The Scarcity of Fish, the Proliferation of Property and the Fishermen Caught in the Middle:
Property rights and the connection to labour in Scotland’s demersal fishery.

Jack Smith

Advisor: Brad Barr, Ph.D

University of Akureyri
Faculty of Business and Science
University Centre of the Westfjords
Master of Resource Management: Coastal and Marine Management
Ísafjörður, May 2017
Supervisory Committee

Advisor:
Bradley Barr, Ph.D.

Reader:
Emma Cardwell, Ph.D.

Program Director:
Catherine Chambers, Ph.D.

Jack Smith

The Scarcity of Fish, the Proliferation of Property and the Fishermen Caught in the Middle: Property rights and the connection to labour in Scotland’s demersal fishery.

45 ECTS thesis submitted in partial fulfilment of a Master of Resource Management degree in Coastal and Marine Management at the University Centre of the Westfjords, Suðurgata 12, 400 Ísafjörður, Iceland
Degree accredited by the University of Akureyri, Faculty of Business and Science, Borgir, 600 Akureyri, Iceland

Copyright © 2017 Jack Smith
All rights reserved

Printing: Háskólaprent, Reykjavík, May 2017
Declaration

I hereby confirm that I am the sole author of this thesis and it is a product of my own academic research.

________________________________________

Jack Smith
Abstract

Property rights have become dominant across world fisheries within a relatively short space of time. Within the context of natural resources, there have long been theories of ownership of property connected to labouring upon the resource; “mixing labour” with the resource to make it one’s own. This thesis examines connections between labourers and property rights within the specific context of the Scottish demersal (White fish) fishery. This is achieved via in-depth qualitative interviews with “owner-skippers” active, or previously active, in the fishery. The key findings group around topics of labour, national ownership, consolidation, leasing, and agency. This thesis discovers strong and relevant connections, both direct and indirect, between the owner-skippers’ conceptions of their labour and their claims to ownership over the fish (via an advanced quota system). However, the very same connections discovered in this thesis are also simultaneously being undermined by forces within the fish economy that are changing the nature of fishing-labour. Importantly, the owner-skippers should be seen not so much as harvesters out in the open sea, but businessmen and owners of capital motivated mainly by their own self-interests. Despite this, a degree of sympathy and agreement towards a more publically owned and managed system is evident. The importance of this should not be underestimated. The owner-skippers are the key actors and instigators within fisheries management. In order to maintain fisheries management, or improve upon it, these actors must be both understood and accommodated.
The purchaser draws boundaries, fences himself in, and says, “This is mine; each one by himself, each one for himself.” Here, then, is a piece of land upon which, henceforth, no one has a right to step, save the proprietor and his friends; which can benefit nobody, save the proprietor and his servants. Let these sales multiply, and soon the people — who have been neither able nor willing to sell, and who have received none of the proceeds of the sale — will have nowhere to rest, no place of shelter, no ground to till. They will die of hunger at the proprietor’s door, on the edge of that property which was their birthright; and the proprietor, watching them die, will exclaim, “So perish idlers and vagrants!”

— Pierre-Joseph Proudhon (1840)
Table of Contents

List of Figures ........................................................................................................... viii
List of Tables ............................................................................................................. ix
Acronyms .................................................................................................................. x
Acknowledgments .................................................................................................... xi

1 Introduction ............................................................................................................. 1
  1.1 ‘Tragedy of the Commons’ and the Roots of Property Rights in Fishing ........ 1
  1.2 Introduction to the Labour Theory of Ownership ........................................ 3
  1.3 Purpose of the Thesis and Research Questions ........................................... 3
  1.4 Thesis Value ..................................................................................................... 5
  1.5 Structure and Contents ................................................................................. 6

2 Theoretical Overview ............................................................................................ 9
  2.1 Property Rights ............................................................................................... 9
    2.1.1 Conceptualising Property Rights: The Schlager/Ostrom Schema .......... 10
    2.1.2 Categorisation of Natural Resources as Property ............................. 11
    2.1.3 Fish Stocks and Ownership ................................................................. 13
  2.2 Property Rights and Fisheries ........................................................................ 14
    2.2.1 Limited Entry Permits ......................................................................... 14
    2.2.2 Individual Fishing Quotas ..................................................................... 16
    2.2.3 IFQs, Marketisation and Neo-Liberalism ............................................ 17
  2.3 Scotland’s Fisheries ....................................................................................... 20
    2.3.1 The E.U, the U.K, and Scotland ......................................................... 20
    2.3.2 Sea Fisheries ....................................................................................... 21
    2.3.3 Inshore Fisheries .................................................................................. 24
    2.3.4 The Scottish System and the Schlager/Ostrom Schema ..................... 24
    2.3.5 European Union Membership ............................................................. 25
  2.4 Fishermen and Property Rights ..................................................................... 26
    2.4.1 Romanticisation of the Fisher .............................................................. 26
    2.4.2 Property Rights and Labour – a Philosophical Perspective ............... 28

3 Methods ................................................................................................................. 33
  3.1 The Demersal Sector in North East Scotland ............................................... 33
  3.2 Selection of Interview Participants .............................................................. 34
  3.3 The interviews ............................................................................................... 37
  3.4 Analysis .......................................................................................................... 37

4 Results .................................................................................................................... 39
  4.1 Who Owns the Fish? ...................................................................................... 39
List of Figures

Figure 1 Map of Historic Scottish White Fish Ports………………………………32
List of Tables

Table 1 List of Participant Fishermen.......................................................... 33
Acronyms

EEZ: Exclusive Economic Zone
LEP: Limited Entry Permit (system)
TURF: Territorial Use Rights Fisheries
IFQ: Individual Fishing Quota
TAC: Total Allowable Catch
ITQ: Individual Transferable Quota
EU: The European Union
CFP: The Common Fisheries Policy
FQA: Fixed Quota Allocation
PO: Producers Organisation
10mu: Ten meter and under
SoN: The State of Nature
Acknowledgments

Alongside my academic advisor, Dr. Brad Barr, and the staff at the University Centre of the Westfjords, I would like to acknowledge and thank the “go ahead lads”, the fishermen who participated in this thesis, for their wisdom and candour.
1 Introduction

“My bounty is as boundless as the sea, my love as deep; the more I give to thee, the more I have, for both are infinite”, Juliet could not have known just how vacuous her simile of eternal love for Romeo would eventually become (Shakespeare, 2002, pp. 140). In William Shakespeare’s Elizabethan mind-set, the seas must have seemed incomprehensively vast; an endless expanse, both free and bountiful. Move forward a few centuries and, regardless of romantic hyperbole, the seas have proven to be neither “boundless” nor “infinite”, but really quite limited. This has had huge ramifications for the fish that inhabit these seas and their most rapacious hunter, humanity. Primarily, it has necessitated the enclosure of the fish resources into the prism of property rights, and forced new cultures and mind-sets on the world’s fishermen. This thesis is an examination of a group of particular fishers, in a particular fishery, regarding this historic enclosure and the effects it has had on them as labourers upon the fish resource.

1.1 ‘Tragedy of the Commons’ and the Roots of Property Rights in Fishing

Fish stocks have often been used as the example resource in academic arguments surrounding property and ownership of natural resources (Cheung, 1970; Mansfield, 2004; Rieser, 1997; Wiber, 2000, Wyman, 2005). This is for a number of reasons, but, as Hennerson puts it, it is primarily the result of the idea that: “The oceans were the last commons to be enclosed. For the most part, the fish resources of the oceans used to be common property, to be enjoyed by anyone who had the audacity and the equipment necessary to go after them”, (2004, pp. 24). The sheer vastness and inhospitable nature of the world’s oceans relative to the size of the human population and the extent of fishing technology, allowed the natural resources of the marine environment to go unencumbered by social and economic notions of ownership and property for centuries. This changed, mostly, in the twentieth century, during which there was an incredible growth in world population and many advances in technology and science. The result: a much larger global
market for fish, coupled with the technological capacity to harvest the fish required to satiate this new market demand.

These twin pressures of more mouths to feed, and the vastly increased means to feed them, led inexorably towards Garrett Hardin’s famous *Tragedy of the Commons*, for the world’s fish resources (1968). The mid to late twentieth and the early twenty first centuries have seen global fish stocks devastated from over harvesting, the population of marine vertebrate species declined by 49% between 1970 and 2012 (WWF & ZSL, 2015). The UN has estimated that 31.4% of global fish stocks are “overfished” (biologically unsustainable) and further 58.1% “fully fished” (FAO, 2016).

A tragedy of the commons occurs when there are too many agents acting on any one resource and, although these agents act rationally in their own self-interest as individuals, they over use the resource collectively, to the point of unsustainable resource depletion (Harden, 1968). The usual prescription for this diagnosis is a fairly old one: enclosure (Mansfield, 2004; Stavins, 2011). If the problem occurs as a result of the resource being open-access, exploitable by anyone and everyone, then the solution lies in limiting access; to enclose the resource in a prism of rules, regulation and authority. This has been the main driver behind the development of philosophies of property and ownership in the European tradition over the last few centuries. From the like of the English land enclosures and the Highland clearances, to the creation of *Exclusive Economic Zones* (EEZs) off the coastlines of modern nations as recently as the 1970s (Fairlie, 2009; Evans, 2010).

As the marine environment was, as Henneson states above, “the last commons to be enclosed”, and its enclosure has occurred in living memory, marine resources highlight very well the formation, maintenance and evolution of property rights in a contemporary context. This means that studying the recent formation of property rights and enclosures within the fisheries can reveal much about notions of property and the management of natural resources in general.
1.2 Introduction to the Labour Theory of Ownership

The property created from the enclosure of the world’s marine resources has been distributed in various ways, but naturally, much of that property has been distributed to those who act as agents in the fish economy, especially fishermen. Fishermen, therefore, are provided a privileged place in terms of receiving access and benefits from this particular natural resource within the context of a property regime. For many, this “fishermen’s privilege” will seem intuitively correct i.e. just. It is the fishermen, after all, who actively engage in the dangerous and difficult job of catching the fish that allows for the consumption of fish and the existence of a fish economy in the first place. But what is the nature of this intuition that the “fishermen’s privilege” is just? It is, to a certain extent, an expression of the idea that those who have a strong claim on a natural resource are those that labour upon it; that there is something significant in the act of labouring upon a resource.

This intuition is founded in the historic perception of the fish as Res Communis/Res Nullius – owned by everyone/owned by no one, becoming “one’s fish” only after it had been caught (Bromley, 1990; Joyner, 2008). This would later be built upon by John Locke, in his Labour Theory of Ownership (1988[1689], see chapter 2). Locke’s belief that an individual can come to own a free natural resource by mixing their labour with it has been highly influential, helping to lay the foundations of many modern conceptions of private property and resource rights (Cohen, 1985; Haddad, 2003; Hailwood, 2015; Nozick, 1974; Sanders, 1987; Witzum, 2005). It takes as its central premise the principle that ownership of one’s body lies with oneself, and that, by extension, the efforts of one’s body (one’s labour) are also owned by oneself. This theory creates a basic framework of justification for the idea that the fishermen have a strong claim of “ownership” (in whichever way that ownership may be defined) of the resource they labour upon, above and beyond other agents; formalising the intuitive sense of “fishermen’s privilege”.

1.3 Purpose of the Thesis and Research Questions

A belief in ownership through labour has been theorised and observed throughout history (Bromley, 1990; Hume, 2003[1739-40]; Joyner, 2008; Locke, 1988[1689]; Wijkman,
The purpose of this thesis is to observe whether a significant belief in a labour theory of ownership has taken root in the Scottish demersal fishing sector, and to understand what that would mean for fisheries management. To achieve this, this thesis sets out to observe and understand the relationship between fishermen and the fish resources they labour upon; specifically analysing connections, if any, that are centred on property rights and notions of ownership. As such, the research considers two central subjects: fish stocks as property; and fishermen as *labourers* upon that property. The following research questions were chosen to help bridge these two subjects together and discover the nature of the connection, if any, between the two within the perceptions of the fishermen working in the Scottish demersal sector:

1. What are the fishermen’s beliefs, both descriptive and normative, on who (or what) owns the fish stocks?
2. What are the fishermen’s perceptions of fishing as a form of labour?
3. Do the fishermen demonstrate a connection between their labour and property rights over the fish stocks and, if so, what is the nature of this connection?

Question (1) splits into descriptive and normative elements in order to provide a deeper understanding of the fishermen’s beliefs on fish as property. The descriptive answer communicates the literal perception, the *way things are* view; one which is more resigned but revealing of the fishermen’s perceptions on the extent of their own ownership in actuality, and their subsequent thoughts, feelings and beliefs on that. The normative element explores the fishermen’s ideal conceptions – stating the way they think things *should be* – in turn communicating their preferences and underlying beliefs in regards the fish resource and their connection to it. Analysing the difference between the descriptive and the normative reveals valuable insights for this thesis’s aims.

Research question (2) simply seeks to understand how the fishermen view themselves as fishermen in order to subsequently discover whether there is something relevant in their conception of fishing as a form of labour. Question (3) ties the answers found in the multiple facets of questions (1) and (2) together; aiding in understanding
connections, if any, between labour and property in the context of fishermen’s perceptions within the modern Scottish demersal fishing sector.

Ultimately, the purpose of this research is to gain insights that allow for a deeper analysis of the mind-sets, values and thoughts of a particular sub-set of actors in the fish economy, not necessarily to make generalities to a wider population. Choosing depth, rather than breadth, allows for a more valuable examination at this point, as it aides in discovering and understanding the underlying topics and themes in labour-theories of ownership and property rights in fishing.

1.4 Thesis Value

As mentioned above, ownership of natural resources, especially in the context of property rights, can be a complex and contested topic. Ownership entails the privilege of access to the benefits of whatever is owned (Lea, 1994; Rose, 1985). This creates problems for natural resources in particular, as resources that come from the natural world, in their raw forms, are not tied to the creative and inventive efforts of an individual or group; that is to say, they are not the result of original human effort (Cohen, 1985, Vaughn 1978). Therefore, to create a system that provides a person or group a degree of property right over a natural resource is to create a system that distributes privilege in one way or another. Naturally, this privileging can be contested by individuals and groups in society who may take issue with the manner and distribution of this privileging (Clarke, 2005).

The general value of this thesis lies in better understanding the privileging that has occurred within the Scottish demersal fishing sector through the enclosure of the fish stocks within a property rights regime, from the specific viewpoint of some of the main beneficiaries of that enclosure, the fishermen themselves. Their perceptions shed light on whether a privileging has occurred, what effect such a privileging may have on fisheries management, and whether their status as labourers is relevant to any sense of privilege. These elucidations have practical value as a measure of the success and popularity of the current fisheries management in Scotland, and in providing knowledge as to the different aspects and secondary issues that arise from property rights in fishing. Put simply, the research provides a better understanding of the fisheries system currently in place,
especially from the point of view of one of the main actors in that system, the fisherman himself. This better understanding can then subsequently identify problems and contradictions (if any), be further used to make suggestions to improve the fisheries system, and contest or defend the current distribution of property (and privilege) within the system.

Many of the aspects of this thesis are specific to issues inherent in fishing and management of fish stocks; the focus is on fish as a natural resource. However, the central topic of property rights over a natural resource and the connection to the labourers upon that resource are general to all instances of natural resource management. This thesis therefore contributes to and enhances the foundational understanding and knowledge of topics such as enclosure, property rights, conservation, natural capital, the status of labourers, national and communal ownership, and the link between rights and responsibilities. These topics are not abstract, they lie at the centre of many of the issues surrounding natural resource management and concern the everyday realities of politicians, business people, communities and publics, environmentalists, scientists, conservationists etc.

1.5 Structure and Contents

In the following chapter, Chapter 2, the state of knowledge is described and the theoretical framework is explained. It begins by addressing property rights, investigating what they are and describing a particular schema of rights to help in their conceptualisation. This is followed by a general description of property rights in fishing, including the different conceptions of these rights and the nature of quota-based property systems as “neoliberal”. Chapter 2 continues by placing these fishing-based property rights in the specific context of the EU, UK and Scottish fishing systems, providing a description of the current system(s) and the manner in which other aspects fit into them. It finishes with a look at fishing as an occupation, specifically the romanticisation of fishermen and their communities and the philosophical foundations of labour-based defences of ownership rights. Chapter 3 is the methods section, providing, firstly, the context of the research – the Scottish demersal sector in the North East of Scotland – followed by an explanation of the type of research implemented: this thesis used a number of qualitative, in-depth interviews with fishermen heavily invested in the Scottish demersal sector as the source of original
data. This was then qualitatively analysed to determine the results. Chapter 4 subsequently describes these results, discovering that the answers relevant to the research questions group into five major themes: labour; national ownership; consolidation; leasing; and agency. The discussion of these results follows in Chapter 5, mirroring the key themes laid out in Chapter 4 and finishes with a discussion of the implications for management and conservation, the limitations, suggestions for further research and a conclusion.
2 Theoretical Overview

2.1 Property Rights

At its simplest, a right is an entitlement to be (or not be) in certain states and to perform (or not perform) certain actions; and, an entitlement to expect others to be in certain states or perform certain actions (or not) (Wenar, 2005). Property is a general term for a set of rules that describe how a resource is to be used and/or accessed (Alchian & Demsetz, 1973). A property right, therefore, is an entitlement to expect others and oneself to perform certain actions or be in certain states in regards to the use and access of a resource. Within fisheries management, the “bundle of sticks” interpretation of rights is often borrowed from the study of law (Huppert, 2005; Scott, 1989; Grafton et al., 2000). The “bundle of sticks” conception helps law students, and others, to understand that a property right is not one single “thing” that can be held or not held, but rather a collection (bundle) of different rights (sticks) that can be held to varying degrees within that defined property right. Further refined within the context of fisheries, the bundle tends to be a function of the following four elements (Metzner, 2005):

- Transferability: The ability to give or exchange the property to others.
- Security: The degree of protection of the resource, so that it may not be damaged or revoked by other agents.
- Durability: Stating the length of time of the property right.
- Exclusivity: A measure of the extent to which outside agents and forces can influence the management and use of the resource.

As Bromley states, “Property is not an object but is rather a social relation that defines the property holder with respect to something of value [a benefit stream] against all others.” (1990, pp. 2). These four elements strengthen this view by demonstrating the social nature of property as an agreement of a kind between people. They are the main parameters by which these social agreements, called property rights, need to be defined and understood by all involved.
2.1.1 Conceptualising Property Rights: The Schlager/Ostrom Schema

Due to the complexities of property rights and the different ways they can be interpreted, it is vital to lay out a clear conceptualisation of them. Without a standardised language of property rights, it would be too easy to fall into linguistic traps or create confusion e.g., using the words “owner” and “proprietor” interchangeably, or failing to make a distinction between de jure and de facto rights. In their conceptual analysis of property rights within natural resources, Edella Schlager and Elinor Ostrom described a well-structured and comprehensive schema of property rights (1992). This thesis will use their schema as the underlying conceptualisation of property rights throughout.

At the most basic level, use-rights can be split into two main categories: access and withdrawal. Access simply allows a fisher to enter into a fishing ground or fishery. Withdrawal then subsequently allows the fisher to harvest fish to a certain extent, this extent can be a set number of fish, a set amount of gear e.g., size of net, or a set time limit (Charles, 2000). Withdrawal will always go hand in hand with access, but not necessarily the other way around; a fisher may have an access right all year but a withdrawal right only, for example, in the summer season. Both, however, do not necessarily include participation in, what Schlager and Ostrom term “collective-choice actions” (1992, p. 251). Participating in collective-choice actions allows power over the decision-making process; not simply a right to utilise the resource, but a right to decide how the resource is utilised. This is the first major distinction to be kept in mind: a right will either allow some kind of control over the decision-making process, or it will not.

These collective-choice action rights can be further categorised into three different types based on the extent of the power the right-holder has over the resource. These are: Management, Exclusion, and Alienation.

The right to management allows a rights holder to have power over how, when and where a resource is utilised, what rules are in play, systems implemented, policies adopted etc. as well as an authority to change the resource itself in order to make improvements e.g., limiting catch seasons to allow juvenile fish to grow to sexual maturity in order to increase the population of the stock.
The right to exclusion simply allows the right holder to declare who can use the resource i.e., who has access and withdrawal rights and how those rights can be transferred. Exclusion holders set criteria and qualifications required to have access e.g. setting a rule that only women above the age of 16, who use, say, traditional Chinese cormorant fishing, qualify for access.

The right to alienation allows the right holder to sell or lease the previous rights of management, exclusion and access/withdrawal. Schlager and Ostrom further categorise rights holders based on the extent to which they hold the rights of management, exclusion and alienation:

1. **Authorised User**: An individual, group, organisation etc. that can be said to hold the rights of access and withdrawal.
2. **Claimant**: An individual, group, organisation etc. that can be said to hold the rights of access, withdrawal and management.
3. **Proprietor**: An individual, group, organisation etc. that can be said to hold the rights of access, withdrawal, management and exclusion.
4. **Owner**: An individual, group, organisation etc. that can be said to hold the rights of access, withdrawal, management, exclusion and alienation.

The schema also reminds us of the difference between de jure and de facto rights - how these rights are seen and enforced by the communities in which they are held. In the context of natural resources, a de jure right is one that is formally recognised, for which there are formal legal protections. If one holds a de jure right, they can be reasonably confident that the state/government/local authority will defend their right on their behalf. Alternatively, a de facto right is a much more informal agreement between the users of a resource, in which they come to an understanding of how to manage a resource without the need to place it in a formal legal framework.

**2.1.2 Categorisation of Natural Resources as Property**

In this framing of property rights, Schlager and Ostrom offer an easily accessible and simple language in which to discuss property rights in the context of natural resources. However, one further set of definitions still needs to be laid out. In order to discuss
property rights, it is important to describe the different categories of property itself. Broadly, property, in the context of natural resources, can be categorised into four main types (following Lam, 2010):

*State Property:* When the nation state holds full ownership (following the above definition in the Schlager/Ostrom schema) and is managed on behalf of the state by the governing authority. This can mean different things depending on the constitutional framework of the particular nation state e.g., monarchy, constitutional democracy, dictatorship etc. Often, the state will subsequently utilise its right of alienation to create further property regimes.

*Private Property:* When a non-state agent within that state holds a property right over the resource. The property right can range from access and withdrawal to full ownership. There can be limitations to private property set by the state, often justified by pertaining to responsibilities and duties of the property-holder, especially when mismanagement of the resource could lead to negative consequences for society as a whole e.g. a land owner may be banned from using a certain kind of fertiliser on their land due to negative effects on drinking water, atmosphere, wildlife etc.

*Common Property:* Very similar to state property but with the distinction that the state property is turned into a *commons*, a resource that allows defined property rights to a common group or community (rather than individual or company). The community or group can vary greatly in size, ranging from just a few members to the entire population of a nation state. When the commons is open to every citizen in a nation state, it becomes a very similar type to state property, however, sometimes the commons is only open to a certain group e.g. a local indigenous tribe.

*No-Property:* The lack of any defined property regime or rights is itself a category and one that was used to describe most of the global fish stocks before the early to mid-twentieth century. It still describes some of the fish stocks found on the *High Seas*, those parts of the world’s oceans that do not fall into any nation’s EEZ.
2.1.3 Fish Stocks and Ownership

Fish are a complicated thing to have “ownership” over. Fish as a resource are: difficult to access, mobile and migrational, temporal (significantly different at the different stages in their life-cycle), renewable, and highly dependent on, and influenced by, the ecosystem (FAO). As such, ownership over the fish is not as straightforward as it is for, say, a square plot of stationary land with clear demarcations. The fish may move into another country’s seas or become inaccessible at points while accessible at others. The fish are highly imbedded in their environment, requiring the ecosystem to provide spawning grounds and fish nurseries in order to thrive; the individual/country/organisation etc. that “owns” the fish may not have any control or access (ownership) over these spawning grounds and fish nurseries but their fish property is nonetheless highly reliant upon them. As a result of these complexities of the fish resource, the fish were historically seen as Res Communis/Res Nullius – belonging to everyone (common heritage of mankind) and belonging to no one (Bromley, 1990; Joyner, 2008; Wijkman, 1982); something which became “owned” only after it had been caught and taken on board a boat. Once on board, the fish is an easily accessible thing, which, like a set of tools or a plot of land, is much easier to fit into a property regime as normally conceived. Res Communis/Res Nullius is the position from which any conception of property rights of the fish stocks (before the fish are brought on board) must start from and it helps explain how a tragedy of the commons ended up occurring with the world’s fish stocks. It also provides an origin for a labour theory of ownership in the fisheries: what is fishing if it is not catching, that is to say, an action? It is through the action of catching a fish that one can be said to “own” it. The original position of Res Communis/Res Nullius infers a labour theory, tying ownership to an act of effort.

The historic idea of the fish as Res Communis/Res Nullius is based on a necessity born from the practical difficulties of “owning” the fish. These difficulties have not gone away. Any property regime that declares ownership over the fish stocks in modern times – post enclosure and mass stock depletions – must deal with the complex nature of fish as property. The principal way this is achieved, if it is achieved at all, is through the understanding that what tends to be owned is not the physical fish swimming in the sea, but the right to catch those fish (however that right may be defined).
2.2 Property Rights and Fisheries

Within fisheries management specifically, property rights management systems are varied and complex but can be simplified into three broad categories (following Huppert, 2005). Limited Entry Permits, Individual Fishing Quotas, and, within these two, different takes on Community-based, cooperative harvesting.

2.2.1 Limited Entry Permits
Within a Limited Entry Permit system (LEP), ownership is kept in the hands of the state/governing body with fishers competing for harvest rights within a commonly pooled fishery by applying for a set number of permits. Methods of allocation will differ from fishery to fishery. For example, in the case of Alaska, a state that has long used limited entry permits, the governing body (the Commercial Fisheries Entry Commission) will issue permits based on an in-depth point system designed to measure the level of hardship that would be suffered for the individual if they were not given access; taking into account such factors as individual investment in gear and vessel, past participation, and access to alternative employment (Weiss, 1992). In LEP systems, the tragedy of the commons is combated by directly limiting the number of fishers/vessels harvesting the resource. Further limitations are often set on the gear and time of year as a means of enforcement and control.

These entry permits can take the form of **Territorial Use Rights Fisheries** (TURFs), in which access is limited to a certain community, based on a clear definition of that community and its accompanying property right. TURF systems have been popular in Japan, Chile and some Oceanic societies with some now appearing in Europe and North America (Afflerbach et al., 2014). They work best when used for fairly small communities, with a long history of harvesting a local fish stock, and are particularly well suited to shellfish and benthic fisheries in which there is relatively little migration of the stock (Defeo. & Castilla, 2005; Gelcich et al., 2007).

TURFs are an example of a spatial allocation of rights. Spatial-rights allocations are a major form of property rights allocation in which the rights apply not through access or the permission to harvest a certain number of a total catch, but by having rights that apply
within a defined space (Wilen et al., 2012). For many, this will be a more intuitive way of creating and enacting a property right as it is analogous with the ownership of land i.e., a boxed-in physical space within which the rules and obligations of property apply. It is closely aligned to the practice of marine and land zoning in which the large area under management is broken-down into smaller zones to accommodate various uses and stakeholders in that area (Edwards, 2008). A spatial right, therefore, is very difficult to implement for fisheries in the open sea due to the migratory nature of major sea fish species and is why, as mentioned with TURFs above, it is best applied to small and coastal fisheries in which the species are relatively stationary (Costello & Kaffine, 2009).

Within a limited entry permits system, fishers often organise themselves into Fishing Cooperatives, in which they pool their harvest rights and agree to manage and fish the resource together under contract. In these cases, the fishers sacrifice a degree of autonomy over their harvest right in order to gain the advantages of being in an organised group e.g., greater voice for political lobbying, better access to financing, gear sharing etc. (Evans & Birchenough, 2001). It is worth stating here that communal forms of ownership can be quite complex and have been used on occasion to offer a rebuke to Hardin’s tragedy conclusion as too simplistic and linear. As Feeny et al. state: “The Hardin argument overlooks the important role of institutional arrangements that provide for exclusion and regulation of use. It also overlooks cultural factors.” (1990, pp. 13). Communities can operate under their own structures and cultures that defy the simpler conception of economic rationality inherent in Hardin’s theory.

LEP systems can of course be varied but the essential property rights dynamic is fairly similar: fishers (and fisher organisations such as companies or cooperatives) are not owners, in the sense described above, as they do not have the right to alienation under this system. The only kind of property rights that limited entry permit systems allow are access and harvest, and therefore fishers under these systems simply hold the status of Authorised User. These fishers do not hold the rights of management, exclusion and alienation necessarily and, without a direct right over the decision-making process, limited entry permit systems are sometime not even categorised as property rights systems at all. The fish stocks remain state property with the state as owner, except in the case of TURF
reserves, as these can be categorised as a type of communal property, in which case the stocks are a commons.

2.2.2 Individual Fishing Quotas

In Individual Fishing Quota (IFQ) systems, a Total Allowable Catch (TAC) is determined through scientific assessment, it is then divided into set quotas and allocated to fishers and fishing companies accordingly. Whereas permit systems manage fisheries through controlling input (gear, time of access, number of fishers), individual quota systems do the same using output, specifically, the output of fish from the oceans. Within the Schlager/Ostrom property rights framework, ownership essentially lies with whichever authority is setting the TAC. It is an example of public property becoming private property through the use of alienation. The state may pass on the other decision-making rights, exclusion and management, to varying degrees. In some cases, it can also be said to transfer the right of alienation itself, to a certain extent. The prime example being Individual Transferable Quotas (ITQs), in which quota holders can subsequently buy or sell their quota after the initial division of TAC. The TAC may be allocated permanently or temporarily (Grafton, 1996; Squires et al., 1998)

Rather than individuals or companies, the quota system can also be allocated to a clearly defined community or group (Evans & Birchenough, 2001). This is similar to the territorial access right described above. These collective quotas do not differ much from individual quotas structurally, they simply describe a different rights holder, i.e. the community. The effects of having a different rights holder could, however, lead to very different outcomes for that management system in so much as the priorities, values and decisions made from a collective rights holder may be very different from those set by an individual rights holder. Collective rights holders may, for instance, be more likely to emphasise sustainability of the stocks for future members of that community whereas an individual rights holder may be more likely to prioritise the maximisation of profit or the capture of market-share from rival competitors (Deacon, 2012).

An individual quota management system allows for a greater degree of property rights transfer from the original holder to other holders than with permit systems, even including the right of alienation. This means that under these property rights regimes, individuals and
organisations can have much more power and authority over the resource, even becoming full owners. There is still, however, a major limitation to the rights of individuals under a quota system, ultimate authority still resides in the body that first decides and divides the TAC, nevertheless, after allocation, the private property structure of quota systems affords a higher degree of property rights when compared to limited entry permits (Clark & Sumaila, 2010). As stated previously, it is important to be reminded that an IFQ right is a right to catch the fish, not ownership in the sense of physical possession.

2.2.3 IFQs, Marketisation and Neoliberalism

The overarching thinking behind quota systems is to introduce market economic theory into fish resource management (Arnason, 1993, 1995; Costello et al., 2008; Gibbs, 2007). Because quota systems change the fish stocks from public property to a form of private property, they are an example of privatisation, one of the hallmarks of neoliberal economics. Since the late 1970s, neoliberal economic thinking has grown to dominate much of global economic discourse and policy. David Harvey describes neoliberalism as:

A theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade. The role of the state is to create and preserve an institutional framework appropriate to such practice… It must also set up those military, defence, police, and legal structures and functions required to secure private property rights and to guarantee, by force if need be, the proper functioning of markets. (2005, pp. 2)

Although they predate the modern conception of neoliberalism, IFQs fall very neatly into neoliberal thinking: by allowing the fishermen themselves, and other actors in the fish economy, to have more of a direct link, via property rights, to the resource, the industry as a whole will be better motivated to eliminate inefficiencies and instigate changes that will maximise profits (Gilmour, Day & Dwyer, 2012). Crucially, those who advocate for quota systems, argue that this thinking incentivises the fishing industry to maintain the health of fish stocks; taking directly from the Hardin-esque thinking that a property right will
eliminate competition between fishermen and “consequently, the fishing firms will attempt to catch their vessel quota with minimal fishing effort” (Arnason, 1993, pp. 214).

Although IFQs fall under the definition of property rights within the Schlager/Ostrom schema, allowing for the rights of management, exclusion and even, in some cases, alienation, it is a point of fierce debate whether IFQs systems can be defined as property rights systems at all (Connor, 2000; Hennesson, 2004). Under the US constitution, American ITQs, for example, cannot be defined as “property rights” but rather “privileges” allowing some citizens access to what is ultimately a public resource: “ITQs are not considered property, but a privilege to catch a share of the total allowable catch of fish or shellfish in a given year”, (Buck, 1995). Whereas the New Zealand ITQ system allows for a full privatised property right, which are “permanent, transferable, divisible…etc.” (Conner, 2000, pp. 31). These discrepancies stem from different political cultures and legal frameworks that relate to how much, and in what ways, neoliberal thinking has permeated these systems, as Hannesson puts it (2004):

The reasons probably are ideology and unwillingness of governments to relinquish ultimate control. Many people abhor the idea of turning a public resource into private property and making it possible for private individuals to enrich themselves by using such resources for their own gain (pp. 78).

The dominance of the neoliberal ideology over the last few decades has not been total and we see this reflected in the varied developments of different quota systems (particularly ITQs) in fishing (Huppert, 2005). Here we see the benefits of the Schlager/Ostrom interpretation of property rights: by conceptualising property rights as a set of gradations, IFQ systems (which themselves come in sets of gradations) can be defined as property rights systems to greater or lesser extents; this is what allows for very different types of IFQ systems – from one in which IFQ holders can be deemed owners (New Zealand) to one in which holders can be defined as authorised users (USA) – that can still be said to create a property right(s).

The implementation of IFQ systems, and in particular ITQ systems, is by no means universally popular (Davies, 1996; Gibbs, 2007; Kearney et al., 1998; McCay, 1999;
The privatisation of natural resources, such as fish stocks, can lead to problems of economic justice and management. Although ITQ systems have generally, and arguably, improved economic efficiency (Grafton, 1996; Dewees, 1998), as Sumaila states, “fisheries management is not about economic efficiency alone. It is also about conserving the resources, preserving the ecosystems that support the resources through time, and ensuring equity and social justice in the use of these resources”, (2010, pp. 36).

One aspect of the privatisation process that highlights the particular problems of equity and social justice is the commodification of the stocks. Under ITQ systems, the initial distribution of the TAC may be very fair and spread across many of the existing fishers/companies/cooperatives, but, due to the tendency of tradable assets to accumulate in fewer and fewer hands over time, can become grossly uneven and monopolised (Greer, 1995). And although anti-monopoly safeguards are placed in nearly every ITQ system (Andersen, 2008), it nevertheless can lead some individuals or companies to “hoard” the fish wealth and shut out other users; turning what was once collectively owned wealth into the wealth of a few (or at least much fewer) individuals. This naturally leads to the question: why should these individuals in the nation be privileged with the gains from this (once collectively owned) natural resource over others within that nation (Cardwell, 2014)?

One answer, as defenders of ITQ systems might say, is that the commodification process allows for the further financialisation of the stocks and unlocks the ability of the natural resource to generate other streams of revenue; capital that can be used as security for lending for investment in other parts of the economy, or indeed, in the fisheries itself. Further proof of ITQs neoliberal nature, the thinking is that the disproportionate accumulation of economic benefits that accrues to individuals directly from privitisation of the stocks is the necessary price for unlocking the potential of the resource to bring benefits to that industry and the rest of the economy. Nowhere better epitomises this thinking in practice than Iceland (Benediktsson & Karlsdóttir, 2011; Gunnlaugsson & Sævaldsson, 2016), as Robert Wade states:

The whole Icelandic business model involved converting firms into investment funds, where productive assets were used as collateral to support (foreign)
borrowing used for purposes of speculation or prestige. Thus, for example, the CEO of a fishing company used his fishing quota as part of his collateral on a loan to buy an English Premier League football team (2009, pp. 20).

In Iceland, the entire model broke down and collapsed spectacularly during the financial crisis of 2008 (Bergmann, 2014), due in no small part to the accumulation of fishing quota in the hands of a few large fishing companies via an advanced ITQ system.

This broad overview of the different rights-based fishery systems demonstrates that introducing property rights into fisheries management offers different outcomes and varying degrees of impact based on the type of property right created and the degree to which this property right is extended (from authorised user to owner). Furthermore, these systems have dominated fisheries management in recent decades with varying levels of success in regards the sustainability of stocks, social justice, and economic performance.

2.3 Scotland’s Fisheries

2.3.1 The E.U, the U.K, and Scotland
The fisheries of all twenty-eight European Union (EU) member states is currently managed, by the European Commission, via the Common Fisheries Policy (CFP). The CFP is therefore the overarching policy that manages the UK and, by extension, Scottish fisheries. Under the policy, a total allowable catch is calculated and allocated for each fish stock within the EEZs of all member states, a quota of which is then administered to different member states based on a system of Historical Right, also known as Relative Stability. Historical right works in such a way that each member state that has traditionally, i.e. before the CFP came into effect, fished large portions of, say, the North Sea Cod stock, will receive a relatively similar proportion of that Cod stock in the European TAC allocation, regardless of where in European waters that stock is normally located; the historical right lays down the original, bottom-line allocation of the stocks based on the historical record of each member state. This TAC is tradable between member states. All inshore (twelve nautical miles from the coastline) fisheries and fish stocks are managed directly by the member state (although some members can claim historical right on some
fisheries between the six and twelve nautical mile zone in other member state’s inshore area) (“European Fishing Policy”, 2016; European Commission, 2016).

Once the TAC has been calculated and allocated to the various member states, the United Kingdom (UK) Government allocates its portion to each of the devolved fishing administration bodies across the four nations of the UK. Before a 2012 concordant, the quota was administered directly by the UK Government to UK fishermen. Since then, each of the four UK nations administers the quota and is allocated a portion based on the number of licensed vessels under that administration (Scottish Government, Negotiations and Total Allowable Catch).

In Scotland, the fisheries administration is the Scottish Government which subsequently allocates quota to Scottish fishermen based on an established Fixed Quota Allocation (FQA) system (Marine Scotland, 2014). The Scottish Government can allocate based on a different system under the concordant but this must be negotiated with the UK Government. The fishermen themselves are represented by fish producing organisations (PO) that work in tandem with the Scottish Government in allocating quota. There are ten POs in Scotland representing different regions or type of fishing and are overseen by Marine Scotland – the government department in charge of fisheries. Vessels less than ten meters and vessels not affiliated to a PO are administered directly by the Scottish government which sets catch limits (normally monthly), enforced through the licensing system (Scottish Government, Allocating and Managing Scotland’s Quota).

### 2.3.2 Sea Fisheries

The major sea fisheries (beyond twelve nautical miles) under Scottish management are subdivided into three major categories: The Pelagic Sector (e.g., Herring, Mackerel), the Demersal/White Fish Sector (e.g., Haddock, Cod, Whiting), and the Nephrops /Shellfish Sector – *Nephrops norvegicus* is the dominant prawn species, also known as Norway Lobster, Dublin Prawn, Langoustine or Scampi; it gives its name to the shrimp sector in Scotland (Scottish Government, Nephrops (Norway Lobster)). All three sectors are currently managed under the FQA system (Scottish Government, 2010). Under the FQA system, a “fixed” quota is distributed to the Scottish POs. Before the quotas became fixed, they were allocated to POs based on the member vessels’ catches over the previous three
years - their “track record”. If they proved to catch a large portion of, for example, their Whiting quota in the previous three years, they would receive a relative proportion of the same stock quota during the new allocation. This, however, created antithetical incentives for fishers and POs to engage in “paper fishing”, whereby members would overstate how much they had caught in order to secure more quota in the future. As no PO wanted to be down on quota one year (because it would lead to less quota in future years) it also stunted trade between the POs, leading to inefficiencies (Marine Scotland, 2014).

In 1999, the new fixed system of allocation was enacted. All POs and some other quota allocation organisations across the UK received a fixed percentage share of the quotas based on the track record of catches in the 1994-96 reference period. Thus, the distribution of EU TAC quota across the UK is frozen, “fixed”, in the reference period of 1994 to 1996, as a percentage calculation. This fixed quota percentage is then turned into fixed quota units that are normally applied directly to a license.

The POs act as trade organisations that lobby for their members (owners of vessels/licence holders) and also administer the quota allocated to them by the Scottish Government to the membership as they see fit. They allocate a bundle of rights – quota, licenses and/or “days at sea”. These bundles of rights are de facto transferable between members of the same PO. Quota can be traded between EU member states (at the governmental level) via “quota swapping” – a highly caveated and transparent process of direct and temporary swaps; the whole point of relative stability being that the percentage TAC defaults to each nation state in the same way every year, hence these swaps have to be regularly negotiated (Hoefnagel et al., 2015). Also, POs can trade quota between themselves within the UK system, this is most often in the form of leases and normally takes place if the fishers are falling short of landing all their quota. Outside agents such as banks and fish processing companies can also hold quota in the form of an FQA holding which they can subsequently trade, buy and sell i.e. the FQA units are tradeable commodities. From this, it is clear that the quota (and other rights i.e., licenses, days at sea) in UK fisheries is highly transferable. Therefore, although Scottish Governments have actively fought against the implementation of an ITQ system in Scotland (Marine Scotland, 2014), and although officially not an ITQ system, Scotland’s is a de facto ITQ system of a kind. The trading of quota is highly politicised and often overseen by Marine Scotland and in tandem with POs. Nevertheless, a Judicial
Review (UK Association of Fish Producer…, 2013) stated that, under the European Convention of Human Rights, FQAs are regarded as possessions and, although the government could take these possessions away via an alternative fisheries management policy, the quota holders would qualify for some kind of financial compensation under the European Convention of Human Rights. What this signifies is that the quotas are regarded as property of a kind; a bundle of rights that can be held by an organisation or an individual. In other words, the FQA system is a property rights system with a direct property right over the FQA holding.

Historically, there was a dominant structure and culture of large fishing companies – especially in Aberdeen – for which most fishermen worked, this then changed in the mid to late twentieth century with many smaller businesses being created in the form of a skipper and his vessel/license/FQA holding forming his own company – known as “owner skippers” who would hire fellow fishermen on a “share of catch” system (RSE, 2004). Recently, especially in the Pelagic sector, the consolidation that is typical of market-based systems has occurred to a very large extent, with similar consolidation beginning to occur in the demersal sector as well (Cardwell, 2014). This has led to a prevalence of a more corporate structure in the Scottish fishing industry (coming full-circle back to the once prevalent large fish company structure), as the RSE predicted back in 2004:

The traditional Scottish system of shared ownership, or owner skippers, though having many advantages and part of the way of life in fishing communities, may not be well suited to an industry that requires to raise so much capital… Consideration therefore needs to be given to the advantages of reforming into a corporate structure. This would not be welcome to the industry, which feels much attachment to its traditional ownership structure. But it would make it easier to raise capital for investment without the problems of huge personal debt and to buy quota (whether catch or effort quotas) from fishermen that retire. (pp.20)

Further consolidation occurred due to decommissioning schemes set-up by the EU and Scottish Governments as far back as the early nineties and, significantly for the demersal sector, early 2000s, in order to reduce the size of the fleet and, therefore, the fishing effort
(European Commission, 2016; Bruce, 2004). Part of the deal was that if the fishermen were to sell their vessels they would retain their FQA holding as personal property, much of which was claimed by the banks as debt repayments. Those that retained some FQA holding but did not actively fish began leasing their quota to active fishermen and became known as “slipper skippers” (due to them sitting at home and leasing their quota on a computer). Although not nearly as prevalent today, the “slipper skipper” phenomenon led to much resentment among active fishermen and serious questioning around the merits of leasing and renting quota (Executive Called Upon…, 2003).

2.3.3 Inshore Fisheries
Vessels fishing inshore waters are classified as ten meter and under (10um) in size, and when not a member of a PO, are directly managed by the Scottish Government. The 10mu fleet is very diverse, based in harbours all over Scotland, and fishing a wide range of marine life; the bulk of which, however, is mackerel and nephrops. The government calculates a total amount of quota for the year, the 10mu “pool”, and allocates this quota via catch limits that are administered weekly, monthly or quarterly. Fisheries that are seasonal are opened and closed in close consultation between government quota managers and fishing representatives (Scottish Government, 2010; Scottish Government, Inshore Fisheries and Communities). The inshore management system therefore, is not a property rights system, ownership and stewardship lies in the hands of the Scottish government.

2.3.4 The Scottish System and the Schlager/Ostrom Schema
Due to the FQA system’s nature as a de facto ITQ system, it is safe to say that the fishermen who own FQA holding can be described as “owners” in the Schlager/Ostrom sense due to their ability to buy, sell and lease FQA holding (a right to alienation). However, this is tempered by the overriding fact that ultimate authority lies with the Scottish Government who retain the right to change the system (regardless of financial compensations that the law dictates would have to be paid out) and who do have some influence over the buying and selling of quota among fishermen and other interested parties. The fish remain a state property which is further alienated into a heavily caveated private property regime, sharing management and jurisdiction with the European Union. Contrary to the Schlager/Ostrom schema, it would appear the fishermen do not have much in the way of a right to exclusion and management. However, in order to conceptualise
these rights correctly, we have view them in context: the fishermen have a full right to exclusion of their FQA holding, if they do not want someone to have access to their holding (to fish the quota they hold) they have the right to say so and expect something to be done about it. They also have rights over management to a certain degree e.g. they can decide if the quota will be fished entirely in the first half of the year or spread over more days, if they so wish.

2.3.5 European Union Membership

Importantly for Scotland’s fisheries, the UK held a national referendum on the 23rd of June 2016 on the issue of continued membership of the European Union. The result of 52% vote to leave the EU and 48% vote to remain a member has led to the outcome popularly known as “Brexit” (British-exit) (Electoral Commision, 2016). As a result, the political background surrounding fisheries management and the fish economy is (at the point of writing) in a state of flux with widespread confusion as to what this will entail for the countries of the UK in the years to come and, subsequently, a British fishing industry currently overseen by the EU’s common fisheries policy. As there is no clear plan or idea behind the Brexit negotiations as of yet, it is unclear to what extent fisheries will become more independent of the CFP in the wake of Brexit, and indeed, if made fully independent of it, how the fisheries will subsequently be managed by the UK and Scottish governments.

For years, the fisheries sector has been at the forefront of British Euroscepticism, due to widespread disappointment with the CFP among those in the industry and in fishing communities (Gray, 1998; Spiering, 2004). A report conducted by the University of Aberdeen in the lead up to the referendum found 92% of 114 owner-skippers surveyed were in favour of leaving the EU (McAngus, 2016). The report also found that the vast majority of the respondents (92.8%) believed Brexit would see an increase in the fortunes of the UK industry; with a subsequent widespread belief (76.6%) that there would be no significant difference in terms of trade to the EU (EU countries receive the bulk of UK fish exports) with a sizeable number (17.1%) of the opinion that trade would improve. Primarily, the arguments centre on the part of the policy that insists that the fishing resource be pooled between all European states and access to fishing grounds be available to fishermen across Europe. As the fishing industry across the UK, and its coastal communities, have declined in size and importance (due to the historic decline of the fish
stocks), resentment has built up over the idea that a limited resource should be shared with anyone outside the nation. Crucially, this reflects an implicit widespread attitude among UK fishers that the resource is “national”, i.e., owned by the people of the UK, not something to be shared with the rest of Europe as a kind of “pan-European” resource. This, however, is predicated on the idea that the fish themselves remain solely in British waters when in fact they swim all over the North Sea (and other areas) with, naturally, no regard for borders. As a spokesman for the National Federation of Fishermen’s Organisations said in an online statement following the Brexit result,

Unfortunately, perhaps, the UK’s geopolitical position means that it is not politically or legally possible just to ringfence most of our fish resources, in the way that, for example, Iceland can. The reality is that most of our stocks are shared with other countries to some degree or other. We can certainly seek to renegotiate quota shares, as well as access arrangements, but it is realistic to expect that there will be a price. Who will pay that price is a critical question (NFFO, 2016).

As to whether an attitude of national ownership will continue to pervade in a post-Brexit context, with no European-wide access to oppose, remains to be seen.

### 2.4 Fishermen and Property Rights

This thesis is an exploration of the relationship that certain fishers have with the resource they labour upon, specifically in regards property rights and a sense of ownership, and the subsequent lessons that can be drawn from understanding this relationship in regards fisheries management. The following section explores the status of fishermen as labourers and the philosophical connection between their labour, the fish stocks and property rights.

#### 2.4.1 Romanticisation of the Fisher

“It’s the drive, it’s the excellence of yourself, the excellence of your crew. It’s just that inbuilt thing that seems to be in one or two people. You’ve got to be[sic], em...a hunter’s heart”. (Steele, 1986). These are the words of Scottish fisherman Terry Taylor, in the opening minute of the British documentary, ‘The Last of the Hunters’. The film depicts the
successes and challenges in the British fishing industry in the mid-eighties. This was a time when top skippers were making hundreds of thousands of pounds a year, and enjoying the prestige that went with it. The fisher occupies a romanticised position in the public consciousness of many coastal and marine cultures (Johnson, 2006; Ross, 2013). In developed nations, fishing is one of the last occupations to involve a dangerous exploration of a human-unoccupied wilderness. The fisher is conceptually ennobled by the virtues of independence, hard graft, and courage in the face of danger; further enforced by an authentic connection to ancestry and heritage. This, of course, can often be an over-romanticisation. Fishers can be just as vicious as virtuous, greedily and knowingly overfishing a stock at the expense of other fishers, future generations and the ecosystem. Nevertheless, it can be said that fishermen have often enjoyed the advantages brought about by the glorification of their particular kind of labour, with Mark Gray speaking of UK fishermen that they, “can evoke a great deal of public sympathy and attract a considerable amount of media attention from a maritime nation steeped in fishing traditions and currently experiencing a wave of Euroscepticism” (1998, pp. 122), this despite the relatively low economic significance of the fisheries (MSEP, 2014; MMO, 2016). This is not only based on the romanticisation of fishers but also fishing communities, as Liza Griffin writes:

Fishing communities are commonly thought of as being traditional, local, and having pre-capitalist, ‘natural’ identities. This is almost certainly why the prospect of their destruction provokes such a great deal of media attention. And it is perhaps unsurprising in a time when notions of community and place have gained greater significance, amid a nostalgia for ‘locality’, ‘home’ and ‘roots’. There are few economic sectors in Europe still embedded within the discourse of community, but fishing is one…This feeling is demonstrated not only by the number of press column inches dedicated to the issue, but also by the exponential growth of fishing heritage centres around the UK and elsewhere. (2010, pp. 12)

Despite “nostalgia for ‘locality, ‘home’ and ‘roots’”, much of the perceived virtues and merit of the fishermen themselves is surely found in the appreciation of their individual agency expressed via their unique labour. This thesis is an analysis of whether that labour
is significant towards how the fishermen connect to the resource: is it a basis of any conception of property rights for fishermen? A formal expression of this lies in philosophy, in John Locke’s labour theory of property rights (Locke, 1988[1689]).

2.4.2 Property Rights and Labour – a Philosophical Perspective

In the western tradition, a distinction (popularly interpreted as a conflict) between a Hobbesian philosophy of the state versus a Lockean philosophy of the individual has been the basis of many divisions, not just in the ivory towers of academia, but the real-world politics of our history and times. In order to understand property rights and their origins, both Thomas Hobbes (2002 [1651]) and John Locke started, in their enquiries, from the position of “the state of nature”. The state of nature (SoN) is the imagined human condition and way of life before the creation of societies; a hypothetical world of pre-politics. A valuable foundation for philosophical enquiry, the SoN allowed both of them to justify their different takes on property rights. They each gave a very different conceptualisation of the SoN. Hobbes thought of it as a state of chaos and conflict: “during the time men live without a common Power to keep them all in awe, they are in that condition which is called Warre” (2002 [1651], pp. 88), a condition that necessitates a “common power”, i.e., a powerful state. Locke, far more optimistically, thought of the SoN as a place in which there was conflict but, generally, peace prevailed due to man’s natural instinct to correct injustice via the “law of reason” (Locke, 1988 [1689]). For Locke, state power does not stem necessarily from the SoN as it does for Hobbes.

Rights (including property rights) for Hobbes are only ensured and made real by the existence of the state (the “commonwealth”) and bestowed upon the individual by the sovereign – Hobbes’s Leviathan was a defense of monarchy during the English civil war and the sovereign was regarded as the necessary arbiter of state power. One’s individual liberty is not eroded, as one enters into this relationship with the sovereign and their fellow countrymen willingly; the citizens unite to form the body of the commonwealth, cumulatively forming the Leviathan. This was a major development in social contract theory, as David Hume later described in his ‘A Treatise of Human Nature’, the social contract is one which is “enter’d into by all the members of the society to bestow stability on the possession of…external goods, and leave everyone in the peaceable enjoyment of what he may acquire by his fortune and industry” (2003[1739-40], pp. 348). For Hume and
Hobbes, this is both the descriptive origin, and a normative defense, of property rights. For them, a property right cannot exist without the arbiter of the state to hold individuals to the contract; all property is, at its foundation, state property, made private only by the will of the sovereign (whether that sovereign be a monarch, a dictator or a public represented by a democratically elected government).

For Locke, however, property rights can exist in the SoN. Locke justifies this by creating a chain of ownership that stems from the individual to the fruits of the individual’s labour:

Though the Earth…be common to all Men, yet every Man has a Property in his own Person. This no Body has any Right to but himself. The Labour of his Body, and the Work of his Hands, we may say, are properly his. Whatsoever then he removes out of the State that Nature hath provided, and left it in, he hath mixed his Labour with, and joyned to it something that is his own, and thereby makes it his Property. It being by him removed from the common state Nature placed it in, it hath by this labour something annexed to it, that excludes the common right of other Men. (Locke 1988 [1689], II, para. 27).

Locke’s philosophy is a defense of private property and individual liberty, even against the dominance of the sovereign of the commonwealth. Crucially, he argued, firstly, that the fruits of one’s labours are the property of that individual and cannot be taken without permission, even by the sovereign. Secondly, that the resource which bares that fruit (e.g., the land that produces crops) can also be brought under ownership via the mixing of labour.

Within Locke’s interpretation, the state is not necessitated, nor its social contract – because property can predate civil society (in the SoN), it does not need to necessarily be beholden to civil governments. This should not be interpreted as an argument against the state and social contract necessarily, simply a different conceptualisation of the origins and nature of property. In fact, Locke does concede that a degree of statehood is required, but only in the establishment and maintenance of Justice i.e., a legal framework that protects individual liberty and property; a form of minimal statism. As Haddad writes, “Locke’s state of nature is therefore not a condition of humans existing without laws but rather humans
existing without well-defined laws and without politically hierarchical laws that can be used by a group of individuals to compel another’s behavior” (2003, pp. 22).

The Hobbesian/Lockean distinction (popularised as a conflict despite that not necessarily being the case) is important because it brings into focus the two dominant ways in which property rights can be interpreted in the western tradition of democratic social contracts, and, in turn, highlight the major themes and questions inherent in conceptions of property rights: public vs. private; whether authority lies in the state or the individual and to what extent; how one’s labour affects ownership and property; whether individual liberty can be maintained when a limitation is necessitated (as is the case with the tragedy of the commons) etc.

These issues and concepts are not wholly abstract or purely academic, they are the issues at the heart of fisheries management in the present day. To choose an ITQ system over a basic entry permit system is to lean towards a Lockean philosophy. To allow the nation state to estimate and distribute a TAC is to indulge more Hobbesian thinking. Indeed, before enclosure within the EEZs of modern times, the seas could have been considered as if in the original state of nature – a free commons unburdened by the social contracts and legalities of human society. Bromley (2005) argues that rights-based fisheries systems stem from an incorrect mindset – “the frontier in our mind” – which itself originates from the idea of the oceans existing in a “state of nature”. In the last century, the labourers upon the fisheries have been thrust from their unique position within the state of nature of the high seas into the complex and murky world of ownership, privilege, rules, and law. What is demonstrated in the “complex and murky world” of ownership in the Scottish context is not a conflict between the Lockean and Hobbesian view, but instead a muddled-together and rather messy synthesis of the two: the state is ultimate arbiter of the resource (Hobbes) but the resource has been further alienated in a very Lockean fashion; this contradiction is expressed in the way the fish-resource property is seen, rather confusingly, as both public and private, without being wholly correct or incorrect either way.

As the main theory that connects labour and property rights, Locke’s philosophy is reflected in the attitudes and feelings of many modern-day fishermen in regards their sense of ownership and connection to the fish resource (Barr, 2001; Katz, 1973). This was
demonstrated in a recent paper by Kahmann, Stumpf and Baumgartner (2015) that analysed concepts of justice for fishermen in Canadian Newfoundland fishing communities. The paper discovered that, “practically all interviewees emphasised the group of (inshore) fishers from Newfoundland to be the most important group of claim holders. This status of inshore fishers was often grounded in notions of adjacency, tradition and dependency”, (p. 39, their emphasis). These last three notions give an insight into the possible roots of the widespread view that fishermen have a strong claim on the resource they labour upon in the form of a property right.
3 Methods

For the purposes of this thesis, a number of semi-structured, in-depth interviews were conducted with fishermen, or former fishermen, in the Scottish demersal sector. This was to collect qualitative data that could be subsequently interpreted in an inductive and empirical manner to ascertain perceptions concerning conceptions of fishing labour, ownership and property rights towards the wild fish resource. Further inductive analysis was used to discover a more general sense of “connection” and “identification” that these fishermen have with the resource upon which they labour. The use of in-depth qualitative interviews was chosen as this technique was deemed potentially the most effective in answering the research questions, collecting thoughts, feelings, ideologies etc., rather than objective facts or lists of beliefs. The interviews were each recorded with a voice recorder and subsequently transcribed.

3.1 The Demersal Sector in North East Scotland

Using 2015 statistics, the demersal (bottom feeding fish, also called ‘white fish’) sector accounted for approximately a third of Scottish landings at 93,800 tonnes, forming 79.2% of the UK wide demersal landings. Making up half of all demersal landings are the three primary target species of Gadus morhua (Cod), Melanogrammus aeglefinus (Haddock) and Pleuronectes platessa (Plaice); other key species include Merlangius merlangus (Whiting), Lophius piscatorius & Lophius budegassa (Monkfish) and Pollachius virens (Saithe). The two major UK ports for landing white fish are Lerwick, in the Shetland Isles, and, by far the biggest, Peterhead – the largest white fish port in Europe – with significant landings made in Scrabster, Fraserburgh and Kinlochbervie. The total value of the demersal landings in Scotland, in 2015, was £143 million with the most valuable species being Cod, Haddock and Monkfish. The Scottish fishing sector employs 4828 fishermen overall, however, the official Government statistics do not break down the numbers for the demersal sector specifically. There are 182 working vessels in the demersal sector using predominantly trawling and Scottish Seine net methods (Scottish Government, 2015; MMO, 2016).
3.2 Selection of Interview Participants

For this thesis, fishermen who are either active, or previously active, in the Scottish demersal sector were chosen as the relevant study population. In the absence of suitable research to advise on the sufficient time within the fisheries it takes to build up relevant experience, at least five years working as a fisherman in the sector was determined as an appropriate amount of time for the individual to have formed a sufficient foundation for their opinions and perceptions as well as a relevant amount of emotional and vested-interest in the fish resource, i.e. to have gained some sense of “ownership”, if at all. A tactic of minimising variables between the interviewees was adopted in order to gain more focused and specific data, this subsequently would allow for the inference of conclusions that could be more broadly applied to this particular demographic. To this end, one of the three dominant fishing sectors in Scotland was chosen in order to minimise differences in variables between the interviewees that may result between the three different sectors, e.g. fishing method, type of vessel, quota management, quota share etc. that may have a large influence on the perceptions formed by fishermen.

The demersal sector was chosen specifically, simply due to practicalities: the demersal sector is based geographically close to where the field work was being conducted and so required less time and resources for travel; and also due to the amiability of the dominant Scottish white fish producers organisation, which helpfully and successfully facilitated initial contact with fishermen in the sector. This producers organisation (PO) provided a list of emails and a snowball effect (Biernacki & Waldorf, 1981) was used once interviewing got under way to identify other potential fishermen who were not on the original email list that might be interested in participating in the research. As a result, the interview population became even more specific than was anticipated at the outset of the thesis: all interviewees were current or former owner-skippers (those who own fishing capital – a vessel, licence, quota holding – rather than, say, a crewman who simply works on a fishing vessel as an employee). The study population therefore became a very specific sub-set of fisher – the capital owning demersal skipper (See table 1, on page 34, for a list of the participants). The benefit of this was that it enhanced the focus of this thesis as an in-depth, rather than broad, study of fisher opinion. The participants were all asked to sign an informed consent form and were assured their identities would be kept anonymous.
Interviews were conducted at different fishing communities across the East and North East coasts of Scotland, including Peterhead, Fraserburgh, Aberdeen, and Anstruther (See figure 1). They were conducted over the months of December 2016 and January 2017.

Figure 1. Map of Scotland displaying the major historic white fish ports along the north east coast as well as the locations where interviews were conducted. Source: Google Maps (2017). [Scotland]
**Table 1. List of Interviewees**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Age</th>
<th>Years Active</th>
<th>Retired</th>
<th>Gender</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>55</td>
<td>39</td>
<td>No</td>
<td>M</td>
<td>Skipper/Company Owner</td>
</tr>
<tr>
<td>B</td>
<td>57</td>
<td>35</td>
<td>No longer actively fishes</td>
<td>M</td>
<td>Fisheries Management/Industry Rep. Former Skipper</td>
</tr>
<tr>
<td>C</td>
<td>69</td>
<td>40</td>
<td>Yes</td>
<td>M</td>
<td>Former Skipper/Company Owner</td>
</tr>
<tr>
<td>D</td>
<td>55</td>
<td>33</td>
<td>Yes</td>
<td>M</td>
<td>Former Skipper/Company Owner</td>
</tr>
<tr>
<td>E</td>
<td>54</td>
<td>38</td>
<td>No</td>
<td>M</td>
<td>Skipper/Company Owner</td>
</tr>
<tr>
<td>F</td>
<td>54</td>
<td>36</td>
<td>No</td>
<td>M</td>
<td>Skipper/Company Owner</td>
</tr>
<tr>
<td>G</td>
<td>62</td>
<td>45</td>
<td>Semi-Retired</td>
<td>M</td>
<td>Part-Time Skipper/Owner</td>
</tr>
<tr>
<td>H</td>
<td>52</td>
<td>38</td>
<td>No</td>
<td>M</td>
<td>Skipper/Company Owner/Fisheries Representative</td>
</tr>
</tbody>
</table>
3.3 The interviews

The interviews were semi-structured following an interview script that was designed to question the fishermen’s sense of ownership and property of the fish stocks. The first section asked about their background in the fisheries to ascertain their connection and personal history within the sector, as well as an understanding of their sense of community. The second section asked them of their experience of changes in the industry over the time they have been active in it. Asking them to describe and opine on changes allowed inferences to be made about their connection to the stocks. For example, questions surrounding the introduction of quota or the changes that occurred when the fish resources went from being a commons to being enclosed (if they had worked in the fisheries that long) would help them to express feelings and opinions about concepts such as the commons and quota ownership. The last section of the questionnaire asked more direct questions concerning ownership, touching on themes of corporatism, state ownership and government reach, effects on fishing communities, etc.

3.4 Analysis

The analysis was qualitative and conducted through an in-depth reading and re-reading of the interview transcripts and notes to determine overall themes and topics inherent in the beliefs and feelings expressed by the different interviewees. The underlying search for dominant themes reflects the Grounded-Theory of Glaser and Strauss (1967) in which interview transcripts are closely read to discover which “analytic categories” emerge. These categories, if they prove to be expressed fairly widely, are then taken to be the key themes of the data. The major themes of analysis were determined to be: general ownership, national ownership, conceptions of labour, consolidation of the stocks, leasing of the stocks, and individual agency.
4 Results

The results of the qualitative analysis relevant to the research questions are grouped around five apparent themes:

- **Labour**: specifically, the fishermen’s views of fishing as an occupation, opinions on migrant labour, and what will be called the ‘Track Record Argument’.
- **National Ownership**: including both internal (between citizens of the state) and external (between different nations).
- **Consolidation**: the fishermen’s expressed concerns and thoughts on the accumulation of fishing capital in fewer and fewer hands.
- **Leasing**: the positive and negative aspects of leasing quota.
- **Agency**: both the fishermen’s willingness and reluctance to take various forms of responsibility.

Each of the main themes provides the headings for this results section. However, the first heading will directly answer research question (1): ‘What are the fishermen’s beliefs, both descriptive and normative, on who (or what) owns the fish stocks?’. This chapter uses extensive quotations from the interviews, presented in the original manner in which they were delivered. Therefore, these quotes contain Scottish colloquialisms and idioms which some readers may not understand. These parts are translated in line with the quotations at points deemed necessary (colloquialisms and idioms of the English language more generally e.g., “cause” for “because”, double-negatives, incorrect tense etc., are not translated, as an understanding of these more general phrases and idioms is assumed or easily understood from the context).

4.1 Who Owns the Fish?

Half of the participants directly referred to the Government as the descriptive owner of the stocks: “the Government [owns the fish]. At the moment, in our system, that’s how I perceive it. I own an entitlement to catch an allocation of that Government’s quota by way of an FQA holding.” (Participant F). Participant C was of a similar belief but referred directly to “the nation” as opposed to the Government. Participants E and G did not
reference the Government or nation, instead stating the quota holder as the owner.
Participant D struggled to answer the question, eventually settling on a more detailed view of “no one”:

That’s the million-dollar question [...] this is [a] reason why banks don’t take it [quota] as collateral cause that’s another grey area. You may have all this fixed quota allocation and all these units but you don’t actually own anything. You’ve got the right – if that’s the right terminology – to go out and catch and land all this fish you’ve got the units for, but until you do that, you don’t own them. Somebody else could come along and catch those fish and bring them in, as long as they’ve got the FQAs in units-quota. (Participant D).

When asked the normative question, “who should own the fish?”, the participants demonstrated a clear divide between “the country” (public) and “the fishermen” (private). Participants C and G were proponents of national ownership: “[Who should own the fish?] Oh the country. It should go back to the ownership of the country, for the benefit of the country.” (Participant G, researcher’s emphasis); “The nation, I feel pretty strongly about that” (Participant C). Interpreted from their interviews more generally, both participants demonstrate not just that the nation should “own” the fish, in the manner it does at present, but that is should own the stocks more than it does so now i.e., have no quota system at all (C) or quota rented directly, and solely, from the Government (G).

The proponents of full fisher-ownership were agreed along the general idea that fishermen should receive more “ownership”, but to greater and lesser extents. Participant F directly made reference to ITQ systems as a preference for a more privatised ownership (where “Q” is the interviewer):

-If I’m being selfish and blunt, whoever has it should own it
Q: By “it”, you mean quota?
-Yes
Q. Does that mean you would prefer-
-ITQ system, yes.
Participant E is less specific, stating, “Well…fishermen really” as those that should own the fish. Participant H is less direct, but it is clear from his interview that he believes the fishermen have a strong claim on the fish which can be interpreted as a belief in a more privatised system, if not full privatisation (Participant H’s views will be described in more detail in following sections). Participant B is more pragmatic, but nonetheless an advocate for a more privatised system:

I think…fishing is not…it’s not something we just do. It’s a business, and I think a business deserves a degree of certainty. So, I think ownership and rights should be given to the fishing industry, as long as it manages it well. And I think the point where it stops managing it well, then the Government has a legitimacy to put it on notice.

So, for Participant B, the “fishing industry” should be as near as possible full-owners, with the Government stepping in if, and only if, the industry neglects its stewardship of the fish stocks in a non-specified but meaningful way.

Participant D stated a preference for no ownership of the wild fish stocks – ownership only occurs after the individual fisherman has taken the fish onto their boat. And finally, Participant A did not wish to voice a normative opinion, demonstrating a reluctance, even when pressed, to be idealistic in this regard: “I think I’m a realist, we just have to keep the system we have…I mean, we cannae [cannot] change the system we’ve got cause there’s been so much money invested”.

Therefore, in answering research question (1): Descriptively, all the fishermen either express the belief that the Government/state/nation holds ultimate ownership or, instead, that the ownership stops with the quota holder. Participant D, along with Participant F (as stated above), display a more precise interpretation: that what is owned is not so much the fish, but rather the abstract measure used to quantify and distribute access and harvest to the fish, the “quota”, which is regarded, at least by Participant D, as not really representative of “ownership” of the physical fish at all.
Normatively, the fishermen, if they do not abstain (A) or state ownership is impossible (D), either think ownership should lie completely with the nation (C and G), or that it should be further privatised towards the fishermen or fishing industry (B, E, F and H) in some manner. These results are interpreted as demonstrating a split in belief between public and private ownership, with more weight towards some form of private ownership (or further privatisation) as a normative preference among this pool of participating fishermen.

4.2 Labour

Within the data, the theme of labour presents three major sub-themes of relevance: The way in which the participants view fishing as an occupation; a particular expression of labour-connected ownership – what will be called, ‘The Track-Record Argument’; and opinions on the use of migrant labour. These three sub-themes provide the data required to answer research question (2) and part of research (3), which will be further discussed in chapter 5.

4.2.1 Fishing as an Occupation

All the participants expressed a generally positive view of fishing as an occupation. This was mostly based around three prevalent reasons: A general, but not specified, reference to “freedom”, being one’s own boss, and the satisfaction one receives from catching a “big haul of fish” (Participant E):

I’ve really enjoyed being a fisherman cause of the freedom it’s given me. I’ve been, eh, boss of my own boat. I’ve never worked for anyone else – except my father – ken? [“Ken” is a common colloquialism in eastern Scotland, it is the verb “to know”] But since 1984 I’ve been my own boss, in charge of my own destiny…nah I’ve really enjoyed it. And the fishing’s been good to me as well. (Participant A)

Participant C takes a similar view but mentions a degree of exceptionalism:
We just had a great life, we were free agents when we were young, I mean, we were earning a lot of money. I mean, in a way, we felt kinda special being fishermen, the kind of life we were living, and it was just…it was a good life.

As did Participants B and F:

But yeah, when fishing was good, it was an absolutely terrific way of life – good money, which meant, when you came home, you could give your family the finer things in life which is what it was all about. I mean, all through my career, I’d buy a new car every couple of years […] the reason being is that set you aside from the next guy who was home in his bed every night. So, it was you, giving yourself the sort of luxuries you knew most people couldn’t afford but you deserved them because you were spending your life away from your family. (B, researcher’s emphasis)

I still get a buzz going to sea, getting a haul of fish and trying to get one over my competitors, cause if you were to take the competitive streak out of it, you’d be taking the heart out the industry. It’s the sense that you started your job and wanted to be good at your job, and the cream rises to the top – if you take the competitive streak out of it then, you’d finish it. Mind you, the lads that are left in the industry now are pretty top lads, “go-ahead lads” I would call them. As I say, all the riff-raff that were just peggin’ along, they cashed in, got out. (F, researcher’s emphasis)

This general attitude of just-deserts and exceptionalism was also tied, throughout the interviews, directly to fishing as a difficult and dangerous job, with some of the participants stating that they had known family and friends who had died while fishing, "I paid very expensive. I mean, I lost my father to the sea, I lost a cousin to the sea, I’ve lost numerous friends to the sea. It was a very, very stressful job” (Participant D).

Despite the continuing dangers and extremities of fishing as an occupation, some of the participants mention the changing nature of fishing, contradicting the narrative of
“freedom” by stating the high levels of oversight in fishing along with a view that the job has become “easier”, i.e. less physically intensive and more administrative:

So, you’re on about days of conflict, those days are gone now. In fact, a fisherman’s job is a bit of a doddle now, it’s mere [more] paper work and computer work cause we’ve got to keep up with our books, we’ve VMS [virtual monitoring system], we’re satellite-monitored every hour, every night we’ve got to fill out our log book, send that ashore, and must report about four hours before getting into port. (Participant F)

For the participants, fishing as an occupation has swung between moments of great positivity and great negativity; an occupation of extremes. These extremities appear to be used to justify a perceived exceptionalism and maintain an attitude of just deserts. The fishermen have also romanticised their occupation in a manner similar to the wider cultural romanticisation of the fisheries: an independent and free individual facing a dangerous sea to make an honest living. However, this is contradicted by a less idealistic view of fishing inherent in the pragmatic, and more mundane, day-to-day of the contemporary fisherman.

4.2.2 Labour and Ownership – The ‘Track Record Argument’

The participants express a connection between their labour and ownership in various ways but, predominantly, their opinions in this regard centre around the leasing of quota (covered specifically under leasing) and the ‘Track Record Argument’.

The ‘Track Record Argument’ was expressed directly by Participants H and B who stated an opinion that the fishermen have a very strong claim to the fish stocks due to their fishing efforts before enclosure, and their connection to the historical right aspect of EU quota calculation and distribution:

But we feel, as fishermen, that we’ve fished this quota for years and years and we have got a historic right, basically an entitlement to the quota because it’s basically us that’s caught it and built up the track-record […] the Government didn’t create the quota, the quota was created by fishermen going to sea and catching it to build the track record up. (Participant H)
I would put this to you that, the UK and Scotland, was allocated a share of the opportunities, based on historical rights when you go right back to the start of relative stability, OK? And it’s a point I always make to [politicians] because [they] say it’s the nation’s fish, but had we not fished it at the time, the UK would have nothing, so who’s is it? (Participant B)

This is a direct expression of a labour theory of ownership and is therefore highly relevant towards answering research question (3).

**4.2.3 Migrant Labour**

The participants’ views of migrant labour can be generalised to the perspective that the use of migrant labour in the Scottish fishing industry is a *necessary evil*. The *necessity* aspect is due to both the need to remain profitable in light of high capital and upkeep costs – “If I didn’t have the three Filipinos, my home lads, their wages would be dramatically cut” (Participant E) – and a lack of suitable people willing to work in fishing, especially at moments in the past. With a majority of the participants expressing a belief that the fishing industry is now dependent on foreign labour and would cease to function normally if the supply of foreign labour was suddenly cut-off: “Guaranteed, if the Government pulled the plug on Filipinos, or eastern Europeans working here, it would put the industry on its head” (Participant D).

There’s no question about it, the industry’s heavy dependent on it [migrant labour] now […] it was all down to the fact we couldn’t get decent guys at one time, it was a problem, some had problems with drugs, problems with people going away to oil […] you would basically like to have all hame [home] crew if you could. (Participant H)

Participants C and G were more critical of the necessity for foreign workers, stating that it was a way for some skippers to maximise their profits rather than keep their businesses afloat:
Ten years ago, you really couldn’t get people to go to sea, eh, but it’s a lifestyle choice now for people to use Filipinos. It increases their profitability, some people are building ships with it, some people are taking the money up the road for the lifestyle. (Participant G)

Participant C associated the use of foreign labour with the decline of the share-system in which crewmen would receive a share of the catch rather than a set wage:

They started saying, “we’ll give them enough” […] the share system’s gone […] I think greed got the better of some of those skippers, they wanted mere [more] and mere to themselves and less and less to the crew […] aye they were struggling, but the skippers were not struggling. They were building big houses with swimming pools and all this, and Jaguars and Mercedes, but they couldn’t give the boys a wage. Then the share system just disappeared on boats…I believed in it all my life.

The perception that the use of foreign labour is a necessary evil stems both from a negative perception at paying the migrant crewmen less money than native crewmen: “I personally don’t sit a hundred percent comfortable with what we do – we’re paying them men a fraction of what we’re paying our crew” (Participant F). And another negative perception that the fishermen are keeping paid work from their fellow countrymen and preventing the full economic gains of the fishing sector (in the form of wages spent) from entering the local community: “There’s no money from Filipinos going back into the country, it’s all going back to the Philippines, paying no taxes, nothing.” (Participant G)

### 4.3 National Ownership

The overriding theme of national ownership bifurcates into the two separate sub-themes, *internal* national ownership, whether the fish stocks are seen as belonging to the nation at large, or to the individual; and *external* national ownership, the thoughts and expressions of the participants towards the stocks as UK/Scottish as opposed to, say, belonging to the EU or anyone/thing else outside the nation.
4.3.1 National Ownership: Internal

This section describes in more detail the distinction referenced in section 4.1 on belief among the participants in regards national ownership. The majority, pro-further privatisation fishermen, generally display a conflict in their thinking, best described by Participant H as “wear[ing] two hats”:

[Answering the question: ‘Should the fisheries resource be a national resource?’] Well I’ve got to wear two hats here, in one sense, I would say, “yes”, and the other sense is if someone, like myself, been a skipper for thirty years and you’ve built up a track-record, then I think you should be entitled to utilise that track-record or pass it on – like my son, he’s coming away with a new boat and that, now I wouldn’t like to think that I’d built-up a track-record and if he wanted to continue it, the Government could come along and take it fae [from] him.

I think it’s our right to belong to the nation, but I also think I have a right to own a share of the nation’s stock, a right to it. I’ve paid for it. And I did pay for it. I know one of the arguments is, “well you got it for nothing”, well I’m sorry, but I didn’t get it for nothing. (Participant F)

In the above quote, Participant H again strongly expresses the track record argument, but he is also voicing an argument that was more generally voiced among the participants: that the fish ownership they can be said to “have” (in the form of quota) is something they, as businessmen, have invested heavily in, in terms of finances, time, effort and even emotion. As such, they are highly connected to that quota ownership and the apprehension of it being taken by the Government is seen, strongly, as an injustice: “Well I’m resigned to the fact that people have invested money into them, I’ve invested money into them over the years, and how/where would the money come from to compensate the people who have invested large amounts of money in FQA?” (Participant A)

There was a general tendency among the participants to balance this self-interested stance with reference to the contributions they and their businesses make to the community, “and it’s nae [not] just about me, we’ve employed a lot of people over the years…and I suppose,
the shore side of things, it’s generated a lot of money I suppose, in the community” (Participant H),

The Government owns it [the fish resource], well not the Government but the state. They own it and we maximise the potential for them, cause remember, they draw revenue from us, they get taxes from us, and we very much keep the coastal communities going as well […] we maximise the potential from it. (Participant B)

These expressed views contrast sharply with the more pro-national ownership participants, C and G: “See the thing about these quota: it’s a national asset, the fish out there. It’s no my asset, it’s no somebody down the road’s asset, it belongs to every person in the country” (C, his emphasis), with G expressing an opinion also shared with Participant E: that the nation should have taken control of the quota when they first became commercially accessible, and then leased this quota directly to the fishermen at prices that would be set relative to the success of the industry at that time. They both conceded, however, that this system is unlikely to come about now due to the high level of vested interests in private quota. Participant B built on this idea but, conversely, stated that it was both possible and highly probable:

At some point, we’re going to go to rent, you know? Whereby you’re going to have to pay for access to that opportunity […] I think we’ll naturally get to that point, so that society itself, in general, is getting more for quasi-ownership for that resource […] Now would I be glad if that happened? No I wouldn’t be glad, but I wouldn’t be sad, because it would be a reflection of the success of the sector […] I think the Government have a legitimacy to ask for it [rent], yeah, and I’m surprised they haven’t done it by now.

4.3.2 National Ownership: External

There was a strong conceptualisation and belief among the fishermen in “our waters” i.e. the idea that a nation can extend its sovereignty into the marine environment, as currently exercised via EEZs. The participants did not demonstrate a nostalgia or preference for a free commons fishery – referring to the days before EEZ enclosure – instead, they each
demonstrated a strong commitment to the idea of national boundaries and the allocation of the fish resource to individual nation states. This was demonstrated at its most stringent in the contempt and disdain expressed for the EU and the CFP:

It’s British waters, most of the fish is [in British waters], it’s the EU that added the phrase “equal access to a common resource”, what other common resource is there? […] do I think all the other EU fleets shouldn’t be allowed in? No, they should be, but it’ll be when we say, and they can catch what we say they can catch, in our waters […] their only claim is what we give them. (Participant E)

Britain was left standing, so we were screwed. Fish being caught in our waters, ended up being caught by everyone else. I spoke at Strasbourg to the fishing commissioner, I did everything, ken? […] I’ve seen Europe really close and I just detest it with a passion, I’ve seen how crooked and corrupt it is. (Participant G)

Despite expressed hopes and ambitions for the fishing industry after “Brexit”, the participants demonstrated a general cynicism and suspicion as to whether or not they actually will benefit from the process; thinking it highly likely that access to the UK stocks will, at least partially, be used as an easily expendable token in negotiations with the other European states on other matters deemed more important to the nation as a whole: “if we’re lucky enough, [“Brexit” will result in] realignment of the stock distributions to the country of origin […] but I don’t think it will ever happen” (Participant F)

4.4 Consolidation

Throughout the interviews, the participants make reference to the changing nature of the demersal fishing industry in so much as they have observed a growing accumulation of fishing capital in fewer and fewer hands. This theme splits into two major sub-themes: expressed apprehension and general negative opinion on further consolidation (or the absence of this apprehension in some cases); and a more specific apprehension about the way further consolidation could shut-out younger generations from being able to obtain a
stake in the fishing industry via the procurement of fishing capital. The fishermen were unanimous that the industry is moving in a direction whereby more and more of the quota will end up in fewer and fewer hands and that this could lead to the dominance of big companies over small and family-run fishing businesses.

4.4.1 Criticism of Consolidation

Despite being unanimous that the consolidation of fishing capital is occurring, the fishermen were not as unanimously concerned about it. The major concern voiced was centred around inequality and apprehension about who benefits from the fishing industry. There was an attitude that a consolidation of ownership in the demersal sector could stifle the industry and, in one way or another, diminish both the industry and the communities it centres around.

I would say, in the eighties and nineties, the highest percentage of the Scottish white fish fleet would have been family-owned boats, but what’s happening is the family-owned boat is disappeared and is going back to the old-fashioned trawl company. They are buying out complete vessels and quota entitlement, everything, and just paying a skipper to go skipper a boat. And that’s sadly what’s happened. […] It’s the big getting bigger and the small getting smaller […] it’s taking the heart out of communities, that’s what it’s doing, and you’ll find that person who owns the boat now controls the quota, the FQAs, they get the fish selling commission, everything. (Participant F, researcher’s emphasis)

Both Participants C and G described the decline in the fishing communities over their lifetimes, citing the closing of services such as engineering firms and boat builders, and the reduction in the overall number of fishermen, tagging this directly to the manner in which the introduction of quota, and its subsequent and increasing accumulation in the hands of the “winners”, has affected the fishing industry. Consolidation is seen as creating an exclusivity in the industry which shuts more and more people out of benefiting from the fish resource: “I just feel like we’re being marginalised, ken? […] Any quota that comes up for hire, we can’t afford to buy” (Participant G). Participant C makes reference to the way the introduction of quota and individual track records
advantaged some in the industry over others, running antithetical to his own intrinsic sense of fairness:

At one point, it changed and individual track-records came on…so…this was fine for boys like me, now I never agreed with this, I can assure you of that, but it solved a lot of problems because you could buy other boys’ quota, which I did. It wasnae [was not] fair, cause boys who had been kinda successful and had some cash behind them, they could buy this quota […] but I never believed in that because it obviously meant the fishermen that had the money, they could buy the quotas, it wasnae a fair system.

However, Participants A, B and E were far more relaxed about the growing consolidation and expressed the view that it is an inevitability:

But are we any different from the supermarkets or anything? Big is beautiful now, ken? It’s just a fact of life […] it’s because the corporate guys have the money; big guys can come in and buy the quota […] as I say, I’m a realist again, it’s, I mean in the real world, you would still like to have all the corner shops, ken? It’s just a fact of life. And it's nae [not] a good thing, but how do you stop it? It's a global thing, it’s the way of the world now. (Participant A)

4.4.2 Generational Inequality
One particular aspect of consolidation of the fishing capital that arose throughout the interviews was a concern for young fishermen entering the industry and being shut-out from accumulating the necessary capital to be fishermen on par with the owner-skippers interviewed for this thesis. The expenses of buying a vessel, gaining a licence, upkeep costs, repair costs, crew wages, FQA holding and leasing quota were generally seen as too high to allow any new fishermen to start their own company i.e., become an owner-skipper. The concerns about this particular aspect centred around general apprehensions touched on previously: that this could lead to a lack of competition, an unequal and unjust distribution of the benefits of the fish resource and an inability to incentivise young men (none of the fishermen made reference to women as fishers; in every instance, they stated
the fisher as male) to enter the industry and become the fishermen the industry will need in the future.

For someone to get a start, it’s very difficult […] you’re never going to have enough for a young guy coming in to pay [for] a boat realistically, you need at least…if he’s successfully catching fish, he’s going to need a shit load of quota to keep that boat going, and that’s the problem. (Participant H)

The participants were, however, divided on whether this aspect was a problem or not, with some citing that it is not necessary to own quota or fishing capital to benefit from it: “Where it does concern you is for young guys coming into the industry […] but at the same time, a young skipper now could go to a fish selling company and get a boat from them and be a paid employee” (Participant A). And others stating that the expectation to own a stake in the fishing capital so young is an unrealistic one:

We get precious about it, the ministers will say, “there’s no new skippers coming in, they can’t get into the sector”, look at farming […] I don’t hear anyone saying that someone who comes in as a ploughman, or whatever, should end up owning the farm, nobody ever says that, so why is there a need to actually think that […] new guys […] have got to own a part of the cake? It would be good, but as long as they’re getting paid enough, they don’t necessarily want to own it […] so I’m not precious about that. (Participant B)

4.5 Leasing

One specific aspect of the commodification of fish stocks via a quota system is the ability to lease quota, and, relatedly, to own quota for the sole purpose of leasing it out; turning something which is necessary to enable the business of catching fish into something which can be placed into a property-portfolio and subsequently used to generate income for a non-fishing agent. On this subject, the fishermen displayed a mix of opinion between positive and negative in regards the necessity to rent quota to enable their fishing, with more of a view towards seeing it as negative. However, on the issue of renting from a non-fishing agent, the fishermen were unanimous in their dislike.
4.5.1 Leasing to Enable Fishing

The criticisms of leasing to make up for quota shortages in their own quota-holdings centred on it being one of the highest costs to a fishing business and therefore seen as stifling the industry in so much as it prevents fishermen from being able to invest money back into their businesses via updating their vessel, paying higher wages to crew, investing in more quota, paying down debts, etc., “Cause the money that some of these fish sellers are making off quota today – it’s crazy, it’s ridiculous! They’re just bleeding the industry” (Participant E)

The quota expense killed the industry […] if it wasn’t for the leasing of fish, I’d have had a new boat built […] cause of what we were paying out, some of these catchers, some of these fishermen are paying two to three hundred thousand a year rent in quota. Now you could pay […] the bank back with that money. (Participant D)

There’s definitely resentment […] I’ve [rented from a company] for thirteen year[s], now you’re speaking about a substantial amount of money, so how much times have I got to lease it? Basically, you’re paying the quota for them. They’ve created a business within a business… I’m just using my own position really, it’s a bit of a gripe that you keep on having to hire this fish fae yer [from your] office, ken? Now if they were going to gae [give] it at a really reasonable price then it wouldn’t be so big a detriment to your expenditure, ken? (Participant H)

Not all the participants were as negative about leasing, seeing it as a necessary part of the business that actually allowed the fishermen real-time quota management to maximise their fishing potential while at sea, as well as something that keeps the price of quota (and therefore their own quota holdings) high, “I’ve made a profit with my boat over the last ten years because of rented quota” (Participant A). Participant B goes so far as to say, “that’s where most complaints you’ll get about leasing are from, those that have little quota, and, in many cases, the reason they have little quota is because they sold it away”. Again making reference to a strong belief in just deserts.
4.5.2 The 'Active Fisher' Opinion

The vast majority of renting among the fishermen in the present day is conducted between fishermen themselves or from fish selling companies that have been allowed to buy up much of the quota. However, when asked about their feelings towards the “Slipper Skipper” phenomenon in the early 2000s, the fishermen revealed underpinning attitudes and beliefs on leasing, ownership and, related to section 4.1, labour. This can be described as the Active Fisher opinion: that someone should only be allowed to benefit financially from quota if they work in the fish economy, either as a fisherman or a fish-selling company/on-shore component. This opinion was generally distributed among the fishermen and was tagged to the idea that the whole point of the quota system is to enable fishing, not the accumulation of capital or the expansion of a property-portfolio, “It’s not very right. The quota should be used by active fishermen or active companies, ken?” (Participant G).

I think all fish, all FQA, should be held on an active licence, I’m nae saying that you shouldn’t be allowed to swap and alternate […] there needs to be a bit of flexibility in the system. But say you sit holding ten thousand units and you wouldnae [would not] caught that ten thousand in two years, then I think you should lose it and let it back [to people who can catch it]. So the incentive is to catch it […] it’s like stocks and shares [indicating a negative opinion of this] (Participant H)

Some of the participants felt so strongly about the Active Fisher opinion that they made direct moral statements:

Have you heard of the term “slipper skippers”? […] now that was wrong, I was totally against that.
Q. Wrong technically, or in your opinion?
-Morally wrong I thought.
Q. Why was it wrong?
-Again, it comes down to ownership. These guys thought they owned the quota and they didn’t, they owned the right to catch it, and I suppose they bought the right to catch it, they would have paid for this quota, but if they weren’t
catching it physically themselves they shoulda put it back in the system.

(Participant D, where Q is the interviewer)

As things progressed, it got worse and worse because a lot of people started renting fish. There would be companies renting quotas […] now you had to pay to dae [do] that [rent quota]. But the boy – the skipper who had retired and kept his quota [slipper skipper] – he’s earning more than the boy that’s gone to sea. Now that is no right […] I couldn’t be sat at home and renting my quota to some at sea […] it wasnae [was not] for me, it’s just no richt [right].

(Participant C)

Therefore, for the majority of the participants, part of the general justification of quota ownership lies in actually engaging in the act of catching fish (or at least working in the fish economy – they did not criticise fish selling companies in the same way, as they are regarded as “active” in the industry), that is to say, justification lies in labouring upon the fish resource.

4.6 Agency

Indirectly (i.e., not directly questioned), throughout the interviews, the data show the fishermen expressing various and often contradictory beliefs regarding responsibility towards different aspects of the fishing industry: the sustainability of the fish stocks, the economic benefits, effects of the fishing industry on society etc. Some were far more self-critical and willing to take on the burden of various responsibilities; others demonstrated an attitude of “limited agency”, i.e. not taking responsibility for their own actions, seeing themselves as “forced” into doing something, rightly or wrongly, e.g. black fish (“Black Fishing” is the term given to the poaching of fish, that has occurred on and off in the industry since quotas began, sometimes on a huge scale (Johnston, 2012)). This “limited agency” was sometimes contrasted with expressions of just deserts and exceptionalism i.e., a tendency among some of the participants to take responsibility for positive aspects of the fish economy (such as economic and financial gain) but not the negative (like illegal activity or overfishing the stocks).
Most of the participants were very self-critical and self-aware in stating they contributed directly to overfishing the stocks and must take at least part of the blame for the mass stock depletions seen in the late 20th century: “you [referring to himself and fishermen generally] overfished, there’s no question about that” (Participant C); “In fairness, a lot of it’s our own fault when you go back to the nineties, and we built that ship, the black fish we landed was unbelievable, and I hold my hands up, we damaged the stocks then” (Participant F). Participant E demonstrated a concern for the fish stocks in coming years:

But I am worried with what’s happening with the seas now, I think there’s a few more boats come in, and there’s a few more boats coming in, the fleets gradually building again […] so there’s going to be more effort going into the fishing grounds again, and I have a great fear that we’re going to start overfishing again. I hope I’m wrong.

Demonstrating a link of responsibility, in his view of things, between the fishermen and the health of the stocks.

Among some of the participants, a “limited agency” was often expressed at points of conflict with the Government or the EU. Participant E, referring to EU grants to build new boats in the 1970s stated, “So, the fleet expanded [as a result of the grants] […] so it’s little wonder the stocks collapsed. And I blame it totally on the EU”, in this particular case, Participant E does not take any responsibility for the fishermen accepting the grants and building new boats for themselves, instead placing the blame solely at the feet of the EU. Speaking about a protest in the early 2000s, that many of the fishermen took part in, concerning mass closures in the North Sea, Participant A expresses a limited agency:

We were actually expecting it [compensation – for refusing to fish, “tying up”, as a part of the protest] from the EU. Cause it was the EU […] but we saw it that if we got compensation for tying up, we would conserve the stocks a bit. Because we were going into these nursery areas and we were slaughtering them [Small Haddock] […]

Q. So you expected state aid?
-Aye
Q. So you felt the Government had a high degree of responsibility towards the fishing industry?

-Well they had, they were forcing us to tie up. They were making our business unviable. We were going to make a loss, how were we supposed to pay our crew? We just saw it as a short-term thing. (Where Q is the interviewer)

This is directly contrasted by Participant D’s take on the same protest:

I think fishermen for a long time were their own worst enemy. The destruction that was done, over a few decades was incredible. A few years back, there was a complete closure of the Cod fishing, and there was a big hullaballoo [the tying-up protests] […] the reason that happened, was Round Haddock, because all that was coming in was £15 a box, if Round Haddock had been £50 a box, you wouldn’t have heard nothin’ about it, and all that slaughter would still have gone on […] but that kind of infuriated me, “let’s all tie up our boats, we’re away to sail down, up with your banners” and what have yeh, if fish had been a good price, you’d have never heard anything about it.

Participant B was particularly expressive of a view of limited agency among the fishermen, he based this around two main reasons: that the high financial costs involved in being an owner-skipper mean that the fishermen are often pushed into acts that they would rather not commit in order to keep their businesses afloat – “it’s difficult to be green when you’re in the red, right?”; and that the difficulties of enforcing regulations and rules out at sea mean the fishermen will absolve themselves of responsibility towards these rules and regulations simply because they can (a natural, and in his view understandable, inclination to cut corners):

Part of the problems is that science hasn’t actually known what they fishermen are taking out of the sea, but as you move towards a management system that works […] and actually fishermen are recording what they’re catching, hey presto, you’ve solved the problem. So, you don’t actually need more men or whatever, you just need a management structure that everyone believes in, and is willing to play the game. (Researcher’s emphasis)
The undermining factor is that there will be a limit on what you’re allowed to take out of the sea, and if you start setting things by days at sea or whatever units you want to do it by, you start getting all sorts of gaming going on, and that gaming element would lead to a collapse of the system.

Participant B, therefore, demonstrated belief in the descriptive view that this is just the way things are. A view which expresses the idea that the fishermen cannot be held completely responsible in all situations for their own actions; they are merely “playing the game”. This world-view places the fishermen, at least in some instances, as cogs in a machine, rather than drivers of that machine; expressive of a limited agency.
5 Discussion

The interview participants of this thesis have either retired or are not far off retirement. That is important. It means that their beliefs and opinions have formed over a lifetime of working in the fisheries. As living history, they have experienced, first hand, the myriad changes that have shaped and sculpted the fisheries, and their communities, over the last decades of the 20th century and beginning decades of the 21st. Successfully navigating their way through the many hurdles that this – actually very complex – industry has often placed in their way. Some of them expressed regret that their view of Peterhead and other ports as bustling and thriving centres of a once more-expansive industry can only be described with memories. Throughout their careers, they have found themselves caught in the middle of the decline in fish numbers and the preferred method of enclosure, the proliferation of property-rights. For these reasons, in regards to better understanding the Scottish demersal fishing industry, their perceptions are invaluable. And those perceptions reveal that, for them, there are direct and indirect connections between labour and ownership; that their labour matters.

The following discussion chapter is structured under the same headings as the previous chapter in order to analyse each of the relevant topics systematically. It continues with a discussion of the implications for management and conservation, the limitations, suggestions for further research, and finishes with the thesis conclusion.

5.1 Who Owns the Fish?

The fishermen’s descriptive answers towards ownership of the fish stocks demonstrate they are under no illusions as to where ultimate ownership resides i.e., the Government (on behalf of the nation). This is significant in that they clearly understand there is a limitation to their own “ownership” – that over their FQA holding. They understand, as stated in the Schlager/Ostrom schema, that their ownership is one based on gradations, resulting in a kind of quasi-ownership, or “diluted ownership”, with the Government as ultimate
authority. There is a degree of inconsistency over this demonstrated by who they name as owner: a mix of Government, the nation, and quota holders themselves. This confusion reflects the general complexity and ambiguity when dealing with terms such as “rights”, “ownership”, “claimants”, etc. It is clear from their other comments that the fishermen who stated that quota holders were the “owners” understand that the Government holds ultimate authority but have attached the word “owner” to quota holders rather than the ultimate arbiter of authority over whatever is owned i.e. they reflected a lack of understanding, not of the fact of ownership’s nature as something realised in a series of gradations, but in the definition of ownership within that hierarchy of gradations (such as the one described in the Schlager/Ostrom schema) and where they, as quota holders, sit in that hierarchy. Put alternatively, within the “bundle of sticks” interpretation, the fishermen clearly understand that they own some of the sticks in the bundle and that they cannot be said to “own” the whole bundle. However, they may well not fully understand comprehensively which of the sticks they hold due to the general complexity of property rights (Huppert, 2005; Scott, 1989; Grafton et al., 2000).

In the normative preferences of the participants a clear public vs. private divide has taken hold. Noticeable by their absence are any appeals to the free commons of the past or some kind of communal ownership; the participants having been captured almost entirely by the public-private divide. Indeed, the only one not to express a normative opinion on this divide, Participant A, does so out of a world-weary, and rather negative, pragmatism that there is no point being normative at all as meaningful change is not possible. He was not entirely alone as many of the fishermen were reluctant to voice their normative opinions, the reason being a general pessimism that wide-spread change cannot occur due to the power of the vested interests of the various owners across the sector and the overarching power held by the Government.

The prevalence of the public-private divide is indicative of the extent of neoliberalism’s influence on the fishing industry and the owner-skippers as agents in that industry. As well as demonstrative of the participants’ commitment, or perhaps resignation, towards a quota system in the first place. No matter where the participants fall on the public-private divide, fish stocks as a form of capital (in the form of quota), although a relatively new idea, has
become the dominant mode of the fishing industry within the perceptions of these owner-skippers.

5.2 Labour

This section brings together the answers to research question (2) – what are the fishermen’s perceptions of fishing as a form of labour? – which are built upon throughout the rest of the discussion. It mirrors the corresponding section in chapter 4, addressing the three sub-themes of fishing as an occupation, the ‘Track Record Argument’, and migrant labour.

The participants reference to “freedom” as one of the main appealing aspects about being a fisherman naturally leads to the question: freedom from what? The answer lies in another one of the appealing aspects to fishing voiced by the participants: being your own boss. Fishing has allowed these fishers (as owner-skippers) to live life (and their work life), at least to a certain extent, on their own terms; partially, but meaningfully, free from the interference of an authoritarian “other”, be that a boss, the Government or the like. This, in turn, can perhaps help to explain the prevalence of the preference for further privatisation among the participants. Being more in charge of their own fishing capital would allow them to better realise the independent mind-set they celebrate; the closest facsimile possible to the times of a free commons within an age of enclosure.

This independent mind-set, along with the genuine dangers and successes faced and enjoyed by the fishermen, have helped in fostering an attitude of exceptionalism. For the participants, fishing has ennobled them with certain virtues and experiences which set them apart from other people in other occupations. Whether or not this exceptionalism is justified, it conveys the perception that there is something special about fishing in the mind-sets of these participants; a form of romanticisation along the same lines as that expressed by the wider public (Gray, 1998; Griffins, 2010). For the participants then, at its best, fishing is an occupation that deserves its romanticisation, built, as it is perceived, on a foundation of the virtues associated with independence, hard-work and courage in the face of danger. Their perceptions of fishing as an occupation are further characterised as having a sense of just deserts, a sense born from those feelings of exceptionalism as well as the nature of fishing as a genuinely difficult job. A sense of just deserts can be a pre-cursor for
many libertarian and labour theories of distributive justice and property rights, as well as a necessary element of those theories (Frohlich, 2007; Winfrey, 1981). The strong expression of this sense among the participants suggests a high level of sympathy and belief towards theories that base conceptions of distributive justice, at least partially, on inputs of effort e.g., labour.

Moreover, it is clear from the data that the participants conceive fishing labour as something that goes beyond the image of someone harvesting fish in an offshore setting. More specifically, the job of the owner-skipper is better characterised as that of a businessman rather than a hunter or harvester of a natural resource; that their job is characterised more by the owner part of the owner-skipper occupation. As such, these owners of capital in the fisheries (of which each of the participants is or was at some point), as opposed to crewman fishers working for a wage, have a wider conception of their labour, one which includes the parts of their work that stem from being a businessman: hiring and firing, investing and borrowing, administration, accounting etc. This businessman identity is equally romanticised by society and the fishermen in its own way: the entrepreneurial provider and “job creator”, helping to raise the coastal community up using virtues of individual initiative and sacrifice.

The conception of business as competitive and Darwinian (Henderson, 1983) has influenced the participants, especially, but not surprisingly, those that expressed a preference for further privatisation. By making reference to enjoyment through competition and getting ahead of your competitors, some of the participants have clearly widened their individual conception of themselves as labourers to include that of being a competitive businessman in the neoliberal vain, not just a fisher. This has fed back into the narrative of exceptionalism, as Participant F put it, “the cream rises to the top”. For the “go-ahead lads” left in the industry as owner-skippers, their labour has the possibility of linking to a sense of property rights via being both a fisherman, working directly upon the resource, as well as being a business owner. Any study of the owner-skippers in Scotland’s demersal sector should take into account this dual nature of the role as both a harvester of the resource (fisherman) and an owner of capital (businessman).
Participants H and B directly voiced a labour theory of ownership in regards to the fish stocks, considered one of the key findings of this thesis. The ‘Track Record Argument’ is a direct answer to research question (3). The argument is interpreted thus:

Premise 1 – the EU fish stocks are distributed to member states via “historical right”, based on the pre-enclosure records of which country’s fishermen were fishing what species and where; their national ‘track-record’.

Premise 2 – The fishermen themselves built-up this track record via their labour and independent initiative before enclosure. Without these original track records, the EU would not be able to distribute the TAC to each member state in the manner it does now.

Conclusion – The thing which is “owned” – the track record, in the form of quota – exists as a direct result of the fishermen’s labour and would not exist without their original labouring; they created it. This subsequently means they have a legitimate claim to the fish stocks above and beyond the EU, and even the nation.

So what is actually “owned” in this line of reasoning is the track record – a history of previous catches that allow for the original calculation and distribution of the fish stocks – not the fish stocks (or rather, the right to catch those fish stocks) themselves. Specifically, within the context of EU fisheries, this track record has become what is regarded as “the nation’s fish”, created via the individual efforts of fishermen, not the collective action of the nation.

In this argument, the participants have voiced a strong defence of their ownership over the fish catching rights as individuals, that does at least offer a robust challenge to the idea of the fish as belonging to the nation at large. Or, within the context of belonging to everyone/belonging to no one, that they have a greater justification to the right to fish above and beyond other individuals within the nation. Its strength as an argument however is based on the presumption that labour is significant as a justification for ownership, and, therefore is, at its heart, a labour theory of ownership.

This thesis did not initially take migrant labour to be a relevant topic. However, throughout the interviews, migrant labour was a topic that the fishermen themselves felt compelled to
bring up. For the participants to have independently mentioned migrant labour in relation to the other topics of this thesis is taken as indicative that migrant labour does have some significance towards their thoughts on labour, property rights and connections between the two. What is this significance?

The participants widespread view that the use of migrant labour is a necessary evil suggests a conflict between pragmatic necessity and a more ideal conception of things; that the presence of migrant labour is itself negative. The fact the participants see migrant labour as negative is interpreted as an admission that it is something that diminishes fishing as a form of labour. Migrant labour, in this instance, is characterised as being cheap and transient: a position of labour that is, in one of the participant’s words “not paid enough”, and one which is not tied to the traditional fishing community. Cheap and transient are negative adjectives in this context, placed in a contrasting relation to the romanticised view of fishing labour as something nobly attached to a traditional fishing community and as part of the nation’s heritage and identity.

The subsequent significance of this diminishment of fishing as a form of labour is simply that it directly undermines labour theories of ownership in the fisheries. If fishing, as a form of labour, loses value, then so do arguments that use labour as a justification. It also subtracts from any notion that fishing is a form of labour that should garner public sympathy as part of a romantacised “pre-capitalist identity” (Griffin, 2010), expressed in appeals to “adjacency, tradition and dependency”, as migrant labour directly contradicts these notions (Kahmann, Stumpf & Baumgartner, 2015). Writing specifically about Filipino migrants in the Scottish fisheries, Penny Howards states: “The ‘harnessable vulnerability’ of the Filipino crew functioned ‘as a subsidy to capital’ through the lower wages and increased ‘reliability’ of these workers, which also changed owners’ expectations of their Scottish crew, who in comparison seemed unreliable and needy.” (2012, pp. 339). This criticism of fishing labour as “a subsidy to capitalism” is indicative of an owner/worker divide which facilitates a diminution of fishing labour. The undermining of fishing labour also subsequently suggests that some of the allusions to labour-connected ownership among the participants is based less on their status as fishermen – as fishing is something that can be outsourced as cheap and transient (not very valuable) – and more on their status as businessmen; individuals who own and administer
fishing capital. This runs directly in contrast to the relationships (specifically, the share-system model) between the crew on fishing boats before the onset of the quota system as it exists today:

Another significant aspect of the social structure of fishing workgroups is the tendency towards egalitarianism which has been noted by several observers…the need for coordination within fishing crews and the physical risks associated with the marine environment increase both the need for interdependence and importance of each worker. This […] decreases the social and economic distance between owners and laborers. (Pollnac, 1988, pp. 29-30)

This generalised observation, typical to fishing communities that implement some kind of share-of-catch system, is no longer an apt description of the Scottish demersal fish sector, whereby the introduction of both fish-capital ownership and migrant labour has increased the social and economic distance between owners and labourers. Any labour theory of ownership conceived within the Scottish system cannot be based on fishing labour as traditionally thought or as romantically perceived by wider society, but instead on the Marxian “capitalist class” of the owner-skippers in a kind of opposition to the “proletariat” of the (transient and cheap) crewmen (Cohen, 1985; Howards, 2012).

5.3 National Ownership

On the topic of state ownership, the fishermen widely expressed conflicted feelings (“wearing two hats”) between their communal sense of attachment to the nation (and in some cases a genuinely positive view of state property) and their own self-interest as businessmen and individual investors. The participants eased their social consciences and apparent strong sense of community with their explicit self-interested motivation by frequently referencing the benefits they bring to the wider community; as if to say the pursuit of their own self-interest is justified by wider community benefits, and that this is the manner in which the nation benefits from “its” fish. This apparent need to balance out their naked self-interest with appeals to communal benefit, is perhaps indicative of at least a small degree of guilt, or at least an underlying sense that there is something unseemly
about their personal stakes in a national resource. It further suggests an underlying, but partial, egalitarian and communal ethical belief, widespread among the fishermen (and directly expressed by a few of them), that directly conflicts with the individualist neoliberal ethic that now dominates fisheries management.

It is significant that the two advocates for state ownership were both retired (or semi-retired) with either a limited stake in the fishing industry now (in terms of owned capital) or no stake at all, as it provides an obvious explanation for the difference in opinion: those with a vested-interest do not want the system meddled with. Again, it demonstrates that vested-interest is one of the most, if not the most, prominent motivators among owner-skippers in terms of how they think of the stocks and stock management.

The key finding that the fishermen unanimously believe in the idea of “our waters” is significant for two reasons. Firstly, that they have a clear belief in, and agreement towards, state ownership of a kind. And secondly, that the participants have given up on, if they ever had, a belief in a free commons or totally open sea. That is to say, enclosure is justified, especially along national lines. It can be said that the pro further privatisation participants demonstrate a cognitive dissonance in regards state ownership at certain points: the fish stocks are “national” when compared to other nation states but ideally private within the nation state. Their conception of the fish as property is therefore dual natured, being both private and public in different contexts. This dual nature is a reflection of the multi-layered nature of the fish stocks as they are currently managed: a state property further alienated into a private property regime. Some of the participants do demonstrate, however, an hypocrisy in that they are (sometimes passionate) advocates of the state property of the UK’s fish until it hinders or comes into some kind of conflict with their own private interests; then, suddenly, the resource stops being the nation’s fish, and becomes theirs.

It is important to point out here that the Track Record Argument is weakened considerably by the notion of “our waters” as the argument is entirely based on the EU’s implementation of historical right. The track Record Argument actually defends as correct that French fishermen should be given a sizeable amount of a set species in British waters if the French can prove that they fished it historically and therefore can claim to own the track record. It
is the track record which is owned, not a national boundary and the fish found within it. If
the participants were to be full advocates of the Track Record Argument they would have
to abandon, at least partially, the notion of “our waters”, however, given their responses, it
is anticipated they would, in actuality, give up the Track Record Argument (and their
subsequent claim to ownership of the track records) in favour of the full national control of
the resources found within the EEZ, outside of the EU.

5.4 Consolidation

Consolidation’s significance lies in its aforementioned relation to private property regimes
(especially under neoliberalism): the tendency towards oligopoly, or even full monopoly
(Greer, 1995). The fact that the participants generally spoke about this further
consolidation as negative, and their habit of saying this as if it was obvious (with generally
little argument to back it up), suggests they feel an intuitive sense of injustice at the
imbalance inherent in the consolidation of fish capital. At this point, the analogy of the
fish economy as a game, with owner-skippers as the central players in this game, is apt: a
game of capital accumulation over one’s rivals by engaging in sound but risky
investments, leasing for profit and the juggling of political and social influences. The
“game” is in its later stages with only the very successful players left – the “go-ahead lads”
– who have been successful in accumulating the capital necessary to both remain in the
industry in the first place, and to reap the rewards of winning the game in the form of
sizeable profits. The creeping consolidation of the fish capital can be seen, in this context,
as an elimination of players even further until there are just a few left. Not only are the
remaining fishers anxious about this in the sense that they may be forced out of a game
some of them have come to fiercely identify with and in which they have enjoyed success,
it can also be interpreted as a general concern for the game itself: with just a few players,
the game loses its value as a genuinely competitive enterprise.

The opinions on consolidation are very revealing in terms of the participants’ conceptions
of their labour and sense of what being a fisherman means. It places emphasis, as
previously stated, on the owner part of owner-skipper. That their labour is characterised
more as that of being businessmen and “players of the game”, rather than harvesters and
hunters of a natural resource. In terms of Locke’s theory, it can be seen as severing the
link, however incompletely, between directly labouring upon a resource and using that labour to claim a property right. From the narrower conception of fisherman-labour – as that of the offshore harvester – the potential further accumulation of fishing capital in the hands of a few (especially companies) almost completely destroys the link between the labourer and the property right over the quota in a Lockean context. This is imagined in the sense of the crewman, or even skipper, being a paid employee of a fishing company with no tie of ownership over the quota holding. The negative opinion of consolidation is therefore born, in part, from the diminution of the fisher as a labourer, in the eyes of the participants, as a mere wage-paid employee. From a wider conception of fisherman-labour – as that of anyone involved in the fish economy (as suggested by some of the participants) – consolidation is not nearly as undermining of a Lockean labour theory of ownership, as even an individual working onshore in an office, can be said to be labouring on the resource and, therefore, have a labour-theory-of-ownership claim over the resource in the form of a property right.

The conception of the fishing industry as a game is evident again in the varying opinions on the next generation of fishermen and their supposed lack of access to fishing capital. The participants are aware, as demonstrated in their concerns, that the younger generations are shut-out of capital accumulation in the sense that they have arrived too late to the game; the older generations have already accumulated the fish quota, giving themselves an advantage in the game that the younger generations cannot possibly beat. The game only gains its legitimacy when everyone starts out on an equal footing in order to facilitate a genuine and fair competition. The generally negative opinion of this generational inequality is founded, from the view of the participants, in the eventual demise of their conception of fisherman-labour as it currently stands i.e., fishermen as “players in a game”, and as owner-skippers. It suggests to them that being a fisherman in the Scottish demersal sector will become, eventually, mere paid employee work, not work tied to the ownership of fishing property and the subsequent link to the fish resource. In other words, their belief seems to be that a widespread distribution of property rights among fishermen has a generational time limit.
5.5 Leasing

The analogy of fishing as a game becomes apparent a second time within the context of leasing. Much like consolidation, leasing is a component of a free-market property rights system that is based on a relationship of necessary inequity, whereby one party has access to capital – from which they subsequently make a profit – that another party is dependent upon. This inequity is justified by some participants as merely the just deserts for those who have worked hard to “win” the game, disregarding complaints of injustice and unfairness as the moans of the “losers”. The majority of the participants however, were either against leasing, or resigned to it reluctantly as a necessary part of the industry. This was due to the way in which leasing changes relationships between fishers (and their communities) in a similar manner recently evidenced in Icelandic inshore fisheries (an ITQ system):

Those who rent fear being viewed as somehow less of a fisherman, or as someone not able to take care of his own fishing business. Those who hold quota and lease it out fear being seen as greedy, or as making unethical business transactions by leasing or selling quota away from their home community. (Chambers & Carothers, 2016, pp. 5)

The Scottish participants mirror the unease of both leasing and renting displayed by their Icelandic counterparts, due to similar ethical considerations: greed, cynicism, unfairness etc., viewing it as a sordid part of “playing the game”. This view is significant in that it again changes the perceptions of fishing as a form of labour: the competition inherent in the game of a private property system devalues fishing-labour by connecting it to the perceived vices of self-interest. A devaluation of fishing-labour in one instance is a general devaluation for any labour-based ownership argument that is dependent on that devalued fishing-labour as part of its justification.

This unease towards leasing is also significant in understanding the participants’ perceptions of ownership. Within the Schlager/Ostrom schema, transferability is the defining characteristic of full ownership. But the reluctance towards leasing (an expression of transferability) suggests that the owner-skippers may not actually require full ownership
(in the Schlager/Ostrom sense) in order to be satisfied with their stake in the fish economy. The apparent contradiction – between a keen sense of self-interest, expressed elsewhere by the participants, and a reluctance towards leasing (something that would benefit their self-interest) – is perhaps explained, as above, by the value that the owner-skippers place in their social standing and ethical concerns. This, however, is only a partial, and fairly unsubstantiated, explanation for the contradiction of self-interested businessmen and their reluctance towards leasing, and subsequently suggests an underlying need for further investigation into the ethics of owner-skippers and their communities; specifically, the foundations of these ethics and their development over time.

There is also a more general point to be made here on private property rights: the participants largely claimed that renting quota, as a major capital expense, was badly affecting their businesses in so much as it was preventing them from investing back into the industry via vessel improvements, innovations, higher pay for crew etc. This runs contra to many of the justifications for private property systems based on their tendency to improve economic efficiencies (Grafton, 1996; Dewees, 1998). The rents from fish quota can be seen as funnels through which money and investment can, and do, leave the industry, leading, antithetically, to inefficiencies. Even when leasing and renting are improving efficiencies, as Pinkerton & Edwards state, “efficiencies for whom?” (2009, pp. 711). They concluded, using the specific case of the British Columbia Halibut fishery, that:

This efficiency is achieved at the expense of many lessees of quota, at the expense of crew even on owner-operated vessels, at the expense of the financial viability of many current operations, at the expense of future quota holders who have to buy quota from the original grantees vs. inheriting them as grandfathered public goods, and at the expense of those who will continue as lessees. Thus the efficiency achieved for quota owners comes with a cost in the lack of public benefits created by the ITQ system. Fishing operations are only sometimes conducted by parties who are able to obtain the most value from the resource (pp. 712).

Similar themes and issues are apparent in the views of the participants of this thesis who are aware of the limited public good of leasing and the inequities it creates. Either they
outright condemned it, seeing it as unfair and bad for the industry as a whole, or they uneasily defend it as the “winners” of the private property “game”.

The other relevant aspect of leasing as a topic, the widespread ‘Active Fisher’ opinion, is an important finding within the results and is the other direct answer to research question (3) as it is an expression of a labour theory of ownership. The participants unanimously agreed with the idea that a non-fishing agent i.e., someone who does not work in the fishing industry, should not be allowed to make a profit from leasing quota. The fish property right should only be held by someone or something (such as a fish selling company) that works in the fishing industry.

One way to interpret this is to see it as a type of protectionism, the fishing industry limiting competition and “hoarding” access to fish capital for itself. In turn, it expresses, inadvertently, a second-class citizenship between those that have access to the nation’s fish resource (in the form of a property right), and those that do not by shutting the general public out of the system. This view is justified with appeals to a labour theory of ownership, with some going so far as to declare that it is immoral to simply mine a quota holding for profit without putting in the subsequent effort of catching the fish, as Participant D puts it: “if they [“slipper skippers”] weren’t catching it physically themselves, they shoulda put it back in the system”.

This suggests that the act of catching fish is very much an important aspect in the participants’ conceptions of justice when it comes to property rights. The disdain expressed towards opening the resource to further privatisation and commodification, in the form of outside investment, could be interpreted as a kind of protectionism (and “hoarding” mentality) but also as a conviction among the owner-skippers of seeing the property regime, as it is realised, in its more idealistic conception – as a means to facilitate the actual job of fishing and the reduction of inefficiencies, specifically the necessary reduction of fishing effort, within the sector – regardless of whether this idealised property regime is fully realised in actuality.
5.6 Agency

The relevance of agency as a topic lies in the connection between rights and responsibilities, “we need to stress from the beginning that all rights have complementary duties. To possess a right implies that someone else has a commensurate duty to observe this right. Thus, rules specify both rights and duties” (Schlager & Ostrom, 1992, pp.250). If the property rights system, as it is conceived in Scotland’s demersal fishery, is to be maintained or changed, a clear understanding, not just of rights but the accompanying responsibilities, must be gained and kept in mind. This means that there is something to be learned from analysing the participant’s attitudes as reflected in their willingness to take on board certain responsibilities i.e., the extent to which they engage with their own agency.

Originally, agency was not a topic of analysis for this thesis but it became apparent as data were collected that there was an interesting, and later judged relevant, milieu of responses regarding responsibility and the extent of individual agency. Encouragingly, the power of vested interest (and a genuine concern evident from the participants that has been born from their years of experience and mistakes) has meant that a sense of ownership over the stocks, in the form of their FQA holding, has given the participants a direct stake in the health of the stocks and a subsequent sense of responsibility towards them. This can be seen to back up the claim that private property regimes can work in helping to create proper stewardship of natural resources, when those regimes successfully align self-interest with a positive goal in the management of that resource (in this case conservation and ecosystem health).

The participants were more likely to limit their own agency in matters of conflict with an authority, normally the EU or Government. Specifically, by outsourcing blame to the authority and, subsequently, the outsourcing of the burden of responsibility. The outsourcing of the burden of responsibility (the attendant duties of a right) must also run in tandem with outsourcing the benefits of the rights to which those responsibilities are attached (at least to a certain extent), because, as Schlager and Ostrom state, they are in a necessary relationship with one another. Some of the participants demonstrated a tendency of being happy to take vast profits (benefits of the property rights) from the fishing industry for themselves personally, but expect the Government to step in (demanding
subsidies for example) when the risks and costs inherent in those rewards become apparent and need to be paid (outsourcing of responsibility). Regardless of whether or not they are justified to place blame with the authority and not themselves, it is suggestive of a tendency to take the rewards of ownership in all instances, but outsource the problems associated with the risks of ownership in some instances. In other words, it is an admittance that the responsibilities are too much of a burden in some cases; if you cannot fully (or are unwilling to) own the burden of the responsibilities, you cannot fully own the subsequent right (and attendant benefits). It is reminiscent of the ‘socialism for the rich, capitalism for the poor’, or ‘rewards for the private sector, risks to the public sector’ phenomenon; a fisheries-specific lemon socialism (Blankenburg, Plesch & Wilkinson, 2010; Krugman, 2009). This says a limited amount about labour-theories of ownership specifically, but does present an observation of how some of the participants feel towards property-rights more generally: as something in which the burden of responsibility may be too much to bear – or which they are unwilling to bear fully – in some cases. However, the degree to which this has been demonstrated among the participants may simply be the result of the quasi-private nature of the FQA system in Scotland; if the fishermen do not have full ownership of their FQA holding, and understand that the Government is ultimate arbiter of the fish stocks, then it is easy to contest who has responsibility towards the resource at particular times and circumstances.

Similar to other observations about the participants occupying (sometimes contrary) dual-positions (businessman/fisherman, individualistic/communitarian, pro-national/anti-national), their lack of consistency regarding agency and responsibility may be explained by understanding and conceptualising the participants as occupying different identities in different contexts. What Nightingale (2013) refers to as multiple socio-natures and subjectivities:

The same individual can be subjected as more than one kind of ‘fisher’, and this has significant implications for how individuals and collectives come into relation with their fishery biologically, socially, economically, and politically. As people move through the spaces of fisheries management, the boundaries between themselves, others, and fisheries policy shift, causing different emotional and political outcomes. When combined with an understanding of
the ‘ambivalence of the subject’, such that individuals at times resist, collude, or otherwise inhabit contradictory subjectivities, they find themselves arguing for control in one context and arguing against it in another. (pp. 2374)

Lending further evidence to Nightingale’s observation, the participants in this survey seem to also “inhabit contradictory subjectivities” – with different ideals, beliefs and emotions – in different contexts, sometimes seamlessly moving between them. The point being that the owner-skippers of Scotland’s demersal fleet exhibit multiple and complex identities that can, and often do, directly contradict.

5.7 Implications for Management and Conservation

The owner-skippers as subjects, and their conceptions of their own labour, are crucial to understanding and enhancing fisheries management. This is because, to put it simply, they are some of the most important and knowledgeable actors in the fish economy. They are not only some of the key instigators of fishing policy but are also some of the most highly affected. Understanding their perspectives is crucial to maintaining, improving and changing fisheries management and conservation (Bennett, 2016; Johannes et al., 2000; McClanahan & Abunge, 2015).

The fishermen’s conceptions of their own labour should be taken seriously. The Track Record Argument, the Active Fisher opinion, appeals to just deserts and exceptionalism, and the view of migrant labour as diminishing fishing-labour, point to the owner-skippers as having a strong sense of their own connection to fish property via their labour and a strong sense of entitlement to that property. Any policy within fisheries management should take into account these senses of connection and justice, born from the fishermen’s efforts, if it is to convince them to comply with that policy and make it a success.

However, the nature of fishing-labour in the context of the owner-skipper should also be kept in mind. Their labour is multi-faceted but it is primarily motivated by their status as businessmen, with a heavy financial and personal investment in their private fish-property (FQA holding, vessel, licence etc.). This has created a pervasive and powerful self-interested motivation that directly conflicts with any policies that markedly change the distribution of fishing entitlement or the system as a whole. The private property regime as
it is realised in Scotland has, through legal and financial protections, solidified the system as it is. The benefits of this, following the neoliberal argument, are that it creates sound stewardship among the fishers, turning them from rapacious profiteers with little concern for the long-term health of the stocks, into careful cultivators and harvesters of the fish resources. As stated previously, this is not necessarily the case, and can create inefficiencies in other ways throughout the system (Gilmour, Day & Dwyer, 2012). Indeed, the sheer strength of this self-interest is a powerful impediment (protected by legislation) to change, with most of the participants agreed that significant change to the management system would be very difficult and something they would fight against if it significantly threatened their private interests.

However, the importance of the link between the owner-skippers’ labour and the ownership of fishing capital, in the strict Lockean sense, is limited because it is being gradually and systemically undermined. The prevalent use of cheap and transient migrant labour – usually out of financial necessity but sometimes simply to boost profits – is devaluing fishing-labour and has created a tiered system, a hierarchy, of varying crewmen and fishers, with some having far more access and benefit from the fish resource than others. This undermining is compounded with younger fishermen’s lack of access to fish capital, placing a time limit on a wide and inclusive distribution of fishing capital. The participants are aware of, and concerned about, the changing nature of their labour and the distribution of fishing property. This suggests that the introduction of policies to combat further consolidation, the need for migrant labour and the lack of access to quota for young fishermen would find allies among the owner-skipper class; far more than may at first seem the case given the dominance of self-interest as a motivator and the owner-skipper’s natural instinct to protect what is theirs.

Another surprise can be found in the amount of sympathy and agreement towards a more publicly-owned system. Although this would be met with severe opposition from some, depending on how it was done, the Government having more direct control of the stocks, perhaps even becoming the largest owner of quota-holding (as suggested by some of the participants), would simplify many of the problems found concerning leasing. This would have to be done in a way that is seen as helping fishing businesses, not simply extracting from them, in order to keep the owner-skippers class willing to comply with any change.
For example, a quota leasing system primarily orchestrated by a government could keep quota costs artificially low (especially in bad years) to help owner-skippers remain financially viable and even allow them to invest money back into the industry, rather than see it funnel off to maintain a company’s profits. It would also act as a resolution between a public vs. private conflict; a reconciliation between the general public and private businesses, both benefiting from the resource they own. Whether or not an idea such as this is applicable within the Scottish fisheries system as it stands, it demonstrates that the participants nonetheless displayed a willingness to see the public sphere as a potential ally in boosting the fishing industry, rather than seeing it wholly as a threat to their business and profits. In other words, they are at least open to other forms of capital distribution and changes to the system (however difficult changes may be to enact)

5.8 Limitations

The limitations of this thesis research centre around qualitative interviewing as the means of data collection and analysis. The limits of the interviews are common to in-depth interviewing (Boyce & Neale, 2006); centring around the questions and the way in which they are asked. A badly formed interview script could lead to very little feedback or feedback that lacks meaningful answers relative to the research questions of the thesis. The script and interviewer may also express bias and use leading questions that skew the results away from the true feelings and thoughts of the interviewee. To protect against these limitations, good interview technique and formation was studied before beginning formal interviews. Feedback from a number of sources on the interview script was also sought to benefit from others’ experience, and the interview script was written over several drafts with the aim of refining-out the bias and leading questions better each time.

With in-depth interviews, the limitations will often come from the interviewer but they can also come from the interviewee (Kendall, 2008). There may be an unwillingness to share key details that might completely change the subsequently inferred conclusions of the research. In a sector like fishing, there are many substantial personal interests (particularly financial ones), and often controversies covered in the media (e.g. “Brexit”, immigrant labour, subsidies etc.). These factors can quite conceivably lead the interviewee to be guarded and careful about what they say to an interviewer, to such an extent that a genuine
interpretation of the interviewee’s thoughts and beliefs on a subject are not properly inferred. To counter this, the participants were asked to sign a consent form aimed at protecting their anonymity in the thesis. This was done with the hope that it would lead the participants to be less guarded and more candid. This was backed by a thorough study of good interview technique, such as the use of correct body language and putting interviewees at ease using small talk and reassurance (Bernard, 2006).

There are also limitations attached to the manner in which participants were found via the snowball technique or chain referral sampling. Chain referral sampling can be problematic in three main ways (Biernacki & Waldorf, 1981): Finding a reliable participant to begin the chain(s); gaining assurances that the participants in the chain are genuine (e.g., not just participating to gain a small financial reward for participating); and that all the participants meet the person-specifications relative to the type of data being collected for the research. All three of these potential problems did not arise in the research for this thesis as the target population were a very small population of specific people – the owner-skippers in Scotland’s demersal fishery – who had no incentive to be disingenuous (regarding their status as owner-skippers), and who each clearly met the straight-forward person specifications of being an owner-skipper in Scotland’s demersal fishery. The fact that they were all found via initial contact with their PO (Fish Producers Organisation) alleviates the first problem as the PO is a formal organisation of people who meet the person-specifications.

The major limitation to this research, however, is one general to qualitative interview-based studies, namely, the double-edged sword of inductive research: trading-off between depth of research (and the value found within), and breadth of research (and the different value found within that). However, as the purpose of this research, expressed in the introduction, is to gain a deeper analysis and not necessarily make generalities to a wider population, the analysis is not significantly limited by choosing depth over breadth.

**5.9 Suggestions for Further Research**

After a review of the findings of this thesis, three broad suggestions for further research are nominated: A widening of the scope of the same topics of study to gain a more general
outlook among the demersal fisher population (or other populations e.g., the pelagic owner-skippers); an analysis of the feasibility and popular opinion of the policy of a public leasing system for quota; and an examination of the history of ethical change that has occurred within the fish economy over the last few decades under enclosure.

One of the primary limitations of this thesis is its small study-population. Although this has allowed for an in-depth analysis of the opinions of a specific population, it has prevented more general conclusions being drawn about demersal owner-skippers’ perceptions, or, indeed, Scottish fishermen more generally. This thesis could be built upon by interviewing a much wider sub-set of fishermen along various demarcations. This could be done by keeping the participant specifications within the context of the owner-skipper in the Scottish demersal sector or widened out to include the pelagic or nephrops sectors as well. A compare and contrast between the demersal and pelagic especially, could yield very interesting results within the topics of consolidation and labour in particular, as the pelagic sector has a far more concentrated division of fish capital ownership. Of particular importance to identify would be any agreement in terms of the ‘Track Record Argument’ and the ‘Active Fisher Opinion’, as the two direct examples of labour-connected ownership found in this thesis. If discovered in other sectors of the fish economy, it would point to these phenomena as being widespread and, therefore, highly relevant to Scottish fisheries management. In order for this to be achieved however, the results for this thesis should be made more comprehensive by widening the scope to include more of the owner-skipper population in the demersal sector so as to facilitate more concrete and generalised conclusions of thefishermen’s perceptions. Another demarcation of relevance is the extents of individual stake in the fishery, interviewing those in the industry that are not owner-skippers but crewmen and other non-capital owning fishers. Again, a compare and contrast exercise between those who own fishing capital and those who do not would help to create a broader understanding of perceptions of labour-based ownership and help to better understand the power of vested interests and self-interests in the perceptions of the participants of this thesis.

A specific management policy was suggested by some of the participants during this thesis, the idea of a public rents system for quota. Although not specified in detail, and discussed differently between the participants, the implementation of a publicly-owned
pool of quota (similar to arguments from the like of Bromley (2011)) that is subsequently leased to fishers (Rather than bought outright by them or others) would be a policy worth researching in more detail considering the rather unlikely sympathy it has from some in the sector, as well as its potential to not just create direct benefit for the public owners of the quota (the nation at large), but also as a possible solution to the problems of leasing vis-à-vis up-keep costs and inter-fisher resentment. A study into a public rents system in the Scottish demersal sector would first have to research whether such a system would be feasible in the legal and financial framework of the Scottish fisheries, and the manner in which it would be constituted. Once this initial study is complete, then fisher perceptions of the proposed system could be surveyed, preferably via both a general survey sent to all relevant members of the sector, and in a more specific qualitative interview format such as the method in this thesis (in which the participants are taught exactly what the proposal would be in order to have a well-rounded and informed opinion). Such research, and the suggested proposal (depending on how it was constituted and enacted), would be valuable in offering an alternative quota system with potential benefits such as preventing further consolidation, boosting inward investment by lowering leasing costs, and generating public revenue (which could potentially be invested back into fishing communities and the industry).

One of the key findings of this thesis is the understanding of the owner-skippers as captured by a “game” of capital ownership and business, and a subsequently developed neoliberal ethic, which itself conflicts with egalitarian sympathies and sentiments. An examination of this ethical conflict could yield valuable insights into the mind-sets of the main actors in the fish economy, the fishermen themselves. A study of the history of ethics in Scottish fishing (with an in-depth look at the share systems and its supposed diminution for example) would better elucidate how the current mind-set has been nurtured and the impacts it has on fisheries management, fishing communities, and the ability of the fish economy and Government(s) to enact conservation. Potential topics of particular interest include the use of migrant labour, generational inequality and the concentration of capital in fewer hands. This could also lead to a Game Theory-based approach for these particular contexts. Although Game Theory has been applied to fisheries research in many instances (Munro, 1979 & Bailey et al., 2010), within the context of ethical development, the research could specifically attempt to measure and analyse whether the fishermen act as
completely rational, self-interested individuals in all instances, and, if they deviate from this, why they do so. Such research could reveal the underlying ethical beliefs and values of these particular populations. Another caveat to this is the potential for researching regional and local variations in ethics; the Scottish fishermen are, of course, not entirely similar and there could potentially be very interesting differences between the way separate POs operate, and the effects of more localised cultures and histories that could greatly expand the understanding of fishing-community ethics and their evolution over time.

5.10 Conclusion

The owner-skippers who participated in this thesis believe there is a strong connection between the input of labour and an output of property right(s) to the fish stocks. This is expressed either directly – the ‘Track Record Argument’ and ‘Active Fisher Opinion’ – or indirectly – just desserts/exceptionalism, romanticisation, “winners” of the “game”. Any conception of, or reflection on, their labour, however, should take into account the dual-nature of their position – itself created through the proliferation of property rights – as both harvesters of the resource and capital-owning businessmen. A quota system is now the dominant mode of the Scottish demersal fishing industry within the mind-sets of the participants, made dominant by the power of their vested interests inherent in their property. As some of the most integral members of the fish economy, their opinions and interests are important and far-reaching, made powerful by their accumulated interests in fishing wealth. This proliferation of property rights however, has exacerbated the class system within the fishery itself, between those that own a stake in the industry and those that merely work in it. These perceived inequalities are changing the nature of fishing labour, as seen through the eyes of the participants, as something no longer tied to community and the popular romanticisation of the fisher. The owner-skippers themselves demonstrate an unease and apprehension about this change, proving sympathetic to potential ideas to change the system. This sympathy is ultimately tempered, however, by a strong instinct to protect what they see as their hard-won interests.
References


83


