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Nova Homarus:

*Indigenous Rights, Economic Assimilation, and the Return of Ecological
Plurality to the Lobster Fishery of Nova Scotia*

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TABLE OF CONTENTS

Acknowledgements	3
Introduction: A 400 Year Lobster Fishery Comes Full Circle	4
Part I: Historical Context and Point of Departure	
Chapter 1 One Fishery, Two Peoples: The Euro-Colonial Roots of Ecological Plurality in Historical Mi'kma'ki	28
Chapter 2 Fisheries Foreclosed: Spirit Retreat, State Administration, and the Rise of Ecological Hegemoniality (16th-20th centuries)	64
Chapter 3 Treaties Revisited: Legal Activism, Economic Assimilation, and the Reassertion of Indigenous Harvesting Rights	93
Chapter 4 A Fisheries Collapse Foretold: Conservation Claims, Institutional Orthodoxies, and Story Lines of a Dominant Ecology	119
Part II: Ecological Plurality Emergent	
Chapter 5 Lobster Inc. A Dominant Capitalist Ecology Four Centuries in the Making	147
Chapter 6 Steps to an Ecology of Yore: Cultural Revival and Indigenous Harvesting as Emergent Ecological Plurality	178
Chapter 7 Objects as Subjects, Friends as Foes: The Re-ordering of the Dominant Capitalist Ecology's Relational Grid	209
Chapter 8 Of Fisheries and Fools: Alternative Bureaucratism, Moral Muddles, and Livelihoods in Postmodern Decay	242
Conclusion New Lobster Dynamics: Ecological Plurality as Retrograde Economics, Theater of Reconciliation, or Emergent Hybridity?	270
Bibliography	280
Declaration in accordance with § 8 (1) c) and (d) of the doctoral degree regulation of the Faculty	301

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INTRODUCTION

A 400 Year Fishery Comes Full Circle

Civilizations have risen and fallen. A new technology for the exploitation of nature or a new technique for the exploitation of other men permits the rise of a civilization. But each civilization, as it reaches the limits of what can be exploited in that particular way, must eventually fall. The new invention gives elbow room or flexibility, but the using up of that flexibility is death.

Gregory Bateson in *Steps to an Ecology of Mind* (1972, 503)

The system is a veritable ontology, having to do with commonalities and differentiations of substance. Relations logically constructed from it- e.g. heavens are to earth as chiefs are to people- are expressions of the essence of things. Hence the relations and deeds of primordial concepts as represented in myth become, for the persons descended of such concepts, the paradigm of their own historical actions.

Marshall Sahlins in *Islands of History* (1985, 14)

Overview

Fisher Jonathan McWright remembers that September day in 2020 well. Although the stretch of the Northumberland Strait just off the coast of Arisaig, Nova Scotia where he harvests lobster was out of season, he had gone down to the wharf to check on his boat and replace some of his gear. When McWright received the phone call from his fisher friend in Digby in southwest Nova Scotia, he immediately felt that his years of worry and concern for the future of the fishery had been justified. For him and his fellow fishers and community members around Pictou and Antigonish counties in the northwest of the province, the lobster fishery is deeply intertwined with the history and Euro-settler identity of the place. With a mostly mixed Irish and Scottish heritage, the region has for hundreds of years been at the forefront of a developing fishery economy and exemplifies a particular way of life in rural coastal communities around the Canadian Maritimes¹. For McWright, that way of life is rooted in the sea and in the hearty fish harvesting livelihoods that its resources enable. Absent those livelihoods, he notes, “. . . our ancestors wouldn’t have come here, our communities wouldn’t be what they are, and we wouldn’t be who we are.”² For many like McWright around the province, fishing and coastal living are thus of a long lineage of place-based livelihoods that are widely credited with effecting what it means to be Nova Scotian.

Hence, when he received the news that indigenous fishermen in southwest Nova Scotia had defied federal authorities and launched their own lobster fishery in St. Mary’s Bay, he couldn’t help but feel that an entire history and way of life would be pushed to the precipice. On that September day, fishermen from the indigenous Mi’kmaq³ community were exercising what they referred to as their “Treaty right” to harvest lobster for commercial purposes outside of official fishery regulations. The launch was the culmination of 20 years of failed negotiations, back and forth accusations, and occasionally violent confrontations between Mi’kmaq fishers throughout the province and the federal Department of Fisheries and Oceans (DFO), which has regulatory authority over the sector. While the full history of conflict over natural resources between indigenous peoples and European settlers in the Maritimes is a centuries-long saga, this most recent dispute is rooted in a 1999 Canadian Supreme Court decision that granted the Mi’kmaq commercial access to marine resources.

¹ Refers to the three Canadian coastal provinces of Nova Scotia, New Brunswick, and Prince Edward Island.

² Personal Communication, 24/03/2021, Arisaig, Nova Scotia.

³ Note that throughout this thesis the variable usage of the terms “Mi’kmaq” and “Mi’kmaq” will follow the linguistic guidance outlined in the *Mi’kmaq Resource Guide* (2007). Accordingly, “Mi’kmaq” denotes either a singular individual or as an adjective that precedes a noun (e.g., a Mi’kmaq fisher), whereas “Mi’kmaq” denotes the plural form of Mi’kmaq people (e.g., as in the Mi’kmaq). The corrupted spelling of “Micmac” will only be used when directly quoting other texts.

That decision, referred to in short as the “*Marshall Decision*”, recognized that indigenous groups around the region had in fact been granted Treaty rights by British colonial authorities in the 18th century to harvest marine resources for commercial purposes. As such, the ruling noted that Mi’kmaw fishers could pursue their livelihoods *outside* of DFO-enforced regulations for a “moderate livelihood” (*R. v. Marshall [1999] 3S.C.R. 26014*).

By the fall of 2020, Mi’kmaw fishers and their communities had become fed up with two decades of the DFO pushing for those newly confirmed Treaty rights to be realized within the official regulatory framework of the commercial lobster sector. For, not only had DFO spent hundreds of millions of dollars over that 20-year period on gear and license provisions and skills development training to encourage Mi’kmaw adherence to its regulations, it had also continued to prosecute those who dared to harvest according to alternative frameworks. Hence, beginning in September of 2020 and continuing intermittently throughout 2021, Mi’kmaw fishers from several different communities took to the waters in defiance of both DFO and the commercial industry’s pleas to abide by the official regulations. Of particular offense to DFO and others throughout the industry, such as commercial fishers like McWright, was that the Mi’kmaw fishers were attempting to harvest lobster outside of official fishing seasons and with licenses that were issued by their own communities, not DFO. According to the Mi’kmaw fishers and their supporters, the right to self-govern their fishery and devise their own regulations was exactly what the *Marshall Decision* had granted, and thus their detractors were attempting to deny them their “Treaty rights”.

For McWright and others throughout the commercial sector, the nuances of legal theory and colonial comportment hundreds of years in the past were beside the point. To them, there was one lobster fishery in Nova Scotia, and it was to be governed by one set of regulations that were applied to all regardless of ethnic identity or historical claims to injustice. The issue was purportedly one of both fairness and science. The former is a normative position, in that in a democracy that adheres to the rule of law everyone should abide by the same rules in order to benefit from the lucrative lobster harvest. The latter draws on decades of official science on lobster biology and ecosystem functioning that undergirds the official regulations, and supposedly justifies them with reference to objective scientific criteria. In other words, the violation of regulations on things like fishing seasons and levels of fishing effort were a recipe for disaster for the sustainability of the lobster stock. In short, for actors throughout the commercial sector, the regulations exist for a reason and any violation of them would certainly lead to both social and environmental breakdown. And it probably goes without saying that it is greatly feared that such disorder would threaten the

entire industry and the wealth and affluence this famed crustacean enables throughout the province (for some).

On that note, the American lobster (*Homarus americanus*) is a hearty and hard-shelled species that lives in abundance on the ocean bottom just off the coast of North America between Newfoundland and the Carolinas in the United States, and is thus relatively easy to harvest commercially (Acheson 1988). Though the Mi'kmaq are thought to have fished the species for millennia, the commercial harvesting of lobster only started in the late 19th century, and its marketability and lucrative potential has grown at an even clip ever since. With about 3,000 commercial licenses in operation in Nova Scotia by the late-20th century, the total hauls over the 20-year period outlined above have climbed to between 30,000-44,000 tons of lobster per year⁴. In revenue terms, from an estimated landed value of \$350⁵ million per annum at the turn of the 21st century, total lobster values have exploded in recent years to approximately \$900 million generated in the 2019 season alone (most recently available data). According to the Canadian Council of Professional Fish Harvesters, these astounding revenues have led Nova Scotia to be not only the top producer and exporter of lobster in the country, but also the most important fishery overall, employing more than 15,000 people in the province⁶. Thus, when the regulatory framework that sustains and contains the lobster fishery is perceived by the commercial sector to be under threat, these lobster economics too are supposedly on the line.

Hence, as soon as McWright was notified of the indigenous transgressions that were unfolding in St. Mary's Bay, he too spread the word among fellow fishers and industry actors around the towns of Arisaig, Lismore, and Ballantyne's Cove. Within two days, he and a few others had organized unofficial surveillance teams to patrol the waters just off the coast and to scout any similar "illegal" Mi'kmaw fisheries in their region. On alternating days, he and the captains of three other boats would take turns motoring up and down the shoreline at first light in search of any out-of-season traps or suspicious boats in the area. Though none were discovered, McWright felt he had a "duty" and an "obligation" to his industry and community to ensure that all harvesting taking place was happening within official frameworks, and therefore "legal"⁷. Had he not acted, "it would have been like throwing away your history,

⁴ Statistics provided by Department of Fisheries and Oceans at <http://www.dfo-mpo.gc.ca/stats/commercial/sea-maritimes-eng.htm>

⁵ Canadian dollars.

⁶ See Canadian Council of Professional Fish Harvesters at www.fishharvesterspecheurs.ca/fishing-industry, accessed June 2021.

⁷ Personal Communication, 24/03/2021, Arisaig, Nova Scotia.

your culture, everything we've built here over the years." Others, geographically closer to the indigenous fisheries, also felt an obligation to act, yet unfortunately did so in a manner less benign. Almost immediately following the September launch, non-indigenous commercial harvesters around southwest Nova Scotia destroyed Mi'kmaw fishing gear, burned storage facilities, confiscated their catch, and engaged in a number of intimidating acts of mob violence. As Mi'kmaw communities persisted in pursuing their moderate livelihood fisheries into 2021, the tensions continued throughout the province and witnessed scattered assaults, vandalism, new court cases, and accusations in both directions of criminality and even "terrorism". For some, the indigenous activism on the water was viewed as an existential threat which justified almost any means necessary to stop it.

But who are the supposed fisheries transgressors that have so attracted the vociferous ire of an industry raking in record profits year on year? Contemporary Mi'kmaw communities trace their lineage to indigenous peoples who first settled approximately 11,000 years ago in the regions of what are today known as Nova Scotia, New Brunswick, Newfoundland, Prince Edward Island, and Quebec in Canada, and the state of Maine in the United States (Whitehead & McGee 1983). Though their population numbers are much diminished from the pre-European contact era (Prins 2002), today approximately 16,000 Mi'kmaq live in Nova Scotia, with an additional 45,000 living in the other provinces and state mentioned above. In Nova Scotia, the Mi'kmaq are organized into 13 separate communities⁸, sometimes referred to as "bands" or "First Nations"⁹, each of which has jurisdiction over reserve lands granted by the British in the early 19th century (Sable & Francis 2012). While approximately 65% of the total Mi'kmaw population lives on reserves throughout the province, a growing portion are moving off-reserve to urban areas for education, work, and other social opportunities¹⁰. Each Mi'kmaw community is governed by an elected council, or "on-reserve government" (Meuse 2016, 65), and an elected Chief who collectively represent their interests to the wider society and make decisions regarding issues of on-reserve infrastructure development, healthcare delivery, and education.

While the councils also concern themselves with issues of housing and communal finances, perhaps their most important role is in promoting Mi'kmaw employment and

⁸ Acadia, Annapolis Valley, Bear River, Eskasoni, Glooscap, Membertou, Millbrook, Paqtnkek, Pictou Landing, Potlotek, Wagmatcook, Sipekne'katik, Waycobah.

⁹ Following the insights of indigenous scholar Thomas King (2012) on the most politically correct contemporary terminology, these three terms will be used interchangeably throughout this thesis, while terms such as "Indian" or "native" will only be used when quoting an individual or from a written text.

¹⁰ According to Nova Scotia provincial government demographic analyses at <http://novascotia.ca/abor/aboriginal-people/demographics/>

livelihood development. By the late 20th century, such efforts had generated jobs in industries as varied as construction, manufacturing, and public administration, both on and off-reserve (Wien 1996). Moreover, with the rise of legal activism in the 1980s and increased access to natural resources granted (e.g., the *Marshall Decision*), band councils have expanded to include the promotion of traditional hunting and fishing livelihoods. On marine harvesting in particular, bands have set up fisheries departments that support their members through trainings, gear provisions, regulatory enforcement, and the management of fisheries licenses (Coates 2000). They also take the lead on drafting management plans and conservation strategies and liaise with the DFO on the realization of indigenous rights vis-à-vis the fisheries. One such example is the right granted in 1992 by the Canadian courts for band members to fish for “food, social, and ceremonial” (FSC) purposes. Though the catch from FSC efforts is to be strictly non-commercial, these band-issued licenses have proven extremely popular and have been credited with reducing malnutrition in Mi’kmaw communities (Pannozzo 2020). Band fisheries departments also oversee the administration of what are known as “communal-commercial” licenses, which were an element of the post-*Marshall Decision* effort by DFO to bring Mi’kmaw fishers into the official regulatory fold. Though sometimes reviled for their assimilationist objective (e.g., Moore 2021), these licenses have brought in significant revenue for the bands over the last two decades (Coates 2021). Thus, when compared to previous eras, these efforts by band councils to realize rights and promote professionalism have significantly integrated Mi’kmaw harvesters into the fisheries sector; the most recent example of which is the promotion of moderate livelihood fisheries.

Yet, it is strictly in the latter effort that McWright and so many others who make their living in some corner of the industry take offense and perceive an encroaching menace to their own livelihoods. For, according to popular and official (i.e., DFO) sentiment, the refusal to accept moderate livelihood fisheries is not a racist backlash against an overzealous minority group attempting to change the status quo of the fishery hierarchy (e.g., Tutton 2021). Nor is the rejection rooted in greed and the desire to keep the lobsters in the water until officialdom permits the commercial harvesters to outcompete the Mi’kmaw harvesters in the race to trap (e.g., Charles & Bailey 2021). Rather, the explanation offered is one rooted in concerns around “conservation”, sometimes articulated as “sustainability”, of the lobster biomass should harvesting take place outside of official regulations. One specific claim is that out-of-season Mi’kmaw harvesting would negatively impact upon the biological process of molting. This annual phenomenon is when lobsters shed their exoskeletons in order to continue to

grow, which purportedly takes place at identifiable times of year depending on various factors (e.g., water temperature, migrations, etc.). It is often claimed that out-of-season harvesting also poses a risk to mating, egg laying, and hatching, as the seasonality of the fishery is supposedly informed by these critical life stages¹¹. Added fishing effort from additional Mi'kmaw band-issued licenses is also posed as a threat, as the commercial industry is understood by many to be “fully subscribed” (Baxter 2020) and unable to tolerate additional harvesters. In other words, the popular consensus is that the regulations exist for a reason and any violation thereof is a sure recipe for ecological disaster.

Hence, when McWright and fellow lobster harvesters conduct unofficial surveillance patrols along the Antigonish County coast, they can claim to be protecting the molt or dissuading agitation to late-summer mating routines. Likewise, when lobster buyers and exporters lobby the DFO and go public via the media decrying the Mi'kmaw fishery and demanding a halt to their operations, they can claim to be concerned about increased levels of fishing effort (i.e., too many traps) and the detrimental impact it will have on the export industry in the future. And when the DFO itself refuses to negotiate with the Mi'kmaw fisheries departments on out-of-season harvesting or unofficial license issuance from the bands, it can claim to be doing none other than structuring regulations according to what its own official science process tells it about the fishery and how best to sustain it. In other words, for the industry and its official backers, accusations of racism and greed are misplaced and simply fail to admit the scientifically proven dangers that the moderate livelihood efforts pose to the fishery. As such, it is said that the rejection of these new Mi'kmaw lobster fishing efforts is *not* a continuation of a centuries long process of exclusion and inequality in the fishery, but rather the application of science-based regulations that ensure the continuation of a lucrative and sustainable commercial sector. Any veering from this official path, according to the argument, would certainly spell environmental disaster and the collapse of a fishery so revered by the likes of McWright and his industry allies.

Point of Departure

Before outlining the original line of thought offered by the current study, it is important to highlight what the argumentation in the chapters to come is *not* and what some of its key limitations are. As a work of anthropology, the current study does not reflect the

¹¹ See DFO's 'Fishing Seasons for Inshore Lobster Fisheries' at <https://www.dfo-mpo.gc.ca/fisheries-peches/aboriginal-autochtones/moderate-livelihood-subsistance-convenable/lobster-homard-eng.html>, Accessed June 2021.

scientific qualifications, nor does it seek to take a stance, on the issues of lobster biology and ecology that underpin the key regulatory issues at play in the conservation risk debate. Those issues are under constant scrutiny by a range of both official and independent marine biologists and environmental organizations, whose scientific work is certain to shed more light on the issues of concern in the future. In addition, the current study does not seek to denigrate the conservation risk concerns expressed by actors throughout the commercial sector- be they fishers, workers in the secondary industries, NGOs, or simply members of the communities within which the fishery is embedded. The subjectivities that underlie such foreboding are real and must be acknowledged as authentic concerns of a working class that sees in its future many an economic pitfall. Thus, neither a work of natural scientific critique, nor one of judgement of the lived experience of the fishery's protagonists, the current study seeks to situate such subjectivities and the concerns they generate within wider historical trajectories of the fishery and the inequalities and hierarchies of access they reflect.

As such, the point of departure argues that such concerns and the forms of rhetoric that they produce about the risks to the fishery cannot be dis-embedded from the structures of power that have increasingly shaped the fishery's fate since the earliest days of the colonial era. Thus, drawing on the insights of a group of critical marine biologists, environmental NGOs, and scientifically committed harvesters, the current study highlights that certain of the lobster fishery's official regulations have become unquestioned and unexamined dogma that receive little scientific scrutiny from officialdom. As such, policies such as the rigid enforcement of fishing seasonality and trap and license limitations per region become viewed less as apolitical and objective reflections of scientific certainty, and more as tools to maintain an exclusionary edifice in the face of indigenous agitations for increased access. Once dogmatic, and supposedly rooted in absolute understandings of the natural environment and lobster biology, the policies in question become non-negotiable and ally all those who benefit from the status quo behind the enforcement thereof. Hence, this study argues that as opposed to viewing the debate around conservation risks as a committed scientific endeavor, it is better understood as a continuation of various forms of techno-bureaucratic exclusions that were initiated in the late 19th century to limit indigenous access to the lobster fishery. The conservation risk argument's potential in explaining the widespread rejection of the moderate livelihood fisheries is therefore limited, and barely scratches the surface of ontological, relational, and ethical concerns that this study highlights. As an original line of argumentation, the argument that follows adopts the lens of a particular version of social

ecology and situates the current dispute and its social lineage within the historical flux of ecological norms in the lobster fishery.

Theoretical Terms

As opposed to focusing exclusively on competing scientific discourses of conservation and the actors and ritual routines that sustain them in the current dispute, in the chapters that follow the theoretical construct of ecology will be employed to more expansively reveal the social complexities at play. Thus, hereafter the term “ecology” is defined as a configuration of hierarchically organized relationships between both human and non-human beings and entities in a particular social formation. Ecologies “relate to ontologies” (Sprengrer & Grossmann 2018, x) and therefore have particularistic conceptions of the nature of reality and assign varying degrees of moral and communicative capacity among those identified. The ontological foundation of an ecology also informs notions of agency, will, and intentionality and how both human and non-human beings and entities are expected to relate to one another. For example, an ecology may prioritize relationships between humans and exclusively direct intentional forms of social intercourse and communicative action thereto. While such an ecology may allow for relations to be maintained with non-humans, they would manifest as mechanical, utilitarian, and devoid of social spirit. By contrast, an ecology may ascribe moral and communicative attributes to non-human beings and entities- sometimes referred to as “personhood” (Viveiros de Castro 2004, 465; Århem 2016; Sprenger 2021)- and therefore allow for a certain intentional sociality to characterize relations among all. Such an ecology can be thought of as expanding the “sociocosmic field” (Viveiros de Castro 1998, 475) beyond the human realm to include any manner of fauna, flora, inert, agentive, or even spirit infused phenomena.

Moreover, the current study employs the notion of ecology *not* as a meta-construct synonymous with a society’s total cultural configuration, or what some may refer to in an expansive sense as “worlds” (e.g., Cadena 2010; Nadasdy 2021). Rather, ecology here utilized is more local and refers to a collectivity of actors (both human and non-human) that configure themselves in a set of relationships while in the service of putting one another to use for some benefit. With a particular focus on human-environment relations, such efforts may include humans leveraging other non-human beings or entities for such varied uses as basic sustenance, recreation, communal well-being, ritual propitiation, or of course commodification; a set of relations that reflect particular attributes like competition, predation, mutualism, or reciprocity. For example, the commercial lobster fishery of Nova Scotia can be thought of as an ecology, in which certain human actors cooperate with one

another in order to harvest other non-human beings (i.e., the lobsters) for commodification and profit in a market economy. Given this study's focus on human actors putting others to use for material gain, ecologies are therefore understood to embody particular "livelihood ethics" that provide a moral framing for such economic action. As such, an ecology's ethical stance identifies which beings and entities- human or nonhuman- can be 'put to use' or 'made beneficial', including the purpose, acceptable forms of governance, and the values that are to guide such efforts. In recognition of its for-profit inclinations and market orientations, the current study thus identifies a "capitalist ecology" of the commercial lobster fishery in Nova Scotia, including a set of "primary actors" whose human relations sustain its contours; an ecology whose historical manifestation is linked to the earliest of Euro-colonial contact in the region.

When that capitalist ecology first started to come into view at the turn of the 16th century along the coasts of Nova Scotia, indigenous peoples too were present and putting to use marine resources for the benefit of their communities. Reflecting their own configurations of relations, moral and communicative identifications, and ethical sensibilities in the harvesting of such resources, a particularistic indigenous ecology was thus encountered and from early on came into close contact with that of the European fishers. As such, the current study employs the additional theoretical construct of "ecological plurality" to refer to those temporal and spatial contexts wherein divergent ecologies begin to relate to one another in any number of ways. Such instances may arise in moments of intense ideological change or population shifts, political-economic transformation due to external influences, or, as in the current study, during moments of colonial-settler contact and the introduction of an external ecology to an indigenous one. While examples of ecological plurality generating reciprocal benefits have been noted (e.g., Kassam 2010; Turner et. al. 2003), it is essential to recognize that the relational characteristics of exclusion and domination are just as common as inclusion and cooperation in such moments. Hence, the contrasting concept of "ecological hegemoniality" will also be introduced to elucidate how that capitalist ecology of the fishery became dominate over centuries of colonial-settler exploitation of the fisheries, and thus variously subordinated and reconfigured the contours of the indigenous ecology. As such, extreme power imbalances (e.g., political, technological, means to deploy violence) resulted in "diverging ecologies" (Brauchler 2018, 373) constituting the marine harvest over hundreds of years, with one becoming increasingly hegemonic vis-à-vis the other; a dynamic which continues to characterize the fishery to this day.

Employing these terms, the current study paints a picture of historical flux along a continuum of opposing axes of ecological plurality↔hegemoniality in the lobster fishery. In the earliest days of Euro-settler marine harvesting in the 16th century, which was typically seasonal and involved little sustained contact with the Mi'kmaq, a relational state of ecological plurality came into view that proffered some benefits being exchanged, yet few outcomes of domination or subversion. However, by mid-century colonial and mercantilist designs on the region enabled the capitalist ecology to begin to express hegemonic relations vis-à-vis the indigenous ecology, which would set off a centuries long process that increasingly 'shifted the dial' towards the hegemoniality axis of the continuum. This hegemoniality in the fisheries manifested at various levels of the indigenous ecology, undermining its ontological assumptions of humanity's place in the cosmos, the relations needed to sustain that place, and how other species could be put to use to benefit Mi'kmaq communities. However, by the late-20th century this state of ecological hegemoniality had become intolerable and set off a process of both cultural revival *and* indigenous activism determined to restore ecological balance in the fisheries. Hence, through various legal victories that restored access to traditional fishing livelihoods, coupled with grassroots efforts to reconnect with an ecological knowledge and set of practices characteristic of the pre-contact era, we witness in the current moment a (re)emergent ecological plurality in the fisheries of Nova Scotia. In other words, certain "pluralizing and hegemonizing" (Sprenger & Grossman 2018, xiii) tendencies have been as constant in the fishery as the lobsters themselves, with ecological plurality once again emerging as a prevalent relational state.

Thesis Statement

In order to explain the sustained and sometimes violent rejection of Mi'kmaq moderate livelihood fisheries in Nova Scotia's commercial lobster sector, it is necessary to expand the analysis beyond concerns around conservation risk to the lobster biomass purportedly posed by said fisheries. While the primary actors of the capitalist ecology may have legitimate sustainability concerns, it is most useful to situate the genesis of those concerns within an historical framework of techno-bureaucratic exclusions proffered by a hegemonic capitalist ecology since the late 19th century. In other words, a focus on conservation risks and the forms of rhetoric that are deployed to maintain an exclusionary regulatory framework offer little more than a surface level rendering of the contemporary social dynamics unfolding in the fishery. By contrast, in framing the current dispute as representing flux on a continuum of ecological plurality↔hegemoniality, we begin to see the

multiple levels at which the rise of a self-governed indigenous fishery is viewed as undermining the capitalist ecology's hegemonic stance. Hence, with the emergence of a determined Mi'kmaw fishery, constituted by a revival of various ontological, relational, and ethical particularities that framed indigenous human-environment relations in the pre-contact era, we once again see an emergent ecological plurality knocking at the door of the lobster fishery of Nova Scotia. Hence, given the (re)emergence of an indigenous ecology that variably diverges from the hegemonic capitalist one of old, there is a shifting underway back towards the ecological plurality axis of the continuum, and the primary actors of the capitalist ecology have taken note.

Assuming an ethnographic view of this ecological flux, the current study identifies the ontological, relational, and ethical focus points where the pluralizing tendencies are most intimately experienced, and thus generating the backlash. For example, the capitalist ecology's configuration of relationships is understood by many to be undergoing a reordering of sorts, wherein certain of its non-human beings and forces are being pulled into moral proximity with its human actors. Whereas previously the lobsters, marine predators, and atmospheric and oceanic forces were rigidly confined to the 'nature' side of the ontological dichotomy, these objects are now perceived as becoming more subject-like and engendering moral obligations and social intentions that must be addressed. And among the capitalist ecology's human actors themselves, certain primary actors' relations with one another are becoming more antagonistic and reflecting less of the win-win sociality of old. Alongside the emergence of novel antagonists, these shifting relational stances leave many feeling isolated and under social siege. In addition, the capitalist ecology's livelihood ethics are viewed as being undermined by a bureaucratic transference of regulatory authority away from the State, with repercussions for how the fishery is demarcated, allotted, and studied for the industry's benefit. With this, alongside alternative indigenous moral framings of the fishery's purpose and the values set to guide its harvesting, stewardship, and management, the re-emergence of ecological plurality once again demonstrates its capacity to upend the ways of old so long taken for granted. Taken together, these manifestations of change signify the coming into ever closer relations of diverging ecologies that had for centuries been kept distant by the hegemonizing tendencies of the capitalist ecology.

Research Site, Data, and Methodology

The current study is based on one year of ethnographic fieldwork at various sites of the commercial lobster fishery in the Canadian province of Nova Scotia from January through

December of 2021. While the majority of the fieldwork period was spent with fishers at their home wharves and communities in the counties of Digby and Yarmouth in southwest Nova Scotia *and* in Victoria County on Cape Breton Island, numerous other research trips were taken to fishing communities throughout the province, notably in Pictou, Lunenburg, and Shelburne counties. Research was also conducted at various industrial spaces adjacent to fishing wharves where lobster processing, storage, and export facilities are located, notably in the regions of Yarmouth Bar, Shelburne, and North Sydney. Data collection efforts aboard fishers' boats included expeditions in Lobster Fishing Area (LFA)¹² 34 in southwest Nova Scotia, LFA 27 off the north coast of Cape Breton, and LFA 26a adjacent to Pictou and Antigonish counties, which include the Atlantic coastal waterways of St. Mary's Bay in the Gulf of Maine, the Gulf of St. Lawrence, and the Northumberland Strait respectively. Additional research sites throughout the province included the cities of Antigonish, Halifax, Windsor, Dartmouth, Lunenburg, and Yarmouth, where pre-arranged formal interviews were conducted (See below).

In order to gain insights from multiple angles of the commercial fishery, participants included individual fishers, fishermen's association heads, employees in secondary industries (e.g., lobster buyers, exporters, gear dealers, etc.), environmental organizations, university researchers, journalists, trade associations, conservation researchers and NGO representatives, and members of the communities in which the fishery is situated. All data presented in the current study is qualitative and was exclusively recorded in fieldnotes by this writer. Participants and research sites were identified through a general "purposive sampling" methodology (Bryman 2008) in which contacts relevant to the research topic were initially identified and leveraged for additional access, contacts, and key informants as the research strategy developed (i.e., snowball sampling). Access to the above-named research sites and permission to conduct research was gained through liaising with heads of fishermen's associations, individual harvesters, wharf managers, and the federal Department of Fisheries and Oceans (DFO). Oral informed consent was obtained from all participants with the full scope of the study explained and its association with Heidelberg University's Institute of Anthropology disclosed. All organizations' and individuals' names presented in this study, other than those quoted from the media, have been anonymized given the sensitive nature of the dispute, while the names of places, universities, and government bodies are accurate.

¹² Lobster Fishing Areas are the official regulatory demarcations of the fishery.

Due to Covid-19 related safety protocols and related restrictions on contact with outsiders, ethnographic research with Mi'kmaw communities or lobster harvesters was not included in this study. Moreover, according to the Mi'kmaw-led ethics and research approval process for external researchers, ongoing risks presented by the pandemic precluded any community-based, on-reserve, or participant observation research with these communities. As such, research proposals were not being accepted throughout 2020 and 2021. However, access was permitted in the form of interviews- typically by phone- with representatives from Mi'kmaw communities or organizations who maintain a public profile, which includes Mi'kmaw academics at universities, band or fishery department media contacts, elders who maintain a public profile, spokespersons for advocacy organizations, and NGO representatives. Given these limitations, the current study includes data from semi-structured interviews with prominent Mi'kmaw elders working out of St. Francis Xavier University and the Indigenous Institute for Natural Resources, spokespersons and fisheries coordinators for the Mi'kmaw Environmental Association and the Mi'kmaq Rights Coalition NGOs, and additional interviews with spokespersons from band fisheries departments. Remaining data on Mi'kmaw communities, fisheries, and ecology come from the literature review, media, and the provincial government of Nova Scotia¹³. This data is primarily found in *Chapters 1, 2, and 6*.

The fieldwork for the current study included two research methodologies: participant observation and formal semi-structured interviews. Participant observation was primarily conducted with fishers at their wharves and while lobster harvesting on the waters. For instance, the Eastern Fishermen's Association (EFA), based at Meteghan wharf in Digby County in southwest Nova Scotia provided access to several of its member captains, including some based out of Yarmouth wharf, and facilitated my participation aboard lobster harvesting vessels during their early 2021 fishing season of January- May 31 and again at the end of the year from November- December 31 (LFA 34). Onboard activities included strict observation from the captain's deck of the pulling, baiting, and setting of traps, minor tasks such as sweeping the deck or banding claws, unloading lobster storage bins wharf-side, and documentation of lobster metrics during the occasional "at-sea-sampling" research protocols. The EFA also granted access to their wharf offices and allowed this writer to participate in their bi-weekly meetings, allowed individual and group interviews, and facilitated access to the entire wharf through negotiations with the wharf manager. Many days throughout the

¹³ Government of the Province of Nova Scotia, Office of L'nu Affairs at <https://beta.novascotia.ca/government/lnu-affairs/about>, Accessed November 2021.

fishing season, when bad weather prevented harvesting, were spent at the wharf socializing with other fishers, observing boat and gear preparations, and documenting the myriad negotiations between EFA members and their buyers, wharf mates, bait suppliers, and lobster pound (storage facility) operators. The EFA also provided introductions to additional EFA members at Port Morien wharf on Cape Breton Island, which facilitated additional wharf-based participant observation.

In addition, the Cape Breton Lobster Association (CBLA) based in North Sydney, Cape Breton Island similarly facilitated access to its members and those harvesters willing to allow participant observation during harvesting. Thus, during their LFA 27 season of May 15-July 15, this writer was allowed access to the fishing vessels of three separate captains, including that of the CBLA President. My role during these participant observation opportunities was similar to that with the EFA, but also included more intense involvement in their annual at-sea-sampling program that was facilitated by academic researchers from Acadia University in Nova Scotia. My tasks included measuring lobsters, documenting shell hardness, condition, and length, emptying traps, and keeping track of the random sampling process. Most non-fishing days included time spent at the Ingonish wharf where most of the members fish out of, observing the daily routines of both lobster and crab harvesters, and socializing with retired fishers and industry actors in the communities surrounding Ingonish and nearby Neils Harbour and White Point. The CBLA also granted access to its offices in North Sydney and allowed individual and group interviews on-site, invited me to sit in on their routine meetings, and permitted access to meetings with their primary lobster buyer during price negotiations with the President. In addition, the CBLA allowed me to participate in their three-day Annual General Meeting in North Sydney in March of 2021.

Similarly, the Gulf Nova Scotia Association (GNSA), based in the town of Antigonish, granted access to numerous of its members who fish out of the wharves of Arisaig, Lismore, and Ballantyne's Cove off the coast of Antigonish county. Though this association resulted in only a few days of onboard participant observation, it did allow for intimate access to those wharves during their LFA 26b fishing season of May 1-June 30. Given that the season overlapped with that of the CBLA mentioned above, I alternated my time between the two based on availability of fishers and on-off fishing days. Wharf-based participant observation included accompanying fishers to unload their hauls at lobster pounds, buying bait from nearby dealers, loading and unloading traps from boats, repairing and refueling boats, assisting others with mechanical issues, and the occasional Sunday community barbecue. Time spent at the wharf in Ballantyne's Cove was particularly valuable

as multiple fish processing facilities and buyers are based in the vicinity and allowed for additional observation of fisher-industry relations, particularly with the East Bay Fishermen's Cooperative. The Cooperative is owned and run by several members of the GNSA and therefore facilitated access to it, its corporate offices, and its storage facility at the wharf. The GNSA also allowed access to its offices in Antigonish for interviews with the President and helped to coordinate my access to members of the Northumberland Strait Fishermen's Association based in Pictou County.

Other participant observation opportunities were provided by numerous secondary industries that support the lobster trade. For instance, the Mobley Lobster Company based in Yarmouth Bar allowed me to spend several weeks throughout the year at its headquarters to observe the purchasing of lobsters from fishers, the treatment and care of lobsters in its storage facilities, and the sale of lobsters to exporters. The Clark's Harbour Fisheries company based in Yarmouth and Cape Sable Island allowed me to sit in their offices at various times throughout the year corresponding to nearby LFA 33's fishing season (November-May 31) to observe negotiations with transporters, pound operators, its sister company Chi-Can Lobster Inc. in Vancouver, and buyers in South Korea and China. And the lobster live well manufacturing company Aqua Marine Systems granted access to its factory in Westville on several occasions between August and October to observe the design, manufacture, and marketing of its lobster storage and transport products around the Atlantic provinces. Numerous other pound operators, lobster processors, and equipment dealers around Shelburne and Lunenburg counties allowed for periodic visits to their facilities, tours, interviews, and days of participant observation on a periodic basis. Lastly, during the August-October 2021 period, when not closely involved with the associations mentioned above, several weeks were spent in fishing communities in Shelburne and Pictou counties. These opportunities allowed for the observation of fishers harvesting other species, the off-season management of wharves, community relations with out of season harvesters, and the labor and mechanical transitions made at processing facilities to in-season species.

In addition, formal semi-structured interviews were conducted throughout the year with various actors involved in the commercial lobster industry. Interviewees included additional lobster harvesters from the Plymouth Rock Fishermen's Association, Bay of Fundy Fishermen's Association, and the Digby Fixed Gear Council, corporate actors in the lobster buying, exporting, and gear provision businesses, wharf managers, environmental NGOs, university-based conservation researchers, journalists, trade association members, and research scientists from the DFO. Many were conducted in a small group setting of 4-5

participants and were variously held at association or corporate offices, at wharves, in homes, on boats, or in public locations in nearby towns. Retired fishermen from the communities mentioned above also participated, as did a number of community members from around the relevant wharves who had family previously involved in the lobster sector. Interviews were loosely focused on the following topics: the history of the industry, risks to sustainability, relationships, demographics, the role of community, life histories of harvesting families, and challenges in pursuing a livelihood in the commercial sector. Interviews lasted between 1-2 hours and several interviewees sat for several interviews throughout the year. In total, 40 harvesters and community members participated in approximately 55 interviews, 15 corporate or trade association actors sat for 20 interviews, 10 environmental NGOs and nine conservation, fisheries management, or marine biology focused academics were interviewed, two DFO research scientists, and two journalists that have reported extensively on the current dispute participated.

Positionality and Limitations

Positionality here understood refers to both the particular perspective that this study offers on a contemporary dispute over natural resources based on who was accessed and what types of information were available *and* how my personal identity, beliefs, and knowledge may influence the outcomes of the study. Regarding the former, all participant observation and nearly 95% of the interviews conducted were with non-indigenous actors involved in the commercial lobster sector, or with organizations peripherally involved in that sector. As such, the argument made regarding why there has been such a vociferous rejection of new indigenous fisheries reflects the views, opinions, anxieties, and concerns of solely that particular demographic. As referenced in the chapters to follow, a variety of other interpretations on this dispute exist- ranging from racism, greed, corruption, ignorance, etc.- yet the one presented herein on the waxing and waning of ecological plurality offers a unique view from those most likely to be impacted by the introduction of new fishers and their ways and beliefs into the fishery. In other words, though some reflection is made on indigenous history and the particular ecology that constituted Mi'kmaw engagement with the fishery in the pre-contact era (*Chapter 1*), as well as recent efforts to revive those 'traditional' ways of harvesting in the moderate livelihood fisheries (*Chapter 6*), in no way does this study reflect an indigenous perspective on the current dispute. Such a view would be more well-

represented from researchers with better access, familiarity, and ethnographic experience with Mi'kmaw communities, or rather with that level of research positionality¹⁴.

On the latter form of positionality, I identify as a white, native English speaking North American, with a European heritage (German & English) rooted in Judeo-Christian traditions and beliefs (although secular). In addition, my childhood was firmly realized within a rural working-class context of mixed agricultural and manufacturing livelihoods in a small town in the industrial Midwest of the United States. Many of these identity markers mirror those of the participants in this study, who by and large see themselves as a white working class clinging to both cultural and livelihood traditions in the face of “elite” criticism and judgement and unpredictable economic headwinds. As a result of these similarities, I shared a native language, understandings of a particular North American working-class disposition and ways of being, thinking, and relating, and of course the status of a white non-indigenous man that in many ways reflects power and privilege to those who identify otherwise. Though my argument highlights centuries of oppression and inequities directed at indigenous people in the fisheries sector, the identity positionality outlined above generated certain sympathies and understandings on my part during the fieldwork of the working-class plight of those involved in the commercial sector. Such sympathies related to perceptions of economic decline, urban disdain for rural livelihoods, and misunderstandings of the ‘folkways’ and styles of communication of workers who use their own hands, force, and brawn to provide for their families; an array of subjectivities that I saw and experienced among working class family and friends in my own childhood and young adulthood.

Despite this positionality and the subjectivities that it has generated for this writer, the current study seeks to present an objective analysis and interpretation of a dispute that has aroused among those involved and the wider public many conflicting emotions and recollections of historical wrongs directed at the Mi'kmaq of Nova Scotia. There is no “taking sides” on the dispute presented herein. Thus, despite my sympathetic stance, a critical analysis of the commercial sector’s primary actors’ responses, rhetoric, and attitudes is offered and contradictions in their stories, myths, and portrayals of the fishery are highlighted. Working class sympathies are thus grated against critique in the pages that follow of an industrial and market fundamentalist fishery sector that in many ways seems to be undermining itself and its own long-term sustainability. Familiarity with North American ‘settler’ society and its individualist inclinations is counterbalanced with a highlighting of the communal benefits and

¹⁴ E.g., the recent work of Mi'kmaw scholars Sherry Pictou, Shelly Denny, and Sacha Dewolf, and non-indigenous scholars Fred Wien, Jane McMillan, Melanie Wiber, and Simone Poliandri (See bibliography).

long-term sustainability objectives the Mi'kmaq seek to derive from the fishery. And a personal affinity with the 'naturalist' bifurcation of nature versus culture that the commercial sector embodies is balanced through a highlighting of the holism and "sacredness" (Berkes 2018) offered by an idealized Mi'kmaw 'interconnection' with nature articulated by many involved in the fishery. In other words, through a framing of the current dispute in terms of ecological plurality and hegemoniality, the current study offers a dispassionate analysis that touches on multiple levels of cultural identity, ontological rootedness, and contemporary political machinations of various human actors who variously perceive in the world their own oppressors and risks to livelihoods; a divergence perhaps explained by their own positionality in the fishery that this study hopefully illuminates.

One potential limitation of the study is in the seasonality of the fishery and how intense periods of participant observation were rather short-term (2-4 months) as they alternated to correspond to those seasons (See above). Longer periods of time with fishers in-season may have revealed additional insights, generated deeper rapport, or perhaps additional contacts in the relevant associations. Participant observation with the secondary corporate entities also could have benefited from more extended periods of time and the ability to become more thoroughly embedded in those corporate cultures. However, a view focused exclusively on corporate entities' views of and practices in the fishery is likely worthy of a study on its own. Likewise, extended participant observation opportunities in the communities surrounding the fishery could have revealed other views on things like the history and purpose of the fishery and the values that are expected to guide its participants (See *Chapter 5*). And of course, the 'point of departure' presented above and in *Chapter 4* could offer a more thorough critique, perhaps from a sociology of science perspective, that dives deeper into the ways in which formal scientific institutions craft policy, defend policy, and revisit (or not) previously held assumptions about the ways of the natural world. Perhaps the most obvious limitation is in the limited access to Mi'kmaw harvesters and their communities that the fieldwork opportunity offered. Thus, in documenting the revival of various ways and understandings of the pre-contact ecology in *Chapter 6*, this study relies heavily on the available literature, publicly available fisheries plans and strategies from Mi'kmaw fishery departments, media, and a few interviews with Mi'kmaq involved in the new moderate livelihood fisheries. This presentation therefore offers just one view of what those fisheries are meant to look like and what beliefs and practices are expected when those fishers hit the water. An ethnographic account thereof would likely offer even more methods of elucidating

the ways the capitalist ecology sees in those fisheries a threat that needs to be stopped (as is presented in *Chapters 7 & 8*).

Chapter Summaries

Chapters 1 and 2 are historical-contextual and provide the theoretical backdrop of centuries of ecological flux in Nova Scotia's fisheries along the hegemoniality↔plurality continuum. *Chapter 1* draws from a limited historical literature that is available to provide a general sketch of Mi'kmaw seasonal migratory livelihoods in the pre-European contact era and focuses on the primacy of fisheries as a source of sustenance and cultural identity. The chapter then presents the establishment and expansion of Euro-settler fisheries in the province from the late-15th century and briefly introduces the emergent "capitalist ecology" that constituted those fisheries. Following an outline of the Mi'kmaw ecology that was encountered at first contact, the theoretical construct of "ecological plurality" is elaborated on and shown to have characterized the fishery in the early contact era. *Chapter 2* expands on the complementary theoretical concept of "ecological hegemoniality" and shows how increased Euro-settler exploitation of Nova Scotia's natural resources and colonial expansion caused a shift towards the hegemoniality axis of the continuum. The first iteration began in the late-16th century as a process of "de-spiritualization and fracture of indigenous ontological assumptions", which was caused by the missionary movement and the "commercial capitalist idealism" of the settler class. The focus then shifts to the mid-18th century as the hegemoniality manifested as "legalistic, techno-bureaucratic, and neoliberal exclusions" on the part of British colonialism, particularly in the lobster industry starting in the late 1800s. *Chapter 2* highlights that while the first form largely targeted the ontological assumptions and relational configurations of the indigenous ecology, subsequent iterations sought to exclude and administer indigenous livelihoods into obscurity. By the turn of the 20th century, this ecological hegemoniality had served to eliminate nearly all Mi'kmaq and their livelihood practices from the fishery.

Chapter 3 begins by describing how the hegemoniality of the previous centuries had, by the mid-20th, become intolerable. Thus, as opposed to negotiating with the government for access to natural resources, the Mi'kmaq took their cases to the courts in a burst of "legal activism". The chapter presents a handful of noteworthy cases that gradually expanded indigenous access to natural resources; all of which referenced "rights" that had been granted in Treaties signed in the 18th century. The discussion culminates in a presentation of the *Marshall Decision* (1999) case in Nova Scotia, which upheld the indigenous "Treaty rights"

to harvest fish for “commercial purposes”. I then present that, taken aback by the court’s ruling on “commercial” access, the government pursued a program of “economic assimilation” (training, license provision, access to capital, etc.) to force the realization of those rights into the dominant capitalist ecology of the fisheries sector. Lastly, *Chapter 3* presents that, fed up by 20 years of assimilationist efforts, Mi’kmaw harvesters defiantly launched their own self-governed lobster fisheries in the fall of 2020. This led to a new round of “lobster wars”, characterized by a vociferous and sometimes violent pushback from the largely non-indigenous commercial sector and the federal government from late-2020 and through 2021.

Chapter 4 begins with an outline of how the official explanation for the pushback against the Mi’kmaw fishery is rooted in concerns around “conservation”. I present a “rhetoric of collapse” that pervades government, industry, commercial harvesters, and non-indigenous coastal communities, which foresees the destruction and ultimate collapse of the lobster fishery faced with harvesting outside of official regulations. As the study’s point of departure, the focus then shifts to how such fears are rooted in “institutional orthodoxies” and the resulting “storylines” of proper fisheries management that they create. The former shows how certain understandings of conservation science can become “orthodox”, in the sense that they are taken as “received wisdoms” that receive little scientific scrutiny. Institutional orthodoxies from officialdom lead to “storylines” at the popular level, and manifest as simplified forms of rhetoric about proper fishery management that justify exclusionary regulations. Lastly, the chapter shows that the “problem closure” around lobster seasons and levels of fishing effort that the institutional orthodoxies and storylines create is being contested and revealed for its hegemonic tendencies. In sum, the chapter shows that rather than viewing concerns around “conservation” as the primary cause for the pushback against Mi’kmaw fisheries, such concerns are best understood as the result of institutional orthodoxies and the story lines that they create; both of which are the latest iteration of ecological hegemoniality in the fishery.

Part II presents the ethnographic data demonstrating how the capitalist and indigenous ecologies are once again coming into close relations with one another (i.e., a shift back towards the plurality axis of the continuum) and how this emergent plurality is viewed as a threat by the primary actors of the capitalist ecology. The data presented in *Chapters 5-8* break from the conservation argument discussed in *Chapter 4* to show that at the ethnographic level certain “distinctions between ecologies” (Sprenger & Grossman 2018, xiv) are increasingly coming into view as an indigenous ecology reasserts itself in the fishery, and the

commercial industry has taken note and is responding in kind. Hence, as opposed to surface level concerns around ‘conservation’, or ‘sustainability’, of the lobster stock, the data reveal rigid ontological dualities questioned, relational schemes reconfigured and demanding of new forms of sociality between fishers and fished, and ethical parameters that historically ensured a level playing field seemingly unraveling and potentially resulting in a ‘tragedy of the commons’ dilemma. In other words, as ecological plurality returns to the commercial lobster sector, risks are perceived and a certain undoing of the hegemoniality of old appears just over the horizon.

Chapter 5 traces the ontological, relational, and livelihood ethics contours of the contemporary capitalist ecology. Beginning with a presentation of the naturalist inclinations of the ecology, the discussion demonstrates how a rigid nature-culture bifurcation identifies in the fishery both objects (non-human beings and entities) and subjects (human actors). The section traces the amoral and non-communicative characteristics of the fishery’s objects (e.g., the lobsters) and how this results in a certain *denied sociality* direct thereto. By contrast, the fishery’s subjects (e.g., the fishers) present themselves as moral and communicative beings with complex subjectivities, will, and intention, and therefore the recipient and generator of *intentional sociality* vis-à-vis other subjects. Upon these identifications, I trace a configuration of both *positive* and *negative relationality* that emerges among subjects and subjects and objects. The former represents relations that result in positive outcomes for all involved (e.g., fishers relating to their buyers), while the latter indicates relations in which one party stands to suffer or experience some loss while the other gains from the transaction (e.g., fisher profits, lobster dies). Lastly, the capitalist ecology’s livelihood ethics are presented as including a *techno-bureaucratic deference* and *moral framing* that guide subjects’ harvesting. The former refers to the expectations of officialdom (i.e., DFO) to properly govern the fishery and to effectively manage the fishery’s ‘system, users, and units’ in an objective bureaucratic manner. The latter refers to how the purpose of the fishery is understood (e.g., commodification for a market economy) and the values expected to guide the fishery’s subjects in pursuing that purpose (e.g., competition & honor). The sum total is a capitalist ecology four centuries in the making.

Chapter 6 presents that alongside this capitalist ecology, a number of Mi’kmaw communities are pursuing efforts to reintegrate an adapted form of the pre-contact ecology to the fisheries sector. The discussion is framed within a broader phenomenon of “indigenous cultural revival” and focuses specifically on the ecological contours of this revival in the teachings of elders, activism from NGOs, and the efforts of harvesting advocates to reassert

understandings and practices understood as “tradition”. The discussion then outlines how the recently launched moderate livelihood fisheries represent a form of “applied revivalism” as fishers and band fisheries departments seek to integrate those teachings, practices, and understandings in their harvesting efforts. Alongside the actual harvesters, a form of “institutional pluralism” has emerged to continue the push towards ecological plurality, in which a number of Mi’kmaw-led NGOs and advocacy organizations have entered the scene in the last 20 years. These groups pursue a number of educational and outreach campaigns to promote ‘traditional ecological knowledge’, to encourage resource harvesting rooted in pre-contact notions of *interconnection* and *unity* with the natural world, and to articulate forms of stewardship particular to these understandings. The chapter concludes with an outline of how this pluralization has generated an “epistemological fusion” in recent years, in which Mi’kmaw elders and NGOs articulate a knowledge system for managing the fishery that blends “Western scientific knowledge” with Mi’kmaw traditions; a phenomenon that has facilitated Mi’kmaw voice in official discussions on fisheries management. Taken together, these efforts represent “steps to an ecology of yore” and the primary forces moving the dial back towards the ecological plurality axis of the plurality-hegemoniality continuum.

Chapters 7 & 8 demonstrate that as these Mi’kmaw-led efforts are further consolidated, the risks perceived by the capitalist ecology are myriad. For instance, *Chapter 7* shows how expanded identifications of subjectivity, communalist values, and humanity’s responsibility for climate change communicated by an emergent indigenous ecology are forcing a rethink of rigid object status identifications in the fishery. Whereas the lobster and other predatory whales, seals, and groundfish, as well as the dreaded forces of bad weather and dangerous waves, were once understood to exist beyond the frontiers of humanity, and therefore denied sociality, they are now being pulled into moral proximity with the fishery’s subjects and demanding new and intentional forms of social intercourse and obligations. Similarly, the relational configuration of the capitalist ecology is being reordered by the “shifting to” and “emerging anew” in negative relationality of subjects that are either sympathetic to or seek to benefit from the Mi’kmaw fisheries. These subjects- some once friends, others new foes- are adding actor antagonists that the capitalist ecology must contend with as it seeks its fortunes (i.e., new subjects in negative relationality). *Chapter 8* focuses on how the capitalist ecology’s livelihood ethics are being undermined by indigenous forms of fisheries governance, and the “bureaucratic transference” away from the State that is transpiring. This transference has implications for how the fishery’s ‘system, users, and units’ are managed and how ocean stewardship is practiced, studied, and understood. Lastly, a

certain *moral slippage* is presented as alternative articulations of the fishery's purpose and the values set to guide its harvesting cause fissures in the once "popular consensus" of the capitalist ecology's ethical leanings. In short, the threats are diffuse, and the sense of decay in this once great modernist economic institution cannot be avoided.

For McWright and his allied subjects in the capitalist ecology, the lobster fishery has come full circle. Just a little more than 20 years ago, they might have been forgiven for predicting that the commercial lobster fishery would forever be constituted by the ontological, relational, and ethical sensibilities and social contours of the capitalist ecology. Those naturalist assumptions were firmly in the majority, its configuration of relations well-established and mutually beneficial for many, and its livelihood ethics effectively framing the moral requisites of the lobster harvest in Nova Scotia. With the *Marshall Decision*, indigenous agitation for rights recognition and activism in the fisheries sector provided the first indications that perhaps other ways, relations, and understandings were not far off. If the courts wouldn't stop it, then perhaps a rhetoric around conservation risks could mobilize enough actors to hold it at bay. And for the likes of McWright in the capitalist ecology, "it" is the fear of a return of ecological plurality at a level unknown in the fishery sector since the earliest decades of the colonial era. And it is the prevention of that eventuality that has mobilized so many to deny and prevent what others see as an absolute right due to the indigenous peoples of Nova Scotia.



CHAPTER ONE

One Fishery, Two Peoples

The Euro-Colonial Roots of Ecological Plurality in the Fisheries of Historical Mi'kma'ki

Every part of this earth is sacred to my people. Every shining pine needle, every sandy shore, every mist in the dark woods, every clearing, and every humming insect is holy in the memory and experience of my people. The sap that courses through the trees carries the memories of the red man. . . . The White man's dead forget the country of their birth when they go for a walk among the stars. Our dead never forget this beautiful earth, for it is the mother of the red man. We are part of the earth, and it is part of us. The perfumed flowers are our sisters; the deer, the horse, the great eagle, these are our brothers. The rocky crests, the juices in the meadows, the body heat of the pony, and man- all belong to the same family.

Daniel Paul, Mi'kmaw Elder (2000: 57)

As human beings, when we pass on, our flesh is put back to the earth and that organic material is living, and it's made up of everything that makes up everything on Earth. And it becomes a part of the soil. And then that feeds all the microbes, everything in the soil. And then it feeds the grass and all the plants. And then it feeds the four-leggeds and two-leggeds and the birds, and then in turn it feeds us. And then we go back to the earth. So when you're indigenous and you live on a geographic piece of land for thousands of years, you become spiritually, traditionally a part of everything. Your spirit lives on in everything. So we're caught in that cycle.

Kerry Prosper, Mi'kmaw Elder (2020)

I. Indigenous Livelihoods at European Contact

According to the archaeological record, migrating bands of big game hunters reached the North American Atlantic seaboard approximately 10-12,000 years ago in the wake of retreating glacial ice (Whitehead & McGee 1983; Paul 2000). Typically referred to as the “Paleo-Indian Period” (Prins 2002: 23), this timeframe has produced in recent decades some of the richest material culture discoveries of early indigenous culture in northeast North America. It is important to highlight here that some Mi’kmaw intellectuals and Elders do not ascribe to this standard anthropological/ archaeological periodization and use of temporal labels such as “Paleo-Indian Period” (See Julien et al. 2008). In their view, such rigid temporal delimitations obscures and disconnects the continuous relations and forms of descent between the earliest inhabitants of the region and contemporary indigenous communities of Nova Scotia and nearby provinces. However, for clarity in presenting the historical transformations in livelihood practices of the time, the sections to come will loosely follow the standard periodization. The most illuminating of such material discoveries is the Debert archaeological site in Nova Scotia, which has generated an abundance of artefacts that indicate distinct big game hunting and occasional river-based aquatic harvesting livelihoods in what is today known as the Atlantic Canadian provinces of New Brunswick and Nova Scotia¹⁵. While there is some evidence that Paleo-Indian habitation in the area was interrupted by subsequent glacial activity around 10,000 years ago (Davis 1997, 11), the early settlement and exploitation of this unique ecological niche is well-documented to have originated in the Paleo-era and to have generally traced the edges of retreating glaciation.

However, according to the origin story of the indigenous Mi’kmaw people of the region, there is a “time immemorial” essence to their connection with these lands and the abundant life forms and forces inherent therein (McMillan 2018, 73). For them, the Creator (*Kisu’lkw*) brought forth the Mi’kmaw people (*L’nu*) from the land and sea, as well as the sun (*Niskam*), and the ever-important spiritual teacher cum “culture hero” *Kluskap* (Coates, 2000). Amidst this dynamic temporal-spatial backdrop¹⁶, Mi’kmaw origin stories locate human relationality within and of the natural and spirit world- neither separate from, nor superior to it. Thus, Mi’kmaw Elders recount that since the beginning of time the Creator has guided the

¹⁵ Canadian Museum of History, ([Civilization.ca](https://civilization.ca) - Gateway to Aboriginal Heritage - The Debert Palaeo-Indian National Historic Site (historymuseum.ca), Accessed January 2022.

¹⁶ It is important to note that Mi’kmaw linguists have in recent years identified a number of other terms that have been used historically to denote the Creator (e.g., *Ankweyulkw*, *Jikeyulkw*, *Tekweyulkw*, etc.), all of which are transitive verbs that emphasize “processes of creation” and constitute the cosmos as “continuously manifesting” and “fluid and transforming” (Sable & Francis 2012, 30-31).

Mi'kmaq in their pursuit of hunting and fishing livelihoods, including the necessary respect for and relationality with all manner of fauna, flora and spatial physicality, and ultimately emphasized the interconnection and interdependence of all beings on the eternal territory of Mi'kma'ki¹⁷ (McMillan 2018, 72-73). In livelihood terms, this knowledge passed on from the Creator through the generations and was historically manifest in seasonal migratory patterns.

Seasonal Migrations

Harald Prins' (2002) research on the pre-history of Nova Scotia highlights that given the relatively low faunal carrying capacity of the woodlands of the Archaic Period (i.e., 10,000-2,000 years ago), indigenous society would have adapted at this early stage to supplement hunting with advances in forest foraging and the exploitation of marine resources. Thus, small mobile groups of the era developed a "basic cultural pattern" (2002, 24) centered around the hunting of white tail deer and moose at interior hunting sites in the winters, the targeting of marine mammals such as whales, harbor seals, and walrus in the summers, and year-round foraging in the region's dense forest ecosystem. Fred Wien (1986) elaborates that given the unfavorable climate of the era, extensive horticulture-based livelihoods were simply unsustainable, which further contributed to the development of increasingly complex seasonal cycles of migration rooted in a subsistence ethic. Thus, while the relatively temperate spring and summers were spent on the coasts and along nearby riverine oases of natural bounty, the harsher autumn and winter months were characterized by a retreat to inland hunting camps in pursuit of terrestrial species (Wallis & Wallis 1955, 25-27). By the late Archaic Period, indigenous life in Mi'kmaki demonstrated these "clear patterns of economic pursuit" (Snow 1968, 1148) and reflected the earliest inclinations toward the "maintenance of family and tribal life" (Battiste 1997, 136).

By the time of the Woodland Period (i.e., 2,000- 500 years ago), a particular social structure had adapted to shifting environmental conditions and taken shape among these Mi'kmaw communities that enabled and facilitated the consolidation of these seasonal migrations. During the fall and winter months, which required more mobility in tracking prey, the Mi'kmaq would disperse into small kin-based social units of 10-15 individuals. These groups were typically comprised of a headman (*saqmaw*) and his immediate nuclear family,

¹⁷ Mi'kma'ki is the Mi'kmaw term for the historical territories of pre-contact Mi'kmaq. According to Sable & Francis (2012), historical Mi'kma'ki was constituted by eight districts (Kespe'k, Epekwitk aq Piktuk, Sipekne'katik, Kespukwitk, Unama'kik, Sikniqt, Eskikewa'kik, and Ktaqmkuk), which overlap with contemporary Nova Scotia, New Brunswick, Prince Edward Island, Newfoundland, the Gaspee peninsula of Quebec, and parts of northern Maine. Note that others have excluded regions in Newfoundland and only included seven historical districts (See Prins 2002, 35).

with additional married sons and daughters or unmarried brothers and sisters occasionally joining the mobile, yet residential kin group (Bailey 1969). In the summer months, these small units would convene into larger kin groups along the coasts, typically referred to as “bands”, and would engage a more complex sociality during periods of relative abundance (Prins 2002). For instance, it was during these months that exogamous marriage rules were put into practice, followed by patrilocal residence patterns, both of which are said to have fostered inter-band reciprocity and cooperation in both hunting and fishing endeavors. For example, overseen and directed by hereditary Chiefs, these closely kin-linked bands are known to have provided food aid in times of regional shortages, to have seconded hunters to other bands with a shortage of young men, and to loan out fishing gear from season to season (Nietfeld 1981). During these periods of expanded residency, band Chiefs also coordinated access to oceanic and riverine fisheries and facilitated a “participatory decision making” process to agree on redistribution norms during lean times (Jesuit Relations 1896). Prins notes that this early social structure, and the inter-band “generalized reciprocity” that it enabled, was highly adaptive to the shifting resource availability that the Woodland Period offered, and was thus maintained up to the time of European contact (2002, 33)

During this era, terrestrial harvesting is thought to have expanded and become more complex to include the exploitation of caribou, deer, porcupine, muskrat and other smaller mammals, while marine exploitation assumed new technologies and was diversified to include sea-based shellfish like mussels and clams and the migratory birds, eels, flounder and smelt of the region’s abundant rivers. Ethnohistorian Virginia Miller (1995, 349-352) expands on the Woodland Period in noting that Mi’kmaw summer and spring settlements tended to be situated along the coasts and near the mouths of rivers which enabled the increased harvesting of more distant ocean fish, such as cod, plaice, skate, striped bass, and lobster. Miller adds that at this time inter-band cooperation resulted in an increased use of technology in river harvesting, and hence “ample quantities” of salmon, sturgeon, alewives and other freshwater fish. Weir traps, harpoons, small nets, and loosely woven baskets in particular were increasingly used, thus increasing the efficiency and quantity of the catch (Whitehead & McGee 1983). Thus, the combination of enhanced riverine exploitation and diversified ocean harvesting typically ensured a bountiful season and a flourishing social life, which facilitated the transition to upstream winter hunting (Snow 1968).

By late autumn, watercraft were used to transport hunting gear and household goods to inland campsites, typically not far from sources of freshwater and assumed mammalian breeding grounds. In addition to the enhanced use of hunting tools in the late Woodland

Period, one of the primary developments related to winter hunting was the formation of what anthropologist Frank Speck referred to as the “family hunting territory” (Chute 1999, 482-483). According to Speck, the 10-15 member dispersed kin group mentioned above would become the “fundamental socioeconomic unit of the winter months”, who would camp and hunt together on a relatively exclusive delimited territory. While the exact provenance of the family hunting territory is debated, this Woodland-era system is nonetheless associated with more complex and increased winter harvesting of moose, bear, elk, beavers, otters and seals (Wallis & Wallis 1955, 25-27). With the coming of spring and the emergence of abundant shellfish and riverine spawning, the Mi’kmaq would reconvene as bands, or even multi-band units, on the coasts and begin anew the seasonal cycle. While the geographic contours and temporal patterns of traditional Mi’kmaq livelihoods had been significantly disrupted by the mid-18th century, the expanding and ever more complex seasonal migratory system was firmly in place and sustaining a substantial indigenous population in the early years of European contact.

Indigenous Fisheries

When the early 20th century anthropologists Stansbury Hager and Elsie Parsons highlighted the pride of place assumed by the sea, fish, and their spirits in Mi’kmaq folklore, they were simply recounting previous European impressions of some 300 years earlier of the centrality of the sea and fisheries in Mi’kmaq society. For instance, while Hager’s (1895) research highlighted the prominence of half-fish half-man actors in turn of the century oral narratives, Parsons (1925) elaborated more fully on the frequency of folkloric references to canoes and their enabling of water-based livelihoods, as well as various marine species and their relationships with the human world. Hager and Parsons were no doubt aware of the similar impressions of the French explorer Marc Lescarbot who wrote at length in the early 17th century of not only the bountiful marine species and social focus on fisheries in Mi’kmaq, but also the Mi’kmaq skill and advanced techniques used to exploit the bounty (2018). A few decades later, the priest Antoine Maillard (1762/2015) seconded Lescarbot in writing of the “fishery better than any on the coasts belonging to France” and of the “particular secrets” demonstrated by Mi’kmaq fishermen. By the end of the century, the missionary Chrestien Le Clerq was equally impressed, noting the “prodigious quantity of all sorts of fish” harvested by the Mi’kmaq and their adeptness at securing “everything necessary for life” from the sea (in Barsh 2002, 19). These early impressions serve as a reminder that

despite seasonal migrations, the exploitation of fisheries resources constituted “the traditional linchpin of Mi’kmaw society and economy” in the pre-contact era (Wildsmith 1995, 140).

Regarding this essential relationship to the fisheries, Chris Milley and Anthony Charles note that at the time of contact up to 90% of the Mi’kmaw food supply was secured from marine resources, and thus became “deeply entwined in the belief systems, cultural myths and legends, language and world-views of the Mi’kmaq” (2001, 1). Jane McMillan and Kerry Prosper further the point in describing a “sacred relationship with the sea” that has developed over thousands of years and a resulting Mi’kmaw cultural identity that emerges “socially, economically, and politically” in relation thereto (2016, 630). Thus, the “premises of Mi’kmaw traditional fisheries”, according to McMillan and Prosper, manifest as both spiritual and practical, with “relationships with marine life incorporated into the cosmological belief system” *and* serving to ensure the “well-being and survival of families and community” (2016, 631). Not surprisingly, this “long cultural history” with the sea and aquatic species (Davis et. al 2004, 360) relates not simply a necessary reliance on marine resources for survival and the spiritual reflection thereof, but also of a wide-ranging practical knowledge and skills-set in the making since the earliest Paleo-Indian settlement of the region.

As noted above, with the arrival of the Woodland Period the technologies employed by Mi’kmaw fishers had significantly advanced and evolved over time and therefore furthered the reality of a “mainly maritime economy” (Prins 2002, 27). One of the most significant innovations was the river and sea-going canoes prevalent throughout Mi’kma’ki which rendered nearly the whole of the fisheries as “one continuous waterway” (Wallis & Wallis 1955, 19). Wilson and Ruth Wallis wrote extensively on the remarkable functionality of the canoes, noting that through their employment the territory’s rivers and lakes “were highways for travel”, as the watercraft were “light and convenient”, and even allowed for long-distance fishing expeditions on the Atlantic (1955, 18-20). Made from birchbark and spruce root and waterproofed with animal fat, Mi’kmaw canoe making was understood as a specialized craft, supported by the spiritual guidance of *Gluskap*, and considered essential to successful riverine and coastal fishing (Meuse 2016, 27-30). While these innovative seacraft made accessible and navigable the region’s waterways and coastal fisheries, alongside the “exceptional skills in seamanship” of their Mi’kmaw captains (Paul 2000, 26), they were coupled with a range of other tools and techniques that had been improved over the generations and furthered the marine harvest.

For instance, when harvesting close to shore multiple forms of semicircular weir traps were put to use, which included both horizontal and alternately crossed sticks driven into tidal

streams, with corresponding swinging doors that would entrap fish with the comings and goings of the tides. At times up to 100 feet in length, weir traps were highly efficient at catching trout, bass, alewife and salmon (Wallis & Wallis 1955, 28), and were even said by Lescarbot in the 17th century to harvest dolphin and sturgeon (2018). Bone gorge fishhooks were also essential to the Mi'kmaw fisher's arsenal and reliably procured trout, salmon, and smelt from the banks of rivers, or alternatively on the coast at low tide from a canoe (Davis 1997). Fishing spears, sometimes called leisters, consisted of long wooden poles tipped with a bone or ivory point and were employed in the spring and summer to catch salmon, trout, bass, and flounder (Prins 2002, 29), as well as during ice fishing in the winter. Nets, often made of intertwined branches of elder or birch twigs, could be up to 150 feet in length and were baited to catch salmon and smelt, while moose bone harpoons and decoys of stuffed sealskins were harnessed in the killing of sea mammals, including seal, walrus, and porpoises (Wallis & Wallis 1955, 28-30). Central to this study's focus, lobster was procured at low tide using specialized sticks shaped with a curvature that allowed plucking by the tail, while mussels and clams were identified by breathing holes made visible by the receding tides (Davis, et al. 2004).

While avoiding over romanticizations of the pre-contact past, it is well-documented that when put to practical use, these tools and techniques ensured not only the health and longevity of the community, but also the ecological integrity and long-term sustainability of a resource base that had served indigenous peoples of the region for at least 10,000 years (Martin 1978; Whitehead & McGee 1983). By the early 16th century, it is estimated that the Mi'kmaq had increased harvesting the fisheries of Mi'kma'ki's rivers, lakes, and seacoasts to 10 months out of the year (Prins 2002), which, according to today's regulatory standards, would presumably constitute a situation of over-exploitation. Nonetheless, when European fishers began to arrive in increasing numbers, the fisheries were rich and abundant and sustaining a thriving Mi'kmaw civilization to such a degree that Father Pierre Biard noted in the *Jesuit Relations* of 1616, “. . . these then, but in a still greater number, are the revenues and incomes of our Savages; such, their table and living, all prepared and assigned, everything to its proper place and quarter.” However, with the fisheries of Mi'kma'ki on course to being increasingly exploited by outsiders, much change would be visited upon those livelihoods so revered by Biard, Lescarbot, Le Clerq and others in the centuries to come.

II. Ecology and the Ecological Contours of Indigenous Human-Environment Relations at European Contact

A fundamental assumption embraced by the current study is that such forms of harvesting (or simply the ‘putting to use’ or ‘making beneficial’) of the beings and entities of the natural environment by human actors for material gain cannot take place in a socio-relational vacuum. Moreover, it follows that economic action- similar to that outlined above- cannot be realized devoid of particular identifications and assignments of moral and social status of those beings and entities that constitute the social milieu around that action. An absence of such particularistic relational norms and understandings of others would render the natural world and the life forms that constitute, animate, and use it nothing more than an anarchic space of simple biophysical flows. Rather, it is understood that when certain humans in a delimited natural space seek to put other non-human beings and entities to use for some personal benefit as a livelihood practice- as in when the pre-contact Mi’kmaq harvested the animal and fish species of Nova Scotia for communal sustenance- they manifest in a configuration of relationships of varying forms depending on the aforementioned status identifications. Given this socio-relational embeddedness, such forms of economic action also reflect ethical norms and stances that define and guide such uses and predetermine the how, when, where, and why thereof. The current study employs the term “ecology” to capture these nuances and identifies in the migratory livelihoods outlined above an indigenous ecology- embedded as it was in its own historical and natural processes- that was encountered when the first Europeans began to arrive to this part of North America.

Ecology Defined

Though ecology is at its most fundamental a branch of biology that seeks to identify and explain the processes and patterns of the natural world, there exists in parallel a “normative” usage of the term that dictates how we ‘ought’ to relate thereto (Ghazoul 2020, 4-8). Thus, if the former denotes a reductionist scientific discipline that seeks to highlight various levels of machine-like *versus* processual functionality among organisms (Berkes 2018, xvii), the latter (as in ‘ecological’) promotes values and strategies related to how we *should* manage complex ecosystems and their resources. While the current study draws on concepts employed by both traditions, it differs by placing human relationality in and of the natural ‘patterns and processes’ noted above, as well as in its emphasis on how ontological

and relational differences shape and determine livelihood pursuits vis-à-vis a particular being or entity in one's natural environment. In short, this study's use of the term "ecology" draws on ontological, relational, and ethical dimensions to put forth an analytical construct that will be used in the following chapters to analyze the current dispute in Nova Scotia's lobster fishery.

Starting with a consideration of ontology, and the increased recognition that different peoples may apprehend reality through "variable sets of historically contingent assumptions" (Kohn 2015, 312), it has become clear that a recognition of the ways social groups conceive of and construct their conceptual worlds, including the "alternative conceptions of the relationships between humans and nature" (Grossman 2018, 324), is fundamental to comparative analyses that include livelihood patterns originating outside of Western modernity. Though once critiqued for proposing something of an unnecessarily "radical alterity" (Graeber 2015, 21), Viveiros de Castro helpfully reminds us that in assuming "ontological partitions" between nature and culture, as is characteristic of the "Western naturalist ontology", we risk seeing a certain "unity of nature" and "plurality of cultures" in every ethnographic moment (1998, 469-470). Such a rigid dualism leads one to conceive of everything non-human as a non-person and beyond the realm of human social and relational expectations, and therefore undeserving of ethnographic attention (Blaser 2013, 551). Thus, Mario Blaser suggests that as opposed to assuming "one nature and many cultures" variously engaging with the same objective reality (i.e., "multiculturalism"), we should recognize the multiple ontologies at play that allow for "a relational world of humans and fully agentic nonhumans" that variously constitute the natural world (i.e., "multi-naturalism") (2009, 17-18). Hence, building on these insights, this study's identification of an ecology highlights the ontological identifications of the beings and entities- both human and non-human, animate and inanimate- that constitute the world of actors in a particular setting. This ontological sorting includes understandings of their social and communicative capacity, and thus a belonging to or exclusion from similar "sociocosmic fields" (Viveiros de Castro 1998, 475), as well as recognition or denial of moral capacity, will, intention, and agentic potentiality; that which is often referred to as degrees of "personhood" (Remme 2016).

For example, a particular "Western" (Hornborg 2008) ontology typically restricts the assumption of personhood to humans and therefore locates all other beings "outside the social sphere" (Descola 2013, 7). Accordingly, humans would be understood to exclusively possess social and moral qualities, to exhibit the agentic capacity to "dominate and manipulate nature" (Hornborg 2008, 15), and to maintain what Hallowell (1926, 4) describes as strictly

“utilitarian” relationships with non-human beings and physical entities. Århem similarly uses the term “naturalism” to emphasize the “foundational dichotomy between an objective nature and subjective culture” that predominates in Western modernity (2016, 3). As such, adherents thereto envision nothing more than “physical causation” in the behavior of a non-human and cultureless ‘nature’, while will and “social causality” dictate the cultured world of humans (ibid). Blaser captures these ontological assumptions as simply being “modernist”, which he articulates as creating “great divides” between nature and culture and the notion that the former is “out there”, while the latter is “in here” (the mind) (2013, 551). These ontological leanings often derive an “object status” of non-humans and therefore see the constituent elements of the natural world as “resources” (Sprenger 2018, 268) ripe for economic exploitation. In short, a certain “foundational dichotomy” (Århem 2016, 3) is assumed to exist between a singular objective nature on the one hand, and a subjective plurality of human cultures variously engaging, exploiting, or respecting that nature on the other.

By contrast, what are often referred to as “animist” (e.g., Sprenger 2016; Ingold 2006) ontologies typically exclude such dualistic understandings of the nature-culture relationship and expand the notion of personhood to ever-widening classes of fauna, flora, and physical entities, a relational “community of beings” (Berkes 2018, 109). As such, in addition to humans- plants, animals, mountains, rivers, rocks, wind, rain and any other relevant beings, entities, or forces have the potential to become subjects on a “social continuum”, to shift between animacy and inanimacy, and to exercise their inherent agency and establish their place in the ontology’s “regime of sociability” (Descola 2013, 9). Hornborg similarly uses the term “biocentric” to refer to those ontologies that emphasize “connection” rather than “clear boundaries” between humans and non-humans, and thus the belief that both manifest as subjects in “relationships of mutual dependency” (2008, 20). Moreover, such ontological positionings often see *Homo sapiens* not as the exclusive holders of moral capacity and reasoning, but as one set of actors among many within an expanded “moral domain of personhood beyond the human” (Sprenger 2021, 88). The typical result is a conceptual sphere constituted by a multitude of human and non-human intentional subjects, understood as persons, variously capable of exercising will, intention in worldly affairs, and personal agency (Århem 2016, 3-5). Todd (2014) captures such ontological patterns of belief and understanding as simply “indigenous” and emphasizes the lack of rigid dichotomies or partitions emphasized by naturalist inclinations.

Once delimited to a particular social formation (e.g., Nova Scotia’s lobster fishery), the ontologically identified beings and entities that constitute an ecology demonstrate what

Sprenger & Grossmann refer to as “a more or less coherent set of relationships” (2018, ix), which variably allow for inclusion or exclusion, recognition or disregard, intentional or denied sociality. One’s status in an ecology’s relational configuration is often determined according to the degree of personhood ascribed, which, according to Descola, implies an “exchange of communication that is reputed to be possible” (2013, 6). In other words, if a being or entity is ascribed full personhood, and is therefore a self-conscious subject with autonomy and will, it enters an “intersubjective ambience” in which “regulated relations” are maintained with other persons and its moral capacity is affirmed and prioritized (2013,4-7). These relationships with *intentional sociality* might be imbued with the values of cooperation, mutualism, reciprocity, or equality in that they occupy similar levels on the hierarchical order. By contrast, if a being or entity is denied personhood- and thus perceived as an object- it is understood to be incapable of communication, perhaps amoral or inanimate, and devoid of spirit or soul, and therefore less worthy of the “reflexive relations” (Viveiros de Castro 1998, 477) observed in the sociality between persons. While a certain relationality may be maintained between persons (as subjects) and non-persons (as objects), it would occupy a lower status in the overall configuration and be reflective of certain mechanical, practical, predatory, or destructive attributes; that is, those relations would be *denied sociality*.

For example, in a “modern economic-scientific ecology” (Sprenger 2018, 268), such as that of the Euro-settler fishers who began to exploit Nova Scotia’s fisheries from the 16th century (See below), personhood would typically be exclusive to human actors and intentional sociality directed thereto. As will be presented, such an ecology rooted in naturalist assumptions and organized around the human harvesting of fish species would prioritize and value social relations between human actors, including government officials, market players, purveyors of fishing gear, and competitor indigenous fishermen. While lower on the hierarchy, the ecology would allow for, and even demand, additional relationships with non-human, yet animate beings (e.g., mackerel, lobster, seals), as well as inanimate objects and forces (e.g., ships, gear, wind, waves) that come to the fore as those human agents seek to make beneficial the fruits of the sea. The key point here is that though relations may be maintained with such non-persons, they would be devoid of intentional social intercourse or communicative capacity, thus leaving those objects available for humans to “handle at will” but without “addressing them as persons or engaging in a dialogue with them” (Sprenger 2018, 268). That is, they would be mechanical and utilitarian relationships lacking the social spirit due to human actors.

By contrast, an ecology, such as the indigenous one within which the livelihoods presented above manifested in the precontact era, would fundamentally differ by extending the “animacy of the lifeworld” (Ingold 2006, 10), and therefore varying degrees of intentional sociality to a broader range of non-human beings (e.g., mackerel, lobster, and seals), seemingly inert objects (e.g., canoes and fishing gear), or natural forces (e.g., wind and waves). Avoiding the dichotomization of nature and culture, these ecologies’ relational configurations would reflect differently arranged hierarchies, recognize a broader non-human sociality, and enlarge the subject pool of communicative actors (Descola 2013). Envisioning a sentient nature, such forms of social engagement with non-human persons often manifest as obligatory, as those beings or entities may house a spirit- perhaps one of an ancestor- and therefore be understood alongside human actors as “autonomous subjects” equally occupying the same “intersubjective field of relations” (Århem 2016, 5). As in an ecology shaped by naturalist assumptions, these human and non-human social relations would variously reflect certain attributes, such as predation, mutualism, or even indifference, and configure themselves hierarchically depending on particular values or the underlying social structure. While ‘more or less coherent’, the relational configuration of any ecology is subject to change and flux as the broader political-economic, natural environmental, or sociohistorical context within which it emerges shift through time.

As referenced in the *Introduction*, this study’s use of ecology is put forth *not* as an all-inclusive analytical construct on par with such expansive notions as ‘total cultural configuration’ or ‘worlds’. Rather, ecology here utilized is more local and refers to a collectivity of actors (human and non-human, agentive and non-agentive) that configure themselves in a set of relationships while putting one another to use for some benefit. Hence, the particularistic ontological identifications and social relations discussed above come together as an ecology in the context of, for instance, human actors harvesting non-human animals for sustenance or commodification (i.e. material gain). In this example, an ecology might include such human actors as the hunters themselves, their communities, and other competitor hunters, while non-human actors might include various animal species, environmental features within which they live (e.g., rivers, forests, mountains, weather), and even the gear or tools used in the hunt; all of which would be variously identified and ascribed degrees of social, moral, or communicative potential (i.e., degrees of personhood). As such, an ecology’s relational configuration would include all those recognized as relevant and primary in the act of ‘putting to use’ or ‘making beneficial’ others in some way. When specifically focused on the human actors of an ecology leveraging other beings or entities for

some material gain, as in the current study, those efforts are understood as ethically infused livelihoods.

Therefore, within an ecology there manifests a certain collective understanding of what is considered morally acceptable economic action vis-à-vis the other beings and entities of that ecology. This “livelihood ethic” dictates that which is available for harvest, consumption, or commodification, how and when such pursuits can take place, and what ritual, ceremonial, or secular symbolic action is required to give thanks to the cosmos (or perhaps the market). Linked to a broader ecological knowledge that mediates between the biophysical entities of an ecosystem and human actors (Colding & Barthel 2019), the livelihood ethics of a particular ecology embody norms and shape management systems, regulatory institutions, and the “meanings and motivations” for conservation efforts (Charles 2021, 15). Thus, building on concepts from ‘social-ecological systems’ discourse (e.g., Ostrom 2007; McGinnis & Ostrom 2014), this ethical space might demarcate the acceptable boundaries of a “resource system” (e.g., Nova Scotia’s lobster fishery), identify the rightful “resource users” (e.g., fishers with a license) of that system, and determine what “resource units” (e.g., lobster) can be harvested and how within a particular ecology.

We might think of this element of livelihood ethics as the governance component, through which a consensus emerges around who gets to dictate the terms of usage of those beings and entities; how, when, where, and why certain regulations or terms of use exist; and what, if any, unwritten and informal social codes are to be adhered to in guiding economic action. For example, an ecology with naturalist ontological assumptions and relational structures would likely defer to a State and its bureaucratic enforcement entities as the right and proper governing body. These ecologies, such as that of the commercial lobster sector of contemporary Nova Scotia, typically look to the natural sciences for knowledge and understanding and expect a uniform and blanket application of the regulatory standards to all actors. By contrast, other ecologies may rely less on such formal and hierarchical bureaucratic structures, and more on decentralized social units and the guidance of hereditary chieftains, fluid and ongoing participatory decision-making models, or even communication with the non-human world for guidance and legitimacy in harvesting practices through a form of spirit mediumship (See below). In other words, given the current study’s focus on human actors enacting livelihoods within particular ecologies, this livelihood ethics lens helps to focus our attention on economic norms, rules, and institutions, including who is expected to uphold and enforce those expectations of proper conduct.

In addition, livelihood ethics communicate certain moral expectations of the ‘putting to use’ or ‘making beneficial’ of others in a particular ecology and shape how variously identified beings and entities are expected to cooperate, compete, prey or be preyed upon. One manifestation of this moral framing is in the specific *purpose* that an ecology identifies for such economic action and how that purpose serves as a structuring factor for social relations. For instance, a ‘modernist’ ecology that takes shape around the harvesting of a natural resource such as lobster would likely identify a ‘for profit’ or ‘feeding markets’ purpose in its livelihood pursuits, and therefore reinforce a relational configuration (among both human and non-human actors) that realizes those economic outcomes. This type of purpose might be contrasted with one focused more on communal well-being or as a means to realize reciprocity-based transactions; a livelihood ethic that will be elaborated on below with regards to pre-contact Mi’kma’ki. The moral framing of an ecology’s livelihood ethics is also likely to communicate *values* that are set to guide and inform economic behavior, including the ways and means that such pursuits should adhere to. In the lobster ecology example given above, the values of competition and individualism might prevail, while other lesser values related to honor and integrity emerge to ensure a level capitalist playing field could manifest in parallel (See *Chapter 5*). Values, in other words, serve to realize the purpose of an ecology’s livelihood ethics and provide a moral compass to those who seek to leverage, redistribute, harness, kill, commodify, or cooperate with others in an ecology for a material gain.

Indigenous Ecology at First Contact

According to the historical record, as well as the historical renderings of many contemporary Mi’kmaw Elders, at the most fundamental level pre and early contact ontological leanings reflected what has been alternatively referred to as an *interconnection*, *unity*, or *cycle* of beings, entities, and forces that constituted the ‘sociocosmic field’ of Mi’kmaw society. For instance, the Assembly of Nova Scotia Mi’kmaw Chiefs points out that pre-contact Mi’kmaq “did not view themselves as distinct from the natural world”, but rather as “merely one life being within a world of many life beings” (MEK Study Protocol 2010). As such, the resulting “interdependence and interconnection” with all aspects of the natural world resulted in particular human-environment relations that are still in a dynamic state of transformation today. Hornborg uses the notion of personhood to describe how the Mi’kmaq saw not necessarily full equality in the interconnections between humans and non-humans, but rather a “unity of all beings that experienced the world as persons” (2008, 42).

Differences between humans, animals, physical formations, plants, or even spirits were therefore understood in strict “corporeal diversity” terms (i.e., the ways that bodies manifest and appear to others), as opposed to differences between communicative ability or subject status in relationships. This “ontological equality” greatly unified and expanded the subject world of beings and entities in Mi’kma’ki and conferred various “rights, wishes, demands, and discontents” beyond the human inhabitants (Hornborg 2008, 24).

Others express such forms of unity in terms of “cycles”, by which fully willful non-human beings and entities offer themselves to humans for sustenance according to “protocol and need” (Sable & Francis 2012, 39). When treated with proper care and prescribed the necessary rituals, animal and plant remains were understood to “reanimate” and return to the life-giving cycle that constitutes the social space between humans and non-humans. Similarly, a spokesperson from the Mi’kmaw Environmental Association (MEA) noted that in the traditional Mi’kmaw cosmology all animals and plants possessed a spirit and demonstrated a purposeful agency to sustain the “food chain”¹⁸. Accordingly:

“ . . . the seals needed to eat, the whales needed to eat, all micro and macro invertebrates were essential to the food chain. . . and so humans were no better or more important than the smallest creature.”

The functionality of this unified and interconnected ‘nature’ therefore required “respect” (See below) from humans, “even in the cases of invasive species because they too have a spirit” and are essential to the cyclical patterns that we all depend on. In other words, through an original assumption of diffuse personhood, predation and competition had to be complemented by cooperation and sociality between all beings and entities in order to maintain the “cycle of life”.

Perhaps the most revealing use of the cycle metaphor as a basis of pre and early contact ontology comes from one Mi’kmaw Elder who describes “a life and death nutrient cycle that forms a connection through thousands of years” (Prosper 2009, 14). According to one indigenous scholar and historian based at St. Francis Xavier University, when humans or animals died, they were understood to be “recycled by the soil” and therefore provided nourishment to plants¹⁹. In turn, flourishing plant species fed animals, who once again provided nourishment to humans in an ongoing “circular spiritual relationship”. The relationship was considered ‘spiritual’ in that a certain “life force” was continually passing through humans, animals, and plants, which, according to Elder Kerry Prosper, was a

¹⁸ Personal Communication, 28/05/2021, Truro, Nova Scotia.

¹⁹ Personal Communication, 22/01/2021, St. Francis Xavier University, Antigonish, Nova Scotia.

manifestation of the ancestors (ibid). The spirits of ancestors were therefore understood to “pass on and get caught within the cycle” and manifest in the living beings used to sustain life, including in the tools used to leverage life from the cycle. In other words, “our ancestors were understood to be all around us”, creating an animated subject status far beyond that assumed by a naturalist stance (2009, 15). Prosper tells of a “never ending circle of life” that rendered humans unified with all other beings and entities, in that “we became a genetic part, a physical, spiritual, and cultural part of everything.” As such, pre and early contact Mi’kmaq saw themselves not as external to, nor solely in a predatory relationship with, the natural world, but rather as physically and spiritually essential to the “act of creation” that constituted that world.

Taken together, these assumptions of interconnection, unity, and cyclical pattern in historical Mi’kma’ki are often described as belonging to an “animistic view of the universe” (Martin 1978, 76). As referenced above, Mi’kmaw animism thus conferred subject status on a range of both animate beings and seemingly inert objects, believing in the possession of a *manitou* (spirit) by all (Prosper & Paulette 2002, 1), and the requirement of reciprocity and social intercourse beyond other humans²⁰. Thus, plants and animals- understood as animate persons- had “extraordinary powers” and, according to Mi’kmaw oral tradition, could “think and talk, and even transform themselves to men” (Hagar 1896, 170). Objects and other physical features of the environment were similarly endowed with “spirit and body” and could at times become animate and social when in the presence of human actors (Battiste 1997, 148-150). Sable and Francis echo this tendency for beings and entities to “metamorphose” between animacy and inanimacy, relating how “. . . rocks, people, plants, stars, thunder, lightning and a pantheon of other-than-human beings shape-change- unpredictably and at will” (2012, 41). It was thus not a feature of biology or physical form that conferred life, agency, and social status, but rather closeness to Mi’kmaw society and a certain “alliance with its spirit” (Battiste 1997, 150).

Central to the animist ontology was the belief in what Wallis and Wallis describe as “supernatural power”, which could be possessed by both humans and non-humans and was often referred to as, “ginap”, “buoin”, or “keskamzit” (1955, 156-157). Though all forces were thought to confer certain capabilities, strength, and magic, *buoin* was also used to refer

²⁰ It’s important to highlight that 17th century Catholic missionaries used the Mi’kmaw term “mntu”, which translates as “devil”, to refer to and describe the Mi’kmaw spirit world. This utilization was a deliberate strategy to discredit indigenous spirituality in an effort to promote Judeo-Christian religious views (See Poliandri 2011, 147).

to the possessors of those powers and a particular intermediary role between the human and spirit worlds (Johnson 1943). Sometimes referred to in English as “medicine men”, “magicians”, or “shamans”, these individuals were leaders in their communities and played a key role in guiding and shaping the seasonal migratory livelihoods outlined above. According to Martin, it was “through the good offices of the shaman” that pre-contact Mi’kmaq were able to “communicate to and have a dialogue with nature” and, as a “spiritual medium”, the shaman ensured the proper human and spirit-infused nonhuman relationality necessary to “maintain the Micmac ecosystem” (1978, 39); that which Viveiros de Castro calls the “ability to cross ontological boundaries. . .in order to administer relations” (2004, 468). Prosper adds that shamans were also active in training hunters and teaching them their responsibilities towards the non-human world, conducting song and ritual to reinforce those responsibilities, and for summoning game through “spiritual knowledge and spiritual conjuring” (2009, 33-35).

Built upon these ontological assumptions was a relational configuration that in many ways contradicted that of the European capitalist ecology mentioned above. While the latter prioritized social intercourse with market-oriented human actors, as well as a non-social and mechanical relationality with the tools and technologies that allowed the harvesting of resources, the Mi’kmaq ecology embodied the alternative principle of *Msit-Na’kmaw* (“all my relations”). According to the MEA, *Msit-Na’kmaw* served to “remind the Mi’kmaq to maintain a certain level of respect for all living and non-living beings” and that “our natural relations should be no different than our relations to each other as humans²¹”. In other words, *Msit-Na’kmaw* required individuals and communities to recognize the communicative capacity, and therefore personhood- of all the beings and entities in one’s day to day experience, which included recognition of the ever-present *manitou* working its way through and animating the lifeworld.

At the top of the hierarchy of relationships to the non-human world was the sociality maintained between the Mi’kmaq and various animal species, which has been described as “a mixture of kinship, awe, and the pragmatic” (Wallis & Wallis 1955, 106). Manifesting according to a “different grid of relationships” (Borrows 1997, 442) than those maintained by the soon-to-arrive Europeans, Mi’kmaq-animal sociality was built upon the above-mentioned *interconnection* and *unity* assumptions of humanity’s place in the natural world. In addition, imbuing animals with a spirit, allowed for the realization of enormous agentive potential, such

²¹ Personal Communication, 28/05/2021, Spokesperson, Mi’kmaq Environmental Association, Truro, Nova Scotia.

as the ability to transform to different species (whale, caribou, mouse), to raise their young as humans do (bear), to develop a livelihood (beaver), cure diseases (moose), and to “make silent the guns of man” (sea otter) (Wallis & Wallis 1955, 110-114). Granting animals this degree of personhood demanded a certain closeness and intentionality that might otherwise be reserved for social engagement with neighboring human communities; an ontological dynamic that has been referred to as “one system of relations that must be navigated as opposed to two domains (human social vs. natural) that must be articulated” (Miller & Davidson-Hunt 2013, 17).

In addition, pre and early contact Mi’kmaw ecology maintained a diverse set of social relations to other living beings and entities in the lived environment. For instance, while much has been said on the comprehensiveness of early Mi’kmaw understandings of botany (Meuse 2016), the multitude of medicinal properties thereof (Whitehead & McGee 1983), and the transformational capacity of plants to become person-like (Whitehead 1988), others have remarked on the animacy of the lived environment and the social engagement therefore required. Sable & Francis (2012) point out that in the pre-contact era various landscape features like hills, rock formations, stones, and even islands were understood to have been transformed from people, and therefore to become animate. As such, rock formations such as *Kukumijinu* (“our grandmother”) and *Kniskamijinu* (“our grandfather”) in Nova Scotia displayed various “human-like features”, “were conscious beings”, and were the recipients of honorific titles and ritual performances for their roles in protecting Mi’kma’ki (2012, 42-44). Martin adds that while waterfalls, rivers, and lakes were often similarly understood to possess “especially strong manitous”, other elements of nature were also personified, such as the wind, thunder, rain, and lightning, and therefore “had spirit, and hence being” (1978, 72). This enlarged subject pool of communicative actors, inclusive of the animal sociality outlined above, existed “in parallel in all respects” (Martin 1978, 71) to the human relationships of Mi’kmaw society.

As such, Mi’kmaw society was conceived of not as a moral sphere exclusive to humans, but rather as a “web of life” through which a certain spiritual energy (Kinnear 2007, 70) cycled through various physical embodiments. This is not to say that the social structure of Mi’kma’ki briefly outlined above included non-human persons as band members, Chiefs, or revered hunters and fishers. Rather, these biophysical embodiments of Mi’kmaw society were exclusively understood to be willful and moral humans. However, as suggested above in ontological terms, human and non-human life- be it plants, animals, or physical objects endowed with a spirit- were understood to exist on a common “continuum of life” (Robinson

2014, 674) and to shapeshift, transform, and manifest variously as *manitous* journeyed through the cosmos. While some early ethnographic accounts detail marriages between human and non-human animal persons in the folklore of pre-contact society (See Whitehead 1988), the more common interpretation is that there existed a society exclusive to humans, yet a wider community of relations that extended to all manner of non-human persons (Sable & Francis 2012). As such spirit journeys cycled through Mi'kma'ki, variously animating and reinforcing the *interconnections* and *unity* of its myriad life forms, the resulting non-human persons were often understood and related to in terms of kinship.

Sable and Francis clarify that beyond the frontiers of humanity, there was an “extension of kinship” to all manner of fauna, flora, and inert physical objects, and therefore that all beings, once animated with spirit, “became relatives” (2012, 33). And given that these non-human kin could at any time metamorphose and take on a human shape, and therefore properly enter human society, they became subjects in personal and reciprocal relationships that might otherwise be restricted to human kin. Robinson similarly describes pre-contact relationality with non-human persons as that among “siblings”, and thus “ongoing kinship relationships” were necessarily extended beyond human society in order to properly revere, honor, pay respects to one’s extended family (2014, 676-677). As mentioned above, Elder Prosper similarly drew animal persons into human sociality with a reference to them as ubiquitous ‘ancestors’ who at proscribed times required engagement. Thus, while temporarily occupying a corporeal form that left them outside of the formal structures and expectations of human society, these non-human persons nonetheless occupied a prominent relational status among the kinsfolk therein. In other words, if the *manitous* manifesting in human form would occupy the formal positions and structure the relations of Mi'kmaw society, then those physically manifesting otherwise were understood to be on a temporary personhood journey to other forms, and therefore required a similar morally infused sociality.

As moral and communicative actors likened to kin, the key question then becomes exactly which parts of the Mi'kmaw social structure and social routines did non-human persons occupy and become prominent social forces? As hinted at above, political organization was restricted to human men and took various forms depending on the level of society. *Saqmaws* oversaw and directed the organization of small winter kin-based social groups at inland camps. Summer congregations of marine harvesting bands were governed by hereditary Chiefs and councils, as were the major historical districts that divided the Mi'kmaw nation; both of which periodically gathered as a grand council to discuss internal and external affairs (Poliandri 2011, 33; McGee 1993). Inter-district sociality was therefore

also an affair led by human protagonists and focused on the equitable access to and exploitation of the myriad rivers, streams, lakes, and hunting grounds of the region (Hoffman 1955, 517-524). Inter-communal conflict (typically with Inuit and Iroquoian peoples) was similarly a human engagement, with considerations of war negotiated by Elders, preparations and provisions orchestrated by Chiefs, and the actual fighting assigned to the youngest and strongest of bands' members (Jesuit Relations 1896). Likewise, educating the youth, negotiating and organizing marriages, and the holding of communal feasts and healing ceremonies were the province of Mi'kmaq whose *manitous'* corporeal expressions were those of humans (Whitehead & McGee 1983). However, when it came to the emergence of an ecology that constituted the harvesting of other of Mi'kma'ki's beings and entities for human use and benefit, the community of relations was expanded and more closely drew those non-human persons into various forms of sociality.

This is not to say that non-economic social norms and institutions were fully devoid of “supernatural leanings”, or as Prins puts it “the belief that all creation was pregnant with a spiritual force” (2002, 36). It's widely documented that pre-contact Mi'kmaq variously drew on “guardian spirits”, “animal spiritual helpers”, or “spirit guides” for advice and counsel in navigating the social complexities of a seasonal migratory existence (e.g., Kinnear 2007; Couture 2013). The key point here is that in the pursuit of hunting and fishing livelihoods outlined above, sociality with non-human persons rose to a near equal status as that strictly between humans. In other words, when viewed through the targeted lens of ecology employed by this study, with its emphasis on localized collectivities of actors that configure themselves in specific relationships as humans seek to put others to use for some material benefit (i.e., livelihoods), the agency and moral presence of non-human persons was paramount in the social totality. As such, livelihood pursuits that included the harvesting of marine and terrestrial species for human sustenance necessarily leveraged expanded social obligations and ritual routines, put front and center moral actors that might otherwise have occupied a less prominent social role, and required a level of spiritual reflection unknown to other social activities. In order to fully exemplify the specific role and place of this non-human sociality, I now turn to the livelihood ethics of the indigenous ecology that guided and shaped economic action.

In the pre-contact era, certain “ways of conceiving the universe” (i.e., ontology) and established configurations of relationships set the stage for a particular set of “norms and codes” and “rules-in-use” to emerge that guided and shaped the aforementioned seasonal migratory livelihoods (Berkes 2018, 18-19). In a merging of the “spiritual and the practical”

(McMillan & Prosper 2016, 631), these livelihood ethics integrated the aforementioned themes of *interconnection* and *unity*, cycles of life, and diffuse personhood to serve as a guide to “co-existence and interdependence with ‘natural’ resources, each other, and other-than-human resources” (Prosper et. al. 2011, 3). Thus, whether pursuing deer or moose at interior winter hunting sites, or alternatively camping along the rivers, lakes, and coasts in the summers to access the abundant fish species and aquatic mammals, Mi’kmaw livelihood patterns were rooted in a “whole system” (Wiber & Milley 2007, 168) ethos that outlined responsibilities, articulated values, and promoted the purpose, means, and ends of the human harvesting of those beings and entities understood as none other than the ancestors in non-human form.

When early Europeans began to come into relation with Mi’kmaw hunters and fishers in the early 16th century, they were exposed to the indigenous concept of *Netukulimk* which served as the foundation of the ecology’s livelihood ethics in Mi’kma’ki. Variably referred to as a “system of spiritualism” (Wiber & Milley 2013, 167), a “total process” in how people take from the land (Mi’kmaq Fish and Wildlife Commission 2010, 4), or alternatively as a “complete way of being” (Prosper et. al. 2011, 3-4), *Netukulimk* nonetheless features prominently in both Mi’kmaw oral narratives and contemporary movements to establish “self-governance” (See *Part II*). Etymologically, the root *ntuk-* refers to “provisions”, while the similar *Netukulit* and *Netukulimkewel* respectively denote “to get provisions” and “rules and standards”, which therefore leads some to infer from the term “a normative commitment to meeting modest needs instead of accumulating wealth” (Barsh 2002, 17). Anthropologist and long-time advocate of indigenous natural resource harvesting rights, Jane McMillan clarifies²²:

“... there is a spectrum of understandings and it has adapted over time. There’s no fixed meaning as it’s evolving, it’s diverse, and it’s never been thought of as a universal principle. For some it’s values, for others it’s concrete practices. But for all, it’s about how natural resources should be used, how to think about them, and for what ends.”

Despite the apparent lack of a fixed historical definition and varying contemporary interpretations, a number of Mi’kmaw Elders have in recent years established the following construct that to them captures *Netukulimk*’s essence (cited in Baxter 2020, 2):

“Netukulimk is the use of the natural bounty provided by the Creator for the self-support and well-being of the individual and the community. Netukulimk is achieving adequate standards of community nutrition and economic well-being without jeopardizing the integrity, diversity, or productivity of our environment.”

²² Personal Communication, 22/03/2021, St. Francis Xavier University, Department of Anthropology, Antigonish, Nova Scotia.

As such, *Netukulimk* can be thought of as both a set of values and moral commitments that prioritizes communal well-being over individual wealth accumulation, as a recognition of the personhood of Mi'kma'ki's 'resources', as well as a certain "conservation ethic" (Berkes 2018, 132) that guides and governs harvesting in ways that ensure the long-term sustainability of the land and the relations it enables.

On human society, *Netukulimk* encouraged the values of responsibility and sharing; both of which were meant to guide livelihood pursuits in ways that reinforced "interdependence and community spirit" (McMillan 2018, 72-73). Communicating these core values, *Netukulimk* therefore envisioned a communal purpose of hunting and fishing endeavors, sanctioned equality of access to the spoils of economic action, as well as the gifting of food and resources when traveling throughout Mi'kma'ki or the holding of feasts for visitors to one's district. Greed and material accumulation were necessarily frowned upon and thought to undermine alliances, threaten the integrity of the natural world, and to "break down the social cohesiveness that was necessary for survival" (ibid). Elder Prosper therefore sees in the original manifestation of *Netukulimk* an "unspoken instruction to share in order to protect the wellbeing of the Mi'kmaw nation" and, given that the values were "socialized from birth to guide Mi'kmaw consciousness in land and wildlife use", an indispensable "cultural construct" that guided individuals throughout their lives (2009, 18-19).

On the interconnectedness with the spirit world, the values of respect and reciprocity were to be extended to the full range of beings and entities that constituted the social sphere of personhood, including those that were being pursued by their human kin. On the former, *Netukulimk* taught that the prey of hunting and fishing endeavors were not unwilling and resentful actors actively seeking to evade capture or kill in order to live another day. Rather, as spirit infused persons, perhaps even a manifestation of an ancestor, they were cooperative social actors willingly sacrificing themselves to their human brethren (Robinson 2014). Animal sacrifice was thus understood as a social act, a moral requisite, even an obligation as little differentiation was made between the lifeforces animating the animal versus the hunter in human bodily form. Thus, the human hunter or fisher was to embrace the value of respect, even reverence, towards the hunted/fished, otherwise the willingness to sacrifice on the part of the non-human persons may be lost. Respect in this sense was similar to that extended to one's kin, Chief, or fellow band members, in that the moral and communicative features of the prey rendered it no different in personhood terms.

According to the Mi'kmaq Grand Council, the value of respect and the desire to maintain “an all-encompassing relationship with the universe” was enacted through various rituals, practices, art, and stories that were directed towards one’s prey (1993, 5-6). For example, the Council refers to the treatment of the bones of game and notes that they were treated “very carefully”, sometimes thrown into a fire, river, or the sea where they have come from, always in an effort to thank the species and to ensure that it will “always exist” (ibid). Similarly, Prosper & Paulette highlight the “sacred being” status of eel and other marine species in traditional society and the various taboos and proscriptions related to their catch, preparation for consumption, and the proper disposal of remains (2002, 7). Before a hunt or fishing expedition, sweat lodges were often held in order to “cleanse the harvester”, demonstrate respect for the ancestors’ spirits, and ultimately to “create a spiritual connection to the animal world” under the guidance of the shaman²³. Not only did such acts convey respect towards the spirit of the hunted or fished, but also a thankfulness for their sacrifice and a deliberate effort to pull their essence into moral proximity with human society. Wallis & Wallis documented a number of similar norms and practices that demonstrated the deep “respect for animals” and the sociality directed thereto, including the prohibitions against “bothering animals that you cannot use”, the killing of animals “you have no need for”, and the discarding of bones “that still have flesh” (1955, 105-107). Of this deep-seated human-animal sociality and its place in livelihood pursuits, Mi'kmaw Member of Parliament Jaime Battiste summarizes, “. . . our worldview was that we are here to sustain relationships, not to capitalize wealth or accumulate, it is about creating harmony with all²⁴”.

Similarly, the ecology’s livelihood ethics embodied in *Netukulimk* communicated the value of reciprocity as a structuring value for the relationality between hunter and hunted, fisher and fished. Reciprocity with non-human persons, is often discussed in terms of “balance” or “continuity” of the lifeforces animating society (Sable & Francis 2012, 35). Elder Prosper notes that reciprocity was a core value of hunting and fishing livelihoods as it ensured “balance between humans, animals, and the environment”, and therefore resulted not only in the willingness to sacrifice oneself as noted above, but also the mutual respect and admiration one expects from their ancestors²⁵. Kinnear (2007) highlights that in practice, reciprocity manifested as animals providing the necessities of life, such as meat, furs, bones

²³ Personal Communication, Kerry Prosper & Professor Jane McMillan, 22/03/2021, St. Francis Xavier University, Antigonish, Nova Scotia.

²⁴ Speech delivered at St. Francis Xavier University “Learning Lodge of Mi'kmaw Livelihoods”, 24/11/2020, Antigonish, Nova Scotia.

²⁵ Personal Communication, 22/01/2021, St. Francis Xavier University, Antigonish, Nova Scotia.

for tools, etc., and in exchange humans reciprocating by taking care of the environment, sharing the leftovers or scraps with other animals, or in making offerings to the spirit of the killed. On the latter, the value of reciprocity thus generated a lively ceremonialism in which human harvesters and the non-human persons that they sought, including other spirit-infused entities of the physical environment beyond the animal kingdom (e.g., plants, trees, etc.), jointly expressed their obligations to one another and their equal status on the plane of sociality. Ceremonial offerings between persons thus included the gifting by humans of sacred herbs (e.g., sage, cedar, tobacco, sweet grass) to the slain or harvested, promises of stewardship to the spirits animating the trees, waters, plants, and land sustaining the flesh of the to be slain, and prayers expressing the hunter's or fisher's gratefulness to the sacrifices on offer.²⁶ Taken together, the values of respect and reciprocity reinforced the equal personhood status between predator and prey and ensured that the moral obligations one had to the other would be sustained.

In addition, as a “framework for experiencing the material world”, and thus “resource stewardship” (McMillan & Prosper 2016, 645), *Netukulimk* provided the livelihood ethics with a conservation and governance focus. Therefore, in addition to communicating the communal values that supported social cohesion and stability, as well as a certain mutuality between hunters, fishers, and their prey, it also articulated management principles and guidelines for harvesting, which helped to regulate the distribution of harvesting territories, seasonal limits for resource procurement, and the necessary alterations between coastal and inland migrations in order to “allow for the replenishment of resources in a sustainable manner” (Prosper et. al., 2011, 5-6). Moreover, *Netukulimk* reinforced a certain sensibility that ensured hunting and fishing territories were not exhausted and that harvesters only extracted that which was required to satisfy needs and avoid waste. In the words of one Elder from Cape Breton Island²⁷:

“Netukulimk reminded us that you don't manage resources, as when the white man says ‘natural resource management’, but you manage people. Nature has rights and humans have responsibilities. Netukulimk is an overarching objective that shows us how we can co-exist with the natural world.”

Martin relates back to the spirit world to highlight how *Netukulimk* served as a “control mechanism” to prevent overharvesting (1978, 35-39). Reminding the Mi'kmaq that human society was embedded in a “spiritual matrix, filled with super-human forces and

²⁶ *ibid.*

²⁷ Personal Communication, 10/02/2021, Eskasoni, Cape Breton Island, Nova Scotia.

beings”, *Netukulimk* ensured “amicable terms” between the would-be hunter or fisher and his potential prey. For Martin, such terms resulted in “spiritual obstacles against wildlife overkill” which were realized through the above-mentioned values, taboos, and ceremonialism centered around the personhood of those pursued. As mentioned, the shaman played a role in promoting positive relations between hunter and prey and reinforced the message of *Netukulimk* that any violation of these terms, such as in exceeding an “upper limit on the number of animals slain”, would offend the spirit world and be interpreted “as an act comparable to genocide” (ibid). In such instances, *Netukulimk* communicated that ancestral spirit retaliation could include the rendering ineffective of the band’s hunting or fishing tools, or by encouraging the spirits of animals or fish to abandon the relevant territory and refuse to sacrifice themselves. In other words, *Netukulimk* not only expressed certain values in order to maintain good relations at the levels of human society and the wider community of non-human relations, but also sought to reinforce “courteous” relations with the spirit world in its myriad bodily forms in order to “maintain the natural environment within an optimum range of conditions” (Martin 1978, 35).

Moreover, *Netukulimk* reinforced a stewardship sensibility to pre-contact harvesters not only through an expanded emphasis on personhood status, but also through communicating the central place of those harvesters within the interconnected whole of the cosmos. In other words, through a leveraging of the ontological foundations of *interconnection* and *unity* of Mi’kmaw society in general, the Elders and shamans who taught and promoted the livelihood ethic of *Netukulimk* articulated that “humans have responsibilities, while other species possess rights” (Lavoie 2018). As such, hunters and fishers were to demonstrate a “community spirit” in their livelihood activities, which included the responsibility to adopt a keen sensitivity to ecosystem dynamics, to understand the carrying capacity of particular landscapes or waterways, and to possess the knowledge of the biological needs and reproductive patterns of their prey (Davis 2011). Berkes refers to this level of indigenous ecological knowledge as the “local and empirical” which includes deep understandings of “animals, plants, soils, and landscape, as well as species identification and taxonomy, life histories, distributions, and behavior” (2018, 18). Through the acquisition of these local empirics on the natural world, hunters and fishers more readily embraced their interconnections and unity therewith and harvested in ways that were more sustainable and cognizant of the needs of the future.

According to Elder Prosper, this empirical knowledge passed on through *Netukulimk* was put to use in constructing “management structures and guidelines for harvesting”

activities (2011, 6). Hunters and fishers would therefore work with Chiefs and band councils to agree on access to and regulation of hunting and fishing territories, which beings and entities could be extracted from the land and at which times of year, and when seasonal migrations should take place in order to allow for replenishment and the cycle of life to come full circle. As mentioned above, these features of *Netukulimk* were therefore the ‘practical’ dimensions of it as a livelihood ethic and worked in parallel to the value configurations and personhood identifications to promote sustainable harvesting. And that very sustainability was specifically defined by *Netukulimk* as the “preserving and caring for the earth for the next seven generations” (Lavoie 2018). According to one Elder²⁸:

“. . . that’s 840 years, from an environmental perspective that’s only the blink of an eye. But our Elders who taught and passed on orally the principles and values of Netukulimk knew that was the sort of long-term perspective that was needed to keep hunting and fishing within acceptable limits. So Netukulimk was constantly reinforcing sustainability, wholeness, our place in the natural world and the long-term view that was needed to sustain the land and our relations to it.”

Environmental stewardship and sustainable harvesting were therefore viewed as objectives that stretched out for seven generations not only to ensure Mi’kmaw society’s human kin would have access to the resources needed for survival, but also the “physical features of the land, the rhythms, cycles and patters of *Wskitqamu* (Mother Earth) and all her living beings and non-living beings”²⁹. The indigenous ecology’s livelihood ethics in the pre-contact era were thus a complex of ontological assumptions and the beliefs in holistic human-environment relations and diffuse personhood they generated, alongside value configurations and practical applications of empirical knowledge that emphasized community and the long-term sustainability of both resource and relations.

In summary, Mi’kmaw ecology in the pre and early contact period was built upon an ontological and relational foundation that enabled livelihood pursuits that prioritized the maintenance of relationships and environmental integrity, and that prohibited personal enrichment at the expense of communal well-being. Moreover, while the social structures, norms, and routines of indigenous society at this time were constructed and reproduced through *human* agency, when those humans sought to put to use other beings and entities in their natural environment for material gain, an ecology came into view that equally prioritized the social status and relationality of those non-human persons animating and populating the

²⁸ Personal Communication, 02/02/2021, Eskasoni, Nova Scotia.

²⁹ Province of Nova Scotia, “Netukulimk” at <https://beta.novascotia.ca/government/lnu-affairs>, accessed February 2022.

natural environment. Thus, the livelihood ethics that guided indigenous economic action drew upon a particularistic set of values, acknowledged a broad-based personhood, and leveraged an expanded relational field in making beneficial the non-human persons of Mi'kma'ki. While not to be understood as a static and undifferentiated cultural outline, the prevalent indigenous ecology in the pre-contact era nonetheless reflected place-based adaptations and a complex of “cumulative and dynamic historical understandings” (Menziés & Butler 2006, 8) that were certain to be noteworthy when encountered by others.

III. Ecological Plurality Emergent: Establishment and Expansion of Euro-Settler Fisheries from New France to Nova Scotia (16th-20th centuries)

While the above-outlined Mi'kmaw ecology was certain to have undergone internal adaptations, flux, and change over the centuries, notably in relation to contact with neighboring indigenous groups (Bailey 1969), it was the increasing contact with European fishers in the late-15th and early 16th centuries that introduced qualitative ecological contrasts to Mi'kma'ki. These first iterations of contact revealed differing ontological leanings and personhood identifications, sets of relationships that prioritized varying actors (both human and non-human), and alternative ethical framings that governed the human pursuit of marine resources. The current study identifies such temporal and spatial contexts in which divergent ecologies come into ever closer relations with one another as “ecological plurality” and sees in such moments the opportunity for reciprocal benefits and cooperation to pass between the two. Hence, in the early 1500s inter-ecological relations in Mi'kma'ki presented opportunities for the sharing of technologies and tools, the opening up of new trade opportunities, and the transmission of knowledge on the natural particularities of the New World, as well as on newly encountered species and their uses. That is, if a particular indigenous ecology came into view as those early Europeans witnessed the Mi'kmaq pursue hunting and fishing livelihoods, equally revealing was a certain ‘capitalist ecology’ that manifested as Euro-settler fisheries expanded over those early decades of contact.

Ecological Plurality Defined

In the standard field of scientific ecology, operating according to an unmistakably “materialist tradition” (Berkes 2018, 24), the notion of ‘plurality’ often refers to concepts such as species diversity (Ghazoul 2020), multi-species interactions (Wise 1980), community-impacting variables (McGinnis & Ostrom 2014), or even the diversity of data collection and

analysis methods in the field as a whole (McIntosh 1987). By contrast, the current study employs the term “ecological plurality” to refer to those instances wherein divergent ecologies come into contact, relate to and possibly influence the other, ignore, engage with, or even subsume one another in any number of ways. As previously mentioned, ecological plurality may arise in moments of qualitative social change or population shifts, political or economic reforms, sociocultural transformations that transpire when societies experience some external intervention (e.g., international development discourse), or in those historical instances of colonial-settler occupation and the introduction of an external ecology to an indigenous one. Sprenger & Grossmann similarly use the term “plural ecologies” to highlight those moments when “diverging ontologies, epistemologies, cosmologies, politics, and economies” result in moments of plurality, or potentially “ecologies in conflict” (2018, ix-x). This study relates the differences between ecologies to the ontological, relational, and livelihood ethics levels discussed above and notes that the outcomes of moments of plurality often depend on the level at which the differences exist.

Thus, while conflict may result when ecologies embracing “contradictory ontological assumptions” (Haug 2018, 343) come into contact, other differences at the relational or livelihood ethics levels may have more positive outcomes. For example, one study found that among neighboring indigenous communities in the Canadian provinces of British Columbia and Manitoba there exist certain “ecological and cultural edges” wherein differences in ecological knowledge and livelihood techniques produce not friction between communities, but rather enhanced resilience through the social exchange of goods, technologies, and know-how (Turner et. al. 2003, 132). Similarly, Kassam highlights that among the diverse social groups of the Pamir Mountains region of Afghanistan (albeit of similar ontological leanings), a certain “organic interaction of religious, ethnic, and ecological aspects” constitutes a daily feature across social groups (2010, 11-13). This form of pluralism among “coupled sociocultural and ecological systems” is said to have enhanced resilience in recent years of conflict through the sharing of agricultural adaptations and the opening up of new trade opportunities and techniques. In other instances, moments of ecological plurality may not only confer adaptive benefits to social groups as a whole, but also to individuals who demonstrate the ability to maneuver between seemingly contradictory ecologies.

Haug (2018) reinforces the point in noting that a particular focus on individual actors reveals the tendency to appropriate from and engage with alternative ecologies for individual benefit. Through the harnessing of alternative concepts and the adaptations of certain behavioral responses, according to Haug, certain elements of diverging ecologies get

“integrated and creatively merged” (2018, 344-345). This phenomenon is demonstrated in *Part II* of the current study when discussing how some Mi’kmaw fishers harvest lobsters under a State-issued commercial license during certain months of the year, and therefore adhere to the regulatory demands and relational configurations required by a market-oriented ecology. In other instances, these same fishers participate in the recently launched “moderate livelihood” or “treaty” fisheries, which are authorized under Mi’kmaw band-issued licenses, and therefore adhere to fundamentally different ontological assumptions on the status of aquatic species, as well as alternative value sets and understandings of concepts such as “conservation” and “marine stewardship”. The key takeaway is that individuals possess varying degrees of agency and are therefore able to assess context, navigate new relationships, and shift their livelihood strategies and ethical leanings when alternative ecologies present personal opportunities, even if the pluralism reflects at its base “multiple ontologies” (Blaser 2013, 548).

However, while divergent ecologies may exist in parallel and present the types of negotiated co-existences outlined above, there also exists the possibility for a certain “irreconcilability of ecologies” (Brauchler 2018, 363) to arise, especially in moments of conflict between social groups. For such instances, I build on Sprenger & Grossmann’s notion of “hegemoniality” as a complementary concept to plurality, which refers in a general sense to those instances when one ecology becomes dominant over, or attempts to “re-programme”, others in a social formation (2018, xiii). While this study’s specific use of the hegemoniality concept is thoroughly presented in *Chapter 2*, it is important to clarify here that neither phenomenon is understood as absolute, but rather as processes that are in a constant state of becoming. Sprenger & Grossmann make the point with the terms “pluralizing” and “hegemonizing”, which effectively place moments of ecological plurality along a continuum, and therefore complementary social forces of most situations (ibid). As presented below, the early contact era of European engagement with Mi’kma’ki can be thought of as existing in a state of ecological flux trending towards the plurality end of the continuum, as the prevalent indigenous ecology was well-established, millennia in the making, and yet to become a deliberate object of settler-colonial designs for the region.

Euro-Settler Fisheries and the 16th Century Roots of Ecological Plurality

While the historian Lesley Choyce reports with some trepidation on the “myths and legends” of Irish, Welsh, and Orkney sailors reaching Atlantic Canada in the 8th and 9th centuries, he nonetheless holds to the more established finding that the first Europeans to

reach this coastal stretch of the New World were Norse explorers around 1000 CE (1996, 25-27). Although there exists archaeological evidence of some Norse engagement with the indigenous peoples they encountered (likely Beothuk, Inuit, and Mi'kmaq), there is little record of any sustained presence or harvesting of local resources. Their only quasi-settlement at L'Anse aux Meadows was abandoned shortly thereafter for unknown reasons. However, following the Norsemen, Basque sailors began to reach the coasts of Newfoundland and Nova Scotia in the 1300s and brought with them a novel and determined economic objective- the harvesting of the region's plentiful whale and cod stocks for financial gain. Though these fishermen demonstrated little interest in the long-term occupation of land, they often did venture ashore to salt and preserve their catch for the long journey back to European marketplaces (Choyce 1996). This first inkling of a profit motive for commercially exploiting the marine resources of Atlantic Canada, as well as the perceived market success of the returning Basque fishermen, started to spread around European ports and among the more adventurous of seafaring communities.

Thus, as early as the 1480s unofficial merchants were surreptitiously sailing from the ports of Bristol in England to try their luck in the newly discovered (by Europeans) fisheries (Martin 1978, 40-42). Given the high demand for fish protein in Europe at the time, and a fishery "so thick by the shore that we hardly have been able to row a boat through them" (cited in May, 2001, 1-2), the market potential was understood to be enormous and soon gained the attention of officialdom. It was thus that the Venetian John Cabot attracted the attention of the British crown for his well-known navigational skills and adventurous spirit (Choyce 1996, 30). Unofficially commissioned by King Henry VII, Cabot set off on a reconnaissance mission in 1497 to investigate the increasingly loud whisperings by eager merchants of the fisheries' bounty thereof. Upon his return in the summer of 1497, Cabot was treated as a prophet of sorts in his dutiful reporting of the abundance of cod and capelin in the fisheries of the New World. Due to his production of detailed fisheries maps and maritime coordinates to be shared with other fishers, the Crown rewarded Cabot financially for future voyages and the exploitation of the reported stock (N.S. Dept. of Fisheries, 1986, 9-10). With the spread throughout maritime Europe of Cabot's findings and fisheries maps at the close of the 15th century, the "great Northwest Atlantic Fisheries" had begun, because, as Choyce notes, "fish was a hot topic in those days" and "there was money to be made" (1996, 31).

Although Cabot, under the auspices of the English, was the first to officially recognize the importance and market potential of the north Atlantic stocks, it was the French and Portuguese who developed the fisheries in the early 1500s. The earliest and most persistent

fishers of the era are thought to have been French Bretoners, shortly followed by Normans and additional Basques, who arrived in significant numbers to the Gulf of St. Lawrence to exploit the bountiful cod (Prins 2002, 44-46). Shortly thereafter, Portuguese fishers from Viana and the Azores began to arrive around the coast of Cape Breton and attempted to establish a colony on the island for the purposes of curing, packaging, and shipping fish (N.S. Dept. of Fisheries 1986, 11-12). Engaging in both “wet” (fish salted and barreled on ships) and “dry” (fish dried and salted on land) processing, by the 1520s these commercial fishermen were annually arriving in the Gulf and Cape Breton coast in the spring, summering on the shores, and returning to Europe in the early fall to market their catch. Through their ingenuity and increasingly efficient techniques, the French and Portuguese are thought to have been harvesting between 100,000 and 200,000 metric tons of cod a year (Brubaker 2000, 3), with many other species to follow in the years to come.

While the French largely dominated the region’s fisheries throughout most of the 1500s, by mid-century the Spanish had entered the fray with a growing and competitive fleet. Recognizing the market potential for increased effort in the fishery, the Spanish had increased their fishing fleet off the coast of Nova Scotia to over 100 ships by the 1570s, nearly doubling the fleet of the Portuguese (Wright 1965, 77-80). In addition, with the increasing demand and lucrative potential for cod in Europe, as well as newly levied licensing fees for foreign ships in Iceland, the English returned to the fisheries with an “expanding and aggressive” fleet (N.S. Dept. of Fisheries 1986, 18-19). Purchasing curing salt and other supplies from the Portuguese, while successfully outmaneuvering the French from some coastal stretches of Newfoundland and the inshore fisheries of Nova Scotia, the English were now well-established to ship enormous amounts of dry cod back to England to feed a growing export market to the Mediterranean. By the end of the century, due to increased knowledge of the fishery and growing market demand, both English and French fleets, at roughly 150 ships each, were making two to three annual trips across the Atlantic (CCPFH, 2020).

With the arrival of the 17th century, we see the rise of what Sue Calhoun refers to as the “resident fishery”, in which increasing numbers of European fishers cum settlers take up permanent residence in Atlantic Canada (1991, 10), as well as the concomitant advancement of French and English colonial designs on the region. While resident fishers may have increasingly focused on local markets for their catch, including a rapidly developing trade in processed fish with the Mi’kmaq, trans-Atlantic international market linkages continued to develop. For instance, by the 1620s nearly 250 vessels were sailing from French Norman ports to the waters around what was then increasingly known as the colony of *New France*,

with an estimated 20,000-200,000 fish transported back to France multiple times per annum (Prins 2002, 56-58). With approximately 4,000 French fishermen engaged in this massive cod harvest and transport, another 2,000-3,000 worked onshore drying cod before the trans-Atlantic journey. By mid-century, such was the growth of the French presence in the fisheries of Atlantic Canada that the colonial official Nicholas Denys would report back to France that on a trip from Maine to around the Atlantic coast of Nova Scotia he found French fishing vessels, processing and salting encampments, and settled communities of harvesters in nearly every harbor he came across.

Similarly, with increasing numbers of English fishers settling at English Harbor (i.e., today's Louisburg) in Cape Breton, including the gradual expansion of English dominance over fisheries to the southwest of Nova Scotia, the export back to Europe continued to grow and to fund England's imperial plans for the region. Adding to the Anglophone presence, by the 1650s increasing numbers of fishers from New England were plying the waters off Nova Scotia, at times competing with the Acadian settlers, and opening up a new front in the international marketing of the bounty (Choyce 1996, 54-56). The continued expansion of English and New English presence in the fisheries increasingly brought "big business into the picture", with companies like the London and Plymouth Trading Company and the Virginia Company increasingly monopolizing various zones of the fisheries outside of French control, notably those around the Port Royal settlement on the Bay of Fundy. While cod continued to dominate the fisheries, the 17th century saw the expansion of European interests in smelt, salmon, shad, halibut, and porpoise (often employing previously discussed Mi'kmaw technologies), as well as the return of whale and walrus harpooning, and thus an increase to nearly 500 European ships commercially exploiting marine resources in the northwest Atlantic on an annual basis (Barsh 2002, 24).

While increased colonial hostility between England and France in the 18th century manifestly impacted the fishing industry, including the displacement of French fishing interests to Cape Breton and Quebec following the Treaties of Utrecht in 1713 and Paris in 1763, other political developments would shape the colonial fisheries as well. One example is the "clearances" that were taking place in Scotland through the mid-1700s, which included the evictions of thousands of tenant farmers by wealthy landowners for commercial purposes (Wagner & Davis 2004, 322-323). Though most of those displaced were sheep farmers and agriculturalists, a significant proportion had developed "sea-based livelihoods", including kelp production and the harvesting of herring, shellfish, whitefish, flounder, and salmon. At the invitation of the English Crown, the 1770s saw initially hundreds, and eventually

thousands, of those Scots impacted by the clearances settle in and around Pictou County, Nova Scotia, including along the coast of the Northumberland Strait and St. Georges Bay (Thorburn 2017). Though some of the settlers returned to lives of subsistence agriculture, others turned to the sea and dramatically enhanced the fishing effort over the next 100 years in the fishing ports of Ballantynes Cove and Antigonish Harbor; a drama that not only increased the fishing effort on this stretch of northern coastline, but also diversified the commercial species to include mackerel and eventually lobster.

In addition, 18th century fisheries were also shaped and expanded by the continued arrival of immigrants from New England, as well as a new batch of German-speaking settlers committed to the fishery. One significant development from the newly arrived New Englanders was the introduction to Nova Scotia's waters of the two-masted ketch sailboat, which had been in use around Boston for several decades (N.S. Dept. of Fisheries 1986, 29-30). Faster, more efficient, and manned by as few as five, the ketches allowed for a dramatic increase in fishing effort around the harbors of Yarmouth, Barrington, and Liverpool, including 24-hour hauls, 12 months of the year. Once the French surrendered the port of Canso in 1713, the ketches' subsequent iteration as a schooner allowed for the enhanced export of cod to the still growing markets in Spain and the Mediterranean. Founding the town of Lunenburg in 1753, the newest of English allies cum settlers from Germany and Holland greatly enhanced the offshore sector of Nova Scotia's south coast, leading that town to become the top port by catch and revenue by the turn of the century (CCPFH 2020). Alongside the mid-century establishment of numerous processing and export-oriented firms by merchants from Jersey (Calhoun 1991, 11-13), the Germans and Dutch incorporated a number of joint-stock fisheries enterprises in Lunenburg; both of which furthered the professionalism and market orientation of the fisheries economy.

The arrival of the 19th century brought a period of increased technology, the explosion of the commercial fleet, industrial expansion, and international market shifts. Perhaps the primary technological advance was the shift to longlines throughout the Maritime region, which consist of hundreds of hooks attached to groundlines along the inshore ocean bottom (CCPFH 2020). The longlines were tended to periodically by New England-style schooners and were capable of dramatically increasing the catch of tuna, halibut, swordfish, mackerel, and cod. With more and more laborers recognizing the lucrative potential generated by such technological advances, there was a significant uptake of fishing as a profession among settler society, thus rendering Nova Scotia's fishing fleet the largest in the world by 1850. Moreover, the combined growth of the inshore and offshore sectors led to expansion in secondary

industries, including canneries for mackerel, lobster, and sardines, salting and processing centers for cod, tuna, and swordfish, and an assortment of ship builders and mechanics in nearly every port town (MacDonald & Connelly 1990); all of which furthered urbanization and coastal development around the region. Lastly, technological advance and industrial expansion were coupled by shifts in market access, with Mediterranean and American markets replacing those of Europe and the West Indies as primary destinations for the region's marine products.

While significant, these developments pale in comparison to the importance of the emergence of the commercial lobster industry in the 1870s, which today stands out as the most lucrative fishery in all of Canada. Before commercialization, lobsters were minimally harvested by settler society, typically on a subsistence basis or for barter in local markets, and rarely involved technology beyond the bare hands or rudimentary spears (Wagner & Davis 2004, 325-326). With the recognition of market potential, harvesters began to use "set lines" which were anchored on shore and had up to 100 traps sunk at successive depths. The traps were tended by fishers in small rowboats who would empty the catch, rebait the traps, and return them overboard to the same location. While a rudimentary technique according to today's standards, by as early as 1886 Nova Scotia's lobster harvesters were nonetheless bringing in 40 million pounds of catch per annum (DeWolf 1974, 17), further contributing to the secondary industrial expansion noted above. For example, the canneries sector operating for lobster alone had expanded from just 24 plants in all of Nova Scotia in 1880 to roughly 170 by the close of the decade (Wagner & Davis 2004, 325) and approximately 700 in all of Maritime Canada by the end of the century (Acheson 1988, 5). These canneries, along with the rise of the trade in live lobsters, fed an emerging market demand in the United States and other international destinations which continued to grow throughout most of the 20th century; a period characterized by enhanced professionalization and federal regulatory oversight of the fisheries industry as a whole (covered in *Chapter 2*).

Capitalist Ecology

Although a persistent theme throughout the above discussion, it is worth reinforcing the degree to which the Euro-colonial engagement with the fisheries of Atlantic Canada was from the very beginning one of an aggressive exploitation of 'natural resources' for commercial purposes. Starting a generation earlier with Basque whalers and rapidly expanding with English and French fishers at the turn of the 16th century, a free market oriented mindset encompassed in the developing doctrine of liberalism in Europe (Fukuyama

2022), coupled with an emergent modern constitution that sought “practices of purification” to keep nature detached from culture (Latour 1993, 39), set out across the Atlantic in search of technologies to harness, things and beings to objectify and commodify, and markets to feed. Once the lucrative target was identified, the particular “ontological regime” (Sahlins 2013, xiii) that came into full display allowed for the partitioning off of a slice of nature that was “out there” (Blaser 2013, 551) and free to be extracted and commodified by the most resourceful and skilled fisher. The underlying ontological duality at play manifested as a centuries-long effort by Europeans to master a set of harvesting skills, to procure increasingly advanced tools and technologies, and to acquire a seemingly objective and scientific knowledge of the oceanic environment (i.e., taken together as ‘culture’) in order to entrap, hook, cure, can, and ship the non-social, yet marketable, aquatic species beyond the shoreline (i.e., understood as ‘nature’). The resulting “utilitarian” relational schema (Hallowell 1926, 3) vis-à-vis the northwest Atlantic’s teeming biomass, coupled with what Sprenger calls the “objectifying strategy of capitalism” (2021, 78), has been sustained up to the contemporary neoliberal era and has facilitated an ever-expanding fisheries industry and internationally oriented export market.

In addition, as this form of “capitalist ecology” (Sprenger & Grossmann 2018, xvi) was consolidated and formalized over the centuries, it necessarily came to recognize and hierarchize a number of other relations and identifications of beings that most thoroughly facilitated the market transactions at play. For instance, alongside the predatory relationality directed at whatever specific fish species cum commodity was under pursuit at the time, inclusive of the “scientific-bureaucratic” identifications thereof (Todd 2014, 228), a configuration of additional relations was maintained with various colonial and economic actors to ensure the necessary property rights, market access, and expansive commercialism deemed essential to the trade. These human protagonists were largely understood as agentic forces who variously required engagement or neglect, competitive or cooperative leanings, etc., depending on one’s specific station in the fisheries business cycle. Moreover, as European settlement in Mi’kma’ki expanded and demand for commodifiable resources grew, a particular and evolving set of relations with the indigenous Mi’kmaq also materialized, and increasingly constituted a form of exclusionary relationality at various “sites of struggle” (Blaikie 2012, 237) related to the fisheries. For, as the centuries passed, the Mi’kmaq came to be viewed as not only competitors, but also as reflecting qualitatively different relational configurations, identifications of beings, and assumptions of their agency and personhood in the race to hook and net the fruits of the Atlantic.

It was thus in the earliest years of contact that a certain dichotomous conceptualization of Mi'kma'ki's land and its bounty came into view. On the one hand, an indigenous perspective that had adapted for over 10,000 years to the particularities of the "land and its life" revealed itself to the newcomers (Mi'kmaq Grand Council 1993, 8). Adherents thereto saw the land and its bounty as "heritage of the community" and an integral part of the Mi'kmaw identity and relational configuration within which life was lived (ibid). As such, in the act of harvesting certain life forms for human survival, this perspective necessarily implicated socio-relational and moral obligations understood to be beyond "the ontological frontiers of humanity" (Descola 2013, 22). By contrast, the earliest of Europeans to arrive had no previous connection to the land, no relationships to nurture or maintain, and no previous contribution to the "historical contingencies" (Ghazoul 2020, 6) that had shaped the land's natural patterns and processes. Therefore, as noted above, Mi'kma'ki's 'natural resources' were viewed as none other than commodities to be developed for the furtherance of a civilizational order an ocean away. As the European presence became more prevalent, it was soon evident that two understandings of and approaches to the natural world, including how and for what ends marine resources could be put to human use, were operating in parallel. However, with time, and faced with the "force of example of individualistic and competitive European institutions" (Bailey 1969, xx), the indigenous ecology began to be undermined and deliberately suppressed in an effort to expand what would be understood in today's terms as market access and capital accumulation. In process over several centuries and under a combination of French and English colonial pressure, the power imbalance on display fundamentally altered the foundations of Mi'kmaw ecology and the traditional livelihood patterns presented above.



CHAPTER TWO

Fisheries Foreclosed

Spirit Retreat, State Administration, and the Rise of Ecological Hegemoniality from the 16th-20th Centuries

And at once they came over in a crowd in their canoes to the side of the lagoon where we were, bringing skins and whatever else they possessed, in order to obtain some of our wares. . . And so much at ease did they feel in our presence, that at length we bartered with them, hand to hand, for everything they possessed, so that nothing was left to them but their naked bodies; for they offered us everything that they owned, which was, all told, of little value.
Jacques Cartier upon his initial meeting of the Mi'kmaq in Nova Scotia, 1534 (1993, 22)

The tragic reality is that what should have been a positive and respectful code of conduct degenerated over time into one in which government policies led to cultural genocide, assimilation, theft of land, denial of treaty and constitutional rights, racism, and increasingly punitive laws meant to control every aspect of the lives and deaths of the original inhabitants of what is now Canadian territory.

Bob Joseph on the *Indian Act* of 1876 (2018, 84)

I. Grating Ecologies: Hegemoniality Emergent in Early Contact Mi'kma'ki

Towards the end of the 15th and into the first decades of the 16th century, when Bretoners, Normans, and Basques began to arrive in greater numbers on the shores of Mi'kma'ki to exploit the fisheries, there was minimal meaningful contact with the indigenous Mi'kmaw peoples they encountered. Fishermen mostly stayed offshore, pursued their harvest, and made the necessary preparations for the long trip back to Europe. As social contacts began to materialize, perhaps in the 1520s as Portuguese fishers started the trend of processing fish onshore, relationships with the Mi'kmaq became more complex and were largely based on “mutual respect and shared need” (Coates 2000, 29). The French in particular began to engage meaningfully with those they encountered on the coasts with a “vigorous exchange” of tools, cooking utensils, clothing, tobacco, and local furs and fish trading hands in both directions. As this early contact period included relatively few Europeans- most of whom had an exclusive focus on offshore marine resources on a seasonal basis- the migrating Mi'kmaq continued in parallel to harvest the bounty of the natural world according to the historical trajectory of their own ecological precepts discussed in *Chapter 1*. Looking on at the European efforts in the fisheries from a distance, the Mi'kmaq were thus certain to perceive an emergent ecological plurality coming into view which included alternative ontological assumptions, differing forms of sociality between human fishers and fished, and varying degrees of ethical sensibilities leveraged in the pursuit of marine livelihoods.

However, by the time of Frenchman Jacques Cartier's arrival to the region in 1534, a new dynamic was emerging in the relationship between Europeans and the indigenous peoples of present-day Newfoundland, New Brunswick, and Nova Scotia. If relations between the two in the first three decades of the century can be characterized as “intermittent, yet frequent” (Bailey 1969, 5), the mid-1500s are best understood as setting off a “collision between aboriginal and European cultures” as an increasingly determined European capitalist ecology began to touch “more than the edges of this first Canadian civilization” (ibid). Historian Alfred Bailey marks this period as a critical turning point, in which periods of occasional contact and minimal coastal trading gave way to “an era of almost steady infiltration of European traits into the cultural areas of the Atlantic provinces” (1969, 6-7). Thus, while the early decades of ecological plurality in Mi'kma'ki conferred undeniable benefits to some (i.e., trade opportunities, shared fisheries knowledge, etc.), the “ecological

globalization” (Coates 2004, 140) that accompanied European expansionism around the world also brought deleterious effects as periods of contact intensified. Hence, as a complementary social force to pluralization, the mid-16th century marked the commencement of a centuries long process of “ecological hegemoniality” that from the beginning served to undermine the very foundations of Mi’kmaq ecology and associated livelihood techniques and ethical obligations.

Ecological Hegemoniality Defined

This study’s use of “ecological hegemoniality” begins with a recognition of the centrality of European expansionism and colonial settler intentionality behind the centuries-long process of suppressing and marginalizing indigenous peoples in the Americas. Historian Ken Coates highlights that as Europeans set out on a “global process of expansion, conquest, and occupation”, including the market-oriented harvesting of the fisheries of the northwest Atlantic covered in *Chapter 1*, a certain “ecological imperialism” was a necessary expansionist design (2004, 141). Thus, in those instances when resource hungry Europeans encountered indigenous peoples navigating alternative “systems of living and working with the ecology”, and when those systems manifested as an impediment to capital accumulation, Europeans demonstrated an “aggressive assertion of humanity’s capacity and willingness to exercise control over the landscape”. Such colonial assertions, including those that began in earnest in 16th century Mi’kma’ki, included the imposition of ideologies of land ownership and privatized resources, identifications of biophysical beings and entities with market potential, and the formal administration and regulation of access to and benefit from ‘natural resources’. The outcome of these intentional and deliberate colonial efforts often resulted in what Elyse Mills calls “overlapping processes of exclusion” for indigenous peoples vis-à-vis their newly contested environments (2018, 1275).

This positioning of ecological hegemoniality within larger socioeconomic and political contexts (Ostrom 2007) serves as a reminder that such forms of domination were not exclusive to the colonial era, but rather ongoing relational dynamics at play in all temporal and spatial moments of plurality. In other words, contemporary manifestations often emerge in the form of State domination, regulation, and control of acceptable forms of ecological knowledge and related modes of practice; a phenomenal reality that is particularly stark in the Euro-settler states of North America. Caroline Butler makes the point with regards to 20th and 21st century fisheries management in Canada, which she sees as a perpetual “massive disruption of Indigenous resource use” (2006, 107, 115). For her, through increasing

regulations, fishing closures, gear restrictions, and other regulatory interventions a firm line has been drawn between “Indian fishing” and “modern fishing”, with the former delegitimized and shut out of livelihood opportunities from British Columbia to the Maritimes. This point will be returned to in *Chapter 3* when discussing the violent rejection of recently launched moderate livelihood lobster fisheries, including the perception of a threat to the capitalist logic of the fishery from the indigenous ecology underpinning the launch. Thus, if the earliest centuries of ecological hegemoniality “turned the natural world and its relationship with indigenous societies on its head” (Coates 2004, 141), more recent forms are no less pernicious in their exclusionary leanings and imposition of capitalist frameworks.

But by what means and at what level does hegemoniality manifest and begin to undermine the foundations of an increasingly subordinate ecology? For the current study, it is understood that divergences between ecologies’ fundamental ontological assumptions, and therefore “different conceptualizations of environment and nature” (Brauchler 2018, 387), are often times primary and irreconcilable, and thus typically result in the imposition of fundamental assumptions thereof. For instance, when one ecology becomes “authoritative” at the level of ontology, and therefore “subordinates alternatives” (Grossmann 2018, 326), the lines demarcating humans from non-human persons, as well as those between beings and entities perceived as animate or inanimate, get redrawn and reconfigured to alternatively expand or restrict the subject pool of society. As such, the ‘subject’ versus ‘object’ status assumptions of an ecology get re-assessed and personhood identifications and understandings of agentive potential are adjusted accordingly. A hegemonic ecology therefore redirects communicative attention to those beings and entities understood to belong to its “sociocosmic field” (Viveiros de Castro 1998, 475), which therefore re-shapes relational configurations and obligations of the social totality. In other words, when hegemoniality presents at the ontological level of an ecology- an example of what Viveiros de Castro refers to as “an ongoing war of worlds” (2015, 9)- the relational configuration is likely disrupted, resulting in alternative inclinations towards inclusion versus exclusion, recognition or disregard, intentional or perhaps denied sociality to others.

Guido Sprenger’s (2018) research among the Jru’ in southern Laos provides an excellent example of how ecological hegemoniality can undermine ontological assumptions and render new identifications of beings and the relational networks they are embedded within. He notes that as many communities in Laos transition away from swidden agriculture to coffee production, the hegemoniality of “the coffee ecology” has undermined the previously prominent animist assumptions of non-human personhood among various entities

in the natural environment (2018, 273-275). Whereas previously rice, animals, land, and other non-human beings were understood to possess a spirit, and thus require ritual and relational engagement from humans, the shift to a cash cropping ecology has decreased “the complexity of non-human personhood” and thus restricted “the operation of the animist ecology” (2018, 281). In other words, the intrusion of this form of capitalist ecology has the tendency to undermine non-modern ontological assumptions, therefore turning previous persons into commodifiable resources. As is presented below, ecological hegemoniality in this sense was prominent in the early centuries of European engagement in Mi’kma’ki as a confluence of both State and non-State actors sought to undermine the aforementioned Mi’kmaw assumptions of *interconnection* and *unity* with the natural world so as to commodify the fruits of the land and sea more easily.

Ecological hegemoniality may also impact upon the aforementioned livelihood ethics of a particular ecology, which typically involves State-sponsored regulatory systems that back one ecology over another. For instance, a State body such as the Canadian Department of Fisheries and Oceans (DFO), may artificially demarcate and sub-divide the boundaries of a particular resource system (e.g., Nova Scotia’s Lobster Fishing Areas), including seasonal determinations of allowable harvesting, and restrictive licensing provisions on who is considered a legitimate resource user. This modernist type of “equilibrium centered, command-and-control” (Folke 2006, 255) management therefore generates an ethical context around that which is considered acceptable or legal harvesting, with any transgressions away from those norms deemed unacceptable, unsustainable, and an environmental threat. Similarly, State-backed hegemoniality often puts forth particular discourses around such concepts as “conservation” and “natural resource management”, which are purported to be science-based and objective assessments of ecological processes (Sowman et. al 2021). Often articulated in support of a capitalist-oriented ecology, these concepts and related livelihood restrictions often serve to exclude certain marginalized communities from a resource and create access rights that are unobtainable to most. Taken together, the hegemonic imposition of bureaucratized regulatory systems and conservation measures create the physical space and perceived limits within which certain livelihoods can be pursued, as well as the legal boundaries beyond which the State deems criminal.

The moral framings of livelihood ethics (See *Chapter 1*) are also potentially subject to undermining or forced modification when in the context of a hegemonic ecology. For example, the collectively understood *purpose* of harvesting certain beings or entities by humans may be challenged by alternative visions of resource use, which then make possible

and acceptable logics that were previously forbidden. Hence, we may see a hegemonic capitalist ecology demanding the ‘freedom’ to commodify and market without hindrance what it sees as an ecology’s objects, and therefore subordinate purposes focused more on simple sustenance or community wellbeing. Similarly, the *values* that structure appropriate comportment, relations, and the pursuit of specific purposes of harvesting are equally vulnerable to the hegemonizing tendencies of a dominant ecology. Thus, with the introduction of alternative livelihood logics, hegemoniality can create situations that are “morally fraught” (Robbins 2007, 302), wherein value configurations are upended or undermined. Building on the work of Joel Robbins (2004; 2007), hegemonic ecologies are therefore understood to either introduce novel values that were previously absent, or perhaps new hierarchies between values differently structured; both of which serve to shift the moral framings that guide the human actors of an ecology.

Moreover, it is essential to the current study to highlight that while most situations of ecological plurality reflect both “pluralizing” and “hegemonizing” (Sprenger & Grossmann 2018, xiii) tendencies, and thus constant flux along a continuum, there are moments when hegemoniality becomes prodigious and serves to nearly “erase prior ecological relationships” (Borrows 1997, 428). Charles Menzies makes the point with regards to the experience of indigenous communities in Canada, noting that ecological knowledge is a “product of dynamic processes” and can therefore “stagnate, degrade, and even disappear” from society in the face of overwhelming colonial force (2006, 102). Such forms of stagnation and degradation are often the result of a “disruption of transmission” of ecological knowledge from one generation to the next (Menzies & Butler 1997, 8); a phenomenon that typically results in either total abandonment of traditional livelihoods *or* the absolute exclusion therefrom in the face of techno-bureaucratic restrictions. Such a fundamental “external disturbance” (Anderies et. al. 2004, 4) that an overwhelming hegemoniality creates therefore has the potential to result in what may seem like a “total loss, a complete disruption in how the environment around us is understood, respected, and put to use in an ethical way for society’s benefit”³⁰. However, as is demonstrated in *Part II* of the current study, while some form of loss, absence, or retreat may characterize a defined temporal period of hegemoniality, particularly when it manifests as diminishing traditional livelihoods, emergent sociopolitical catalysts can at times engender a revival of previously suppressed ecological leanings.

³⁰ Personal Communication, 22/01/2021, indigenous outreach spokesperson, St. Francis Xavier University, Antigonish, Nova Scotia.

Hence, starting in the mid-16th century, European-indigenous relational outcomes began to shift along the continuum from the ecological plurality axis of the early contact era towards one of more extreme forms of hegemoniality into the mid-20th century. This ongoing hegemonizing process was characterized by two distinct, yet related facets that reinforced one another as the modern capitalist ecology bestowed itself upon the New World. Initially, Euro-ecological hegemoniality presented itself in the realm of ideas and fundamental understandings of humanity's place in the cosmos, that which Paul Nadasdy refers to as the "ideological dimension" of settler colonialism's drive to transform the natural world from one of a "profusion of animate beings" to nothing more than a collection of inert resources (2021, 9). Closely linked to the French colonial experience, this facet served to undermine and weaken the ontological and relational foundations of traditional Mi'kmaw ecology and furthered a notion of "human domination over the environment" through a "profound and sweeping ideological revolution" among indigenous communities (Coates 2004, 15). As the centuries of colonial occupation progressed and became more formal, notably in the hands of the British from the mid-18th century onward, a second facet of hegemoniality emerged that was more related to the political economy of indigenous-settler colonial relations. Hence, through the "imposition of state logics on human-environmental relations" (Todd 2014, 231), the 18th to late-20th centuries witnessed the rolling out of increasingly exclusionary treaties, laws, regulations, and bureaucratic norms geared towards the furtherance of a capitalist ecology and related market orientations. Accordingly, these two forms of hegemoniality not only undermined the ideational foundations of a dynamic and adaptive indigenous ecology which was thoroughly overwhelmed by historical circumstances, but also served to erect a plethora of legalistic and techno-bureaucratic barriers that prevented its enactment in the first instance.

II. De-Spiritualization and the Fracture of Indigenous Ontological Assumptions

As the mid to late 16th century came into view, intercommunal relations in Mi'kma'ki began to reflect less of the 'intermittent' nature mentioned above, and more of a sustained and increasingly meaningful dialectic between the indigenous Mi'kmaq and European newcomers. As a result of increasingly present and determined Christian missionaries *and* entrepreneurial harvesters and traders, a certain "clash of two ideological worlds" began to manifest (Prosper 2009, 39), which, in the ecological terms of the current study, set off the hegemonic tendencies that would persist for centuries to come. Such was the intensity of the

growing European presence by the 1650s, including the cultural arrogance that lent a ‘civilizing’ intentionality to nearly all inter-cultural discourse, that it was already evident at this early stage that European notions of monotheistic religiosity and commercial idealism had set the historical particularisms, yet equally dynamic adaptations, of Mi’kmaw lifeways into irrevocable decline (Miller 1976). Referred to by many as the deliberate annihilation of the cultural foundations of indigenous society (e.g., McMillan 2018, 36; Knockwood 1997,116), this emergent ecological hegemoniality thus initially targeted the ontological assumptions of the Mi’kmaq- a relative “declaration of war against worlds deemed inferior” (de la Cadena 2010, 361)- and promoted an anthropocentric view of the cosmos that re-ordered the subject-object status of nearly every entity and being in these newly occupied lands. In other words, through an increasingly intentional “criminalization of Mi’kmaq spirituality” (Prosper et. al. 2011, 7), including the resulting “psychological turmoil” and “social disintegration” it caused (Bailey 1969, 43), the foundations of the indigenous ecology encountered by Europeans would be forever altered.

Missionary Zeal and the Closing of the Mi’kmaw Spirit World

As a result of 16th century French priests accompanying the earliest of fishing vessels to the New World, enough had been learned of the Mi’kmaq that turn of the century missionary circles could envision “almost completely blank tablets” upon which a “speedy and widespread proselytization” could be targeted (Bailey 1969, 126). Hence, it was upon this assumption that the early 1600s witnessed the launch of a concerted effort on the part of Catholic Jesuit and Franciscan missionaries to not only “civilize the savage, haunting the woods, ignorant, lawless and rude” (Jesuit Relations 1896, 173), but to make them “amenable to conversion” through a reinforcement of the “distinction between natural and supernatural, between flesh and spirit” (Bailey 1969, 133). It was thus in 1611 that the French crown authorized the establishment of Catholic missions, first at Port Royal in contemporary Nova Scotia and eventually adjacent to trading outposts throughout Mi’kma’ki, in order to supplement military and trade operations with a spiritual re-ordering of sorts. And it was from these earliest of spiritual efforts on the part of French missionaries- shot through with “fear, trickery and threats”- that the first organized “assault on Mi’kmaw culture and way of being” (Prosper et. al. 2011, 7) would commence and begin to erode the ontological foundations of Mi’kmaw ecology.

It's been noted that as a result of the advanced technologies displayed by the immigrant Europeans, including their seeming immunity to the deadly epidemics beginning to

spread in the New World, the Mi'kmaq of the 16th and 17th centuries regarded the newcomers as “superior” and justifiably “revered and imitated” in all walks of life (Bailey 1969, 128). And it was upon such assumptions that a certain “Christian onslaught” would be on full display by the 1650s (Martin 1978, 60), including various Missionary-imposed prohibitions and demonizations of the traditional Mi'kmaw cosmology. This “despiritualization” through conversion process included the banning of harvest related rituals and taboos, the labeling as “superstitious” of beliefs in non-Christian spirits (*manitou*) and the animacy of the natural environment, and the fundamental discrediting of any form of relationality with the non-human world beyond strict utilitarian or commercial engagement. As such, Christian ritualism increasingly came to the fore and was coupled by beliefs in such new concepts as individual salvation, prayer, Holy Communion, and Baptism, all in service to a monotheistic deity that solely occupied the supernatural realm (Prins 2002; Parsons 1926). It therefore comes as no surprise that after decades of such Missionary efforts at subverting Mi'kmaw ontological understandings, described by Martin as the “replacement of the animistic view of nature by the monotheistic and exploitative European view”, that the Mi'kmaq “role within his ecosystem had changed radically” (1978, 59-61) and fundamentally altered the aforementioned notions of *interconnection* and *unity* with the natural environment.

One particular target in the priests' quest to “sever the connection to the animal and spiritual world” in order to “receive a new God” on the part of the Mi'kmaq (Prosper 2009, 44), were the ever-important individuals who served an “intermediary role between the spirit realm and the physical” in Mi'kmaw society (Martin 1978, 37). As highlighted in *Chapter 1*, many early colonial and ethnographic accounts documented these individuals being referred to as “buoin” in Mi'kmaw, or even “bohinne” in French (Wallis & Wallis 1955, 156), and emphasized their exceptional levels of strength, power, and the abilities to cure sickness and predict the future. Elder Kerry Prosper reflects on these individuals' roles and status as simply that of a “shaman” (2009), which, along with the above-named qualities, served as spirit mediums with the power to communicate with, propitiate, and conjure the spirit realm animating the non-human persons of Mi'kma'ki. As such, the shamans played a crucial role in sustaining a worldview devoid of the ontological dichotomies embodied by the Jesuits and Franciscans. Therefore, the earliest of Missionaries understood that “the shaman had to go” (Johnson 1943, 56) and embarked on a quest to undermine and compete with his offices for “spiritual dominance” (Prins 2002, 84). Prins notes that such efforts included the ridiculing of shamans as “sorcerers, witches, charlatans, frauds, or jugglers”, as well as teachings that described the supernatural powers leveraged by them as demons or evil spirits. Prosper adds

that shamanic rituals were also derided as ludicrous superstitions, which often included the confiscation or destruction of their symbolic “sacred bundles” or “medicine bags” in a humiliating “erosion of shamanic power” (2009, 43). In this way, the French Jesuit Father Biard commented in the 1650s (cited in Whitehead 1991, 58):

“ . . . our Indian juggler, troubled as to what had become of his bag, I told him that he had no further need to be concerned about his bag, which had deserved to be thrown in the fire, since it was the property of the Devil who had dwelt therein. ”

And it was upon such blatant ridicule and demonization of this crucial relationship with shamanic power that “the natural world of the Indian” was, over the centuries, “becoming inarticulate” (Martin 1978, 62).

As the “white sorcerers” of Christianity furthered efforts to despiritualize the natural world (Prins 2002, 71), targets for suppression and assimilation were extended to the realm of Mi’kmaw folklore. As referenced in *Chapter 1*, the culture hero Kluskap occupied a prominent position in pre and early contact Mi’kmaw consciousness and, through widely shared mythical tales, was understood as a “friendly character”, or a “wandering magician who transforms the landscape” and teaches the Mi’kmaq of their sacred duties and relationships vis-à-vis the natural world (Hornborg 2008, 68). Moreover, Kluskap was “benevolent to the Mi’kmaq people” and taught them how to hunt and fish responsibly, how to recognize and know the properties of the non-human natural environment, and how to use tools and weapons in an ethical manner (Wallis & Wallis 1955). As such, the Christian establishment perceived a competitor of sorts and sought to undermine the legitimacy of Kluskap and his teachings; a phenomenon that one historian of early Mi’kmaw society perceived as a “battle between the two masters, Christ and Kluskap” (Speck 1915, 60-61) which would increasingly play out in the stories of elders. Thus, for a time many Mi’kmaw stories depicted a “conflict raging” between two cultures, that of Kluskap’s people (i.e., the Mi’kmaq) and Adam’s people (i.e., Europeans), and highlighted the divergences in how the world and humanity’s place within it were perceived by the two (Hornborg 2008, 108).

However, as the decades of missionary intervention progressed and Christian conversions kept apace, an unmistakable “departure of Kluskap” took place in the stories depicting Mi’kmaw origins and place in the cosmos (Hornborg 2008, 111). According to Hornborg, as the new realities of colonization and Christianization became apparent, including as the “political/social/economic structures of settler society invaded the Mi’kmaq lifeworld”, it was inevitable that indigenous folklore would be transformed along the way (2008, 117). Whereas initially Kluskap emerged in stories in an epic battle with foreign Gods

and concepts, by the late colonial period he was “in exile” and references to him and his teachings became more diffuse and less well-known or understood in society. The result, much like that of the demise of the role of the shaman, was a further undermining of foundational ontological assumptions and the relational configurations between the Mi’kmaq and non-human persons they sustained. Hornborg notes that with Kluskap’s departure, “important bonds are destroyed, both between humans and non-humans and between different species of animals” and, perhaps inevitably, “it is not only communication between people that is damaged, but also communication between them and non-humans” (2008, 112). In other words, through missionary efforts to secularize the non-human world, including a rejection of personhood qualities and animate possibilities thereof, not only were the Mi’kmaq deprived of their primary understandings and means to communicate with the spirit world (i.e., shamans), but also of the folklore that reminded them of their place within that world and how to sustain it.

While these forms of hegemoniality perpetuated through missionary zeal largely disrupted the ontological and relational foundations of indigenous society, there was inevitably a detrimental impact upon the livelihood ethics of traditional Mi’kmaq ecology as well. For instance, through the demonization of spirit communication via shamans, coupled with the missionary push for object status identifications of the non-human world, the ethical imperatives that once regulated Mi’kmaq hunting and fishing livelihoods had begun to dissipate by the mid-17th century (McMillan et. al. 2016). An elder based in Halifax made the point in that³¹:

“As Christian rituals and understandings of the environment started to replace the simple rituals and respect that was once demanded by the animal spirits, people forgot about the teachings of netukulimk and committed multiple infractions in their hunting and fishing.”

In other words, as the dynamic relationships between the Mi’kmaq and the plethora of non-human beings and entities of Mi’kma’ki were eroded, they were “replaced by a new respect for Jesus- with the likeness of man, not an animal” (Prosper 2009, 106). As such, “no longer did the animal spirits and the shamans control hunting, fishing, and gathering activities. . . the new enforcer was God and the priests, *netukulimk* had no place in Catholicism.” And it is perhaps in the Christian undermining of *netukulimk*’s function as a ‘conservation ethic’ or ‘control mechanism’ vis-à-vis the necessary harvesting activities to sustain Mi’kma’ki (See *Chapter 1*) that the most detrimental impacts unfolded.

³¹ Personal Communication, 01/03/2021, Halifax, Nova Scotia.

Martin makes the point in noting that with the shifts underway in Mi'kmaw ontology, there was a "nullifying of the traditional sanctions against wildlife overkill" and thus a removal of the "spiritual obstacle" that had previously structured resource harvesting (1978, 19). Under such conditions of dramatically altered ethical obligations, and whereas the Mi'kmaq previously considered themselves as "sensitive fellow members of a symbolic world" in a broader ecosystem of subjects, *netukulimk's* teachings were increasingly abandoned as Christian precepts took hold (1978, 60-61). The result was a deprivation of a "sense of responsibility and accountability for the land" and an associated "unrestrained slaughter" of those beings the Jesuits and Franciscans held as none other than soulless objects and commodities to be developed. In short, the ontological dualism that underpinned the hegemoniality of Christianization not only severed relationships, redirected communicative attention, and restricted personhood to within ever narrower boundaries, it also furthered a "corruption of the Indian-land relationship" in which the former had previously "merged himself sympathetically" with the latter (Martin 1978, 65). Put simply, the Christian-led closing of the Mi'kmaw spirit world facilitated the transformation of previously communicative and moral subjects to asocial and amoral objects, and therefore encouraged economic logics rooted in profit and market transactions to become increasingly primary in the ethical leanings of Mi'kmaw livelihoods. While this historical portrayal of hegemoniality is not meant to contrast an ecologically "noble savage" (Redford 1991) idealization with a stereotype of rapacious European commodification, it nonetheless draws on the available literature to reflect the real world impacts of divergent ontologies on the lifeways of indigenous people undergoing dramatic shifts in their lived environment.

Livelihood Shifts and Ecological Drift

Roughly in parallel to the ecological hegemoniality perpetrated by the missionary movement was an equally degrading confluence of factors related to the rapid growth in European-indigenous trade, including shifts in Mi'kmaw livelihood patterns to meet the demands and opportunities of that trade. Beginning in earnest with the fur trade in the mid-16th century, the resulting "revolution in the economic life" (Bailey 1969, 74) of the Mi'kmaq would not only alter the types of goods manufactured, harvested, and procured, but also fundamentally reshape distinctions between the material and immaterial, the animacy versus inanimacy, and private as opposed to communal identifications of the natural world. Thus, in addition to the Jesuit and Franciscan efforts to despiritualize the non-human world, the intrusion of capitalist market relations furthered the ontological breakdown by creating new

measures of value, new social obligations restricted to fellow humans (i.e., trade relations), and novel material desires that extended beyond inclinations to sustain Mi'kma'ki's ecological integrity. In other words, as enhanced European contact “unhinged the traditional economic and social interdependencies” of Mi'kmaw society (Prins 2002, 54), ecological hegemoniality continued apace and even gathered momentum.

For instance, though continental European fashionistas were promoting felt hats as early as the 1450s, it wasn't until the closing of the 16th century that this variety of head gear became highly fashionable and caught the eyes of the entrepreneurially inclined (Bailey 1969). It was at this time that European merchants, operating from the expanding numbers of fishing vessels discussed in *Chapter 1*, began to barter and trade with the Mi'kmaq for access to beaver furs along the coasts of contemporary Nova Scotia and Newfoundland. While beaver fur manifested initially as the prime commodity changing hands, as the trade expanded into the 17th century bear, marten, fox, rabbit, muskrat, and elk were also being exchanged for European manufactured wares at a regular clip (Miller 1976). With a growing demand in Europe, coupled with the high overhead costs of shipping furs such long distances, European merchants became more demanding over time and encouraged Mi'kmaw hunters to adjust their seasonal migrations to feed the market with ever expanding volumes of product. Eager to obtain more European ironware in exchange, including axes, hatchets, needles, and guns, many Mi'kmaq readily adjusted their livelihood patterns to focus on the pursuit of whichever four-legged commodity-to-be was in demand at the time (Clark 1968). In addition to iron, as the trade expanded the Mi'kmaq developed a desire for European garments, cooking utensils, tobacco, and alcohol, all of which furthered the “revolution in domestic pursuits” of Mi'kmaw harvesters (Bailey 1969, 12).

While this growing trade served to alter indigenous diets and consumption patterns (Miller 1976), reshape family structures and norms (Wein 1986), and decrease self-sufficiency (Meuse 2016), there was an even more fundamental undermining of the ontological and relational foundations of Mi'kmaw ecology. For instance, from a growing dependency on the practical tools obtained from Europeans, Mi'kmaw harvesters became increasingly reliant on the trade to meet their basic needs and to sustain their communities. As such, the animal kingdom began a painful transition from fellow persons occupying a common relational field, to simple commodities that could be traded away without hesitation. Prins makes the point in noting that whereas animals were once regarded as “four-legged relations” (i.e., subjects with communicative potential), emergent “purely profit-oriented hunting practices” had severed the relationality between hunter and hunted and shifted the

animals' identification from subject to object status (2002, 105). In a tongue in cheek manner, one Mi'kmaw hunter hinted at this loss of personhood and the rising desirability of those 'four leggeds' as valued objects of trade (cited in Kenton 1927, 151):

“. . . *the beaver does everything perfectly well, it makes kettles, hatchets, swords, knives, bread, it makes everything!*”

Hence, devoid of spirit, Mi'kmaw hunters “declared war on game animals” (Prins 2002, 105) and pursued a market relationality that had no time for non-human propitiation. Therefore, not only had the growing demand for Mi'kma'ki's furs forced alterations to seasonal migration patterns, it also effected fundamental changes in how the bodies to whom those furs once belonged were understood, related to, and (dis)honored.

Moreover, a secondary effect related to the acquisition of European material goods by Mi'kmaw traders had an equally deleterious impact upon indigenous assumptions of non-human personhood, including the animate potential of seemingly inert or physical objects. As highlighted in *Chapter 1*, in addition to fauna and flora, certain accounts of the pre-contact Mi'kmaw ecology describe a spirit presence in a range of physical objects- including weapons, tools, canoes, snowshoes, and utensils- and therefore understood such objects as animate and communicative. Emerging from that spirit, the utility of an object was viewed as commensurate to the amount of “Power it housed” (e.g., *ginap, keskamzit*), and thus “the more functional a tool, the more Power it possessed” (Martin 1978, 59). In other words, the efficacy of an implement, including how it should be treated and related to, drew upon “factors which operated beyond the material world” and leveraged a certain spirituality- or rather “mystical forces”- that blurred the distinctions Europeans of the time made between the natural and supernatural (Bailey 1969, 47). However, when Mi'kmaw traders began to receive in increasing quantities the technologically superior European tools and implements mentioned above, the “clash of cultures in the religious sphere” dramatically undermined the perceived animacy thereof.

For instance, in the 1650s the French Governor Nicolas Denys (1908) noted that initially when the Mi'kmaq received European goods, they would assume an animate status and, given the technological superiority to their own wares, would describe such objects as full of Power. Yet, given that such goods received “were accompanied by Christian religious teaching and French custom”, the European technology that was increasingly defining the material world of Mi'kmaw communities was “largely incompatible with the spiritual beliefs” that predated the trade (Martin 1978, 59-60). As Denys pointed out, European material culture was pre-defined, including notions of physical provenance, the properties that conferred

utility and durability, as well as the strictly secular status allowed to objects derived from the Christian God-given earth. In other words, by accepting European material culture as a mode of exchange in their rapidly shifting livelihood pursuits, the Mi'kmaq were "thus impelled to accept European abstract culture as well" which furthered the missionary glee that "their own spiritual beliefs were subverted as they abandoned their implements for those of the white man" (Martin 1978, 59). Hence, the acquisition and use of European tools and technologies not only served to replace those of the pre-contact era, but it also furthered the hegemonic cause of fracturing the indigenous ontology that previously underpinned a spiritual relationality to them.

Lastly, as the commercial idealism of Europeans continued to impact Mi'kmaw livelihoods into the late 17th and 18th centuries, relationships to the land itself were altered when faced with the dogma of private property. Whereas previously the land and its noteworthy landscapes were "conceived of communally as essential beings in the interconnections and interdependencies of everything³²", the fur trade and increasing pressures from settlers shifted such understandings to one that envisioned a divisible object and economic asset. For example, Wien points out that as French fur traders engaged individually with hunters, land that was previously exploited communally was increasingly "regarded as the preserve of a particular family" to the exclusion of others (1986, 10). Market engagement and the desperation to acquire European goods therefore turned land into a site of competition and generated efforts to demarcate exclusionary stretches thereof. Similarly, Hornborg notes that as settlers of the era began to transform the landscape "under a new mode of production", including the conversion of forests to individually owned fields and pastures, the Mi'kmaq began to see themselves as "an alienated country proletariat" whose only recourse was to sell their labor to the rightful "owners" of the land (2008, 92-93). In this way, the emergence of "family hunting territories" (Snow 1968) and perceptions of exclusionary rights to the soil were a direct reflection of the merchant-preached message of private ownership, and directly contradicted the notion of "land as a relatable being to all, not an object to possess for profit³³". As in the missionaries' quest to restrict personhood and foreclose on the non-Christian spirit world, the hegemoniality that emerged from engagement with European merchants and the settler capitalist class had no less of a detrimental impact upon the foundations of Mi'kmaw ecology. Though not static, fixed, or pristine at this time of

³² Personal Communication, Elder spokesperson, 22/02/2021, St. Francis Xavier University, Antigonish, Nova Scotia.

³³ Personal Communication, Elder spokesperson, 08/03/2021, Eskasoni, Cape Breton Island, Nova Scotia.

early European contact, the indigenous ontological assumptions of the era were fractured and set on alternative historical paths as the two ecologies came into increasingly intimate relations.

III. Legalistic, Techno-Bureaucratic, and Neoliberal Exclusions

If the first phase of ecological hegemoniality that transpired in Mi'kma'ki largely targeted indigenous ontological assumptions, the forms that commenced in the early to mid-18th century were more State-centric and sought to define the proper governance, ethical, and legal boundaries of livelihood pursuits. Largely coinciding with the signing of the Treaties of Utrecht (1713) and Paris (1763) between Britain and France, and thus initiating full British colonial control of the region (Choyce 1996), the second phase of hegemoniality emerges from the colonial era phenomenon Ken Coates refers to as a “complex era of administration” (2004, 171). As opposed to allowing for indigenous self-government to emerge, and therefore govern Mi'kmaw livelihoods vis-à-vis the natural bounty, various efforts at assimilation effectively rendered the Mi'kmaq “administered peoples” (2004, 198), who were either fundamentally alienated from those resources, or, in limited circumstances, forced to adhere to the capitalist ecology of the newcomers. More often than not, State administration resulted in the “criminalization of Mi'kmaq livelihoods” (McMillan 2011, 175), and thus a complete inability to pursue the seasonal migrations of the pre-contact era. In other instances, the “rise in government-imposed institutional practices” allowed *not* for livelihood pursuits governed by indigenous ecological precepts, but rather served to “frame and contain” Mi'kmaw livelihoods according to officialdom (Davis et. al. 2004, 380). Hegemony in this sense manifested (and continues to) in the form of treaties and colonial law, techno-bureaucratic policies and regulatory frameworks, and socially embedded approaches to natural resource management that continue to this day; all of which have sought to suppress Mi'kmaw ecology and the forms of resource harvesting it sanctions.

Treaty Flaws and Colonial Law(lessness)

Following the British eviction of French colonialism from most of Nova Scotia in 1713, there was a growing recognition by the British of the need to both formalize alliances with Mi'kmaw leadership *and* to define future relations between settler and indigenous societies, including relations to the land and its resources. Throughout the 18th century, this desire took the form of mutually agreed-upon treaties, most of which varied in their intent and

jurisdictional claims by the British Crown (Dept. of Justice, 2020). These “Peace and Friendship” treaties were often a mélange of both Mi’kmaq and European legal traditions, therefore rendering the treaties honorable and law-like (Whitcomb 2019). More importantly, given that the French still maintained a presence on modern day Cape Breton Island following the 1713 expulsion from the mainland, the British saw the early treaty process as a way to ensure a military alliance with the Mi’kmaq, and thus maintain the “military and political balance of power in the region” (Coates 2004, 176). In parallel, following the loss of their centuries long trade and social partner in the French, the Mi’kmaq were eager to gain formal recognition for continued access rights to traditional hunting and fishing grounds. Thus, what followed was a “chain of covenants” in the form of peace and friendship treaties ostensibly meant to ensure peace, acknowledge colonial jurisdiction, and guarantee indigenous livelihoods (Wildsmith 1995, 117).

The first known example was the *Treaty of 1725*. While the British saw the key provision as that which guaranteed peace, including the cessation of hostilities towards settler communities, the Mi’kmaq prioritized legal recognition of their livelihoods. Thus, the final version of the treaty not only set the foundation for peaceful dispute settlements, it also guaranteed that Mi’kmaq harvesters “shall not be molested in their persons, hunting, fishing and planting grounds, nor in any other of their lawful occasions” (cited in Wildsmith 1995, 123). While this initial treaty generally served to keep the peace over the following two decades, at mid-century there still existed disagreements over the exact nature of land and resource use rights and ownership (Coates 2000, 40-41). Hence, a more comprehensive *Treaty of 1752* was agreed with the intent to clearly dictate access rights to resources, including the form inter-communal trade in these resources might take. Regarding the former, the treaty echoed 1725 in stating that, “It is agreed that said Tribe of Indians shall not be hindered from but have free liberty of hunting and fishing as usual” (Govt. of Canada Treaty Texts 2020). On trade, it added, “. . . if they shall think a truck house needful at the River Chubencadie, or any other place of their resort, they shall . . . lodged therein to be exchanged for what the Indians shall have to dispose of. . . to the best Advantage”. Thus, with the 1752 iteration the British not only sought to maintain peace through a reaffirmation of indigenous livelihood rights, but also to extend the benefits of formalized trade and capitalism.

Following a flare-up of mid-century violence, by 1760 the British felt the need to effect a series of additional agreements structuring relations, trade, and resource use in Nova Scotia. For instance, while the *Treaty of 1760* focused primarily on a cessation of hostilities, it also furthered the Mi’kmaq right, as well as the British expectation thereof, to access the

previously mentioned ‘truck houses’ for the trade of their harvested goods. The treaty notes, “. . .we will not traffic, barter, or exchange, any commodities in any manner, but with such persons, or managers of such truck houses as shall be appointed” (cited in Paul 2000, 150). Over the next two years, no fewer than 10 additional treaties were signed reflecting similar language, including the first mention of the right to acquire “necessaries”, which has been interpreted in recent years as the right to pursue a “moderate livelihood” (See *Chapter 3*). Once the French were fully expelled in 1763, the British sought to consolidate their recognition of indigenous rights and access to resources with the *Royal Proclamation*. According to Coates, the *Royal Proclamation* “holds particular pride of place in defining aboriginal rights” and was meant to “provide dramatic and high-profile evidence” that the British would recognize indigenous sovereignty and the right to a negotiated process over land and resource claims (2003, 176-177). Though a handful of additional treaties were signed by the close of the 18th century, the *Royal Proclamation* and its predecessors of 1725, 1752, and 1760 established the framework that would be used to *de jure* grant indigenous access to traditional livelihoods, as well as to *de facto* marginalize and exclude those livelihoods from being realized at every opportunity.

Although the treaties and *Royal Proclamation* can be said to have succeeded at maintaining a general peace between the Mi’kmaq and British and allied settlers, the reality is that those provisions designed to ensure indigenous livelihoods were always going to play second fiddle to settlement expansion and resource exploitation. In other words, as opposed to viewing the treaty era as one of good faith negotiations and mutual benefit, the ‘covenant chain’ can be alternatively understood as a form of ecological hegemoniality in which peace was ensured in order to further the interests of the colonial settler class. According to Whitcomb, the treaties were never really meant to be honored- as they were typically violated by non-indigenous peoples “before the ink was dry on the paper”- but rather to give the impression that negotiations were taking place between Nations and to therefore buy time as colonial capitalism expanded (2019, 39). Coates reinforces the point in noting that treaties signed up to the time of the *Royal Proclamation* never “defined relations in a profound or systematic way”, but rather created an endless diplomatic process, thus “clearing the way for settlements and development” at the expense of Mi’kmaq livelihood opportunities (2004, 178). Though ostensibly meant to “confer specific commercial resource rights on the Mi’kmaq”, and therefore creating an aura of equality, the treaty process served more as an administrative distraction and offered “little practical protection” in the face of expansionist colonial designs (Coates 2004, 44).

The circumstances around the signing of the *Royal Proclamation* serve as a poignant example. In the lead up to the 1763 signing, intense negotiations between Mi'kmaw chiefs and Crown officials had been taking place on exactly how to demarcate indigenous territory outlined in the *Treaty of 1760*. In theory, the British negotiators tacitly agreed to a substantial tract of land, described as “a Common right to the Sea Coast from Cape Fronsac to Bay des Chaleurs. . . for the more especial purpose of hunting, fowling, and fishing” (cited in Upton 1979, 59). The Mi'kmaw chiefs involved were reportedly satisfied with the gesture, thus leading to “an elaborate ceremony of peace and friendship” (Prins 2002, 153). Involved Mi'kmaq were further pleased by the subsequent *Proclamation's* provision that the Crown “required the extinguishment of aboriginal title be purchased by treaty” (cited in Bartlett 1978, 581) and therefore the guarantee that Mi'kmaw livelihood pursuits could continue unabated, unless negotiated otherwise. However, in the aftermath of the signing, officials in Nova Scotia had decided that the *Proclamation's* guarantee of indigenous title did not apply to the region as a result of previous colonial proprietary claims. Hence, the British saw no reason to require a treaty to access and exploit additional Mi'kmaw lands, given that “the French derived their Title from the Indians, and the French ceded their Title to the English” (Upton 1979, 56). Prins refers to the land grab as “dispossession by default” in which “Mi'kmaq country was thus magically transformed into Crown land” following supposed good faith negotiations (2002, 154).

In addition to the legalistic access obstacles created, the treaty process also manifested as a hegemonic design in dictating how and where trade in indigenous harvested resources could take place. As referenced above, alongside the demarcation of territory and promotion of peace, numerous treaties sought to define the legal entities agreed upon to facilitate such trade, including the common references to ‘truck houses’ as trade outposts and ‘appointed managers’ as trade facilitators. Less than goodwill measures to ensure a fair return on indigenous livelihoods, Chute describes these treaty provisions as forms of “social control” by which British authorities sought to “monitor Mi'kmaq activities” (1999, 500). For the truck houses, the British could “foster economic dependency” in that the treaties stipulated that legitimate trade could only take place at these sites, which were often “under the auspices of military establishments” to address any transgressions from these stipulations. On appointed managers, the British could shape the terms of trade and enforce trade agreements, including the verification of “licenses of occupation” that were increasingly used from 1783 to designate harvesting zones (Chute 1999, 502). In other words, while some treaty provisions were blatantly ignored, others were enthusiastically enforced when the objective was control

and coercion of Mi'kmaw harvesting. As expressions of ecological hegemoniality, these forms of surveillance therefore not only served to further restrict the realization of indigenous livelihoods, but also to ensure that those who did successfully navigate the legal barriers did so according to a capitalist ethic.

Perhaps the most fateful impact on Mi'kmaw livelihoods arising from such legalistic shenanigans is the settler encroachment that was enabled by the treaty process. Increasingly recognizing the “tangible evidence that the question of land and resource ownership had been settled” by treaty enforcement (or lack thereof), rendering Nova Scotia “open for occupation” (Coates 2004, 179), European settlers began arriving *en masse* by mid-century and created what Wien describes as “the main threat to Micmac use of and rights to the land” (1986, 11). Thus, by the 1760s thousands of Europeans were “pouring into Mi'kmaq country” (Prins 2002, 155) to further exploit the fisheries, clear the forests for farms, and to pursue rising industrial fortunes. There were Scots settling in Pictou, Germans and Dutch taking up residence in Lunenburg, Yorkshiremen and Irish heading for Truro, and a scattering of English settlers arriving throughout. Following the onset of the American Revolutionary War (1776), tens of thousands of loyalist settlers set out for Nova Scotia as well, seeking a new life on “land with the best soil for farming, in waterpower for sawmills and grist mills, and in access to the rivers and sea for fishing” (Wien 1986, 13). From an approximate population of 43,000 non-indigenous settlers at the close of the 18th century (Hornborg 2008, 8), the settler wave continued into the 19th bringing tens of thousands of additional Scots, Irish, and English to pursue what they viewed as their right to exploit the lands and waters of Mi'kma'ki.

The result of the settler phenomenon was both expected and calamitous as strangers “occupied Mi'kmaw territory without asking”, increasingly “helped themselves to Mi'kmaw land, fish, game, and timber”, and levelled accusations of “trespassing” when Mi'kmaw hunters and fishers attempted to set up camp at customary sites (Prins 2002, 155). With regards to fisheries in particular, the Mi'kmaq were often pushed by settlers to marginal coastal and interior locations, while industrial development and downstream settler fishers along the rivers left fewer and fewer fish upstream where the Mi'kmaq were left to harvest. Similarly, European settlement on and clearing of traditional habitats for land-based mammals significantly undermined Mi'kmaw hunting and left populations depleted and displaced (Wien 1986, 14-15). Moreover, Euro-settler hunters came into increasingly direct competition with Mi'kmaw hunters and therefore not only undermined their subsistence practices, but also the remaining fur trade opportunities that originated a century earlier. Through the late-18th and into the 19th century, this intense resource competition instigated by the perfidious treaty

process effectively excluded most Mi'kmaq from pursuing their characteristic livelihoods—rendering many “indigent” in the eyes of Europeans (Upton 1979, 71)—and further dissociated those communities from the ethical foundations that guided resource harvesting of the pre-contact era. Mi'kmaw Elder Kerry Prosper summarizes (2009, 49):

“The ability for the Mi'kmaq to maintain wellbeing through the practice of netukulimk became much more difficult due to competition arising from European settlements. The livelihoods of the Mi'kmaq were being wrestled away from them, displacing them from the economic development occurring in Mi'kma'ki”.

While the challenges created by the treaty process for Mi'kmaw harvesters continued into the 19th century, the hegemoniality engendered by colonial law making was only set to worsen with the founding of the Canadian state. Following the signing of the *British North America Act (BNA)* in 1867, Britain's remaining provinces were confederated as Canada and therefore placed “Indians and lands reserved for the Indians” under the authority of the new federal government in Ottawa (*Section 91(24), Constitution Act*). In the lead up to the BNA, British authorities had commissioned a study referred to as the *Bagot Report* in 1844 in order to better understand how to fully assimilate the remaining indigenous peoples of North America, which unsurprisingly recommended, among other things, cultural assimilation for children at boarding schools, education on the merits of free enterprise, and the privatization of indigenous land (Joseph 2018, 7). The full significance of the *Bagot Report* lies in the fact that it provided the foundation for what would later become the *Indian Act* in 1876, which presented the most comprehensive legal framework to date for the administration of indigenous lives in North America. Alternatively referred to as a “form of bureaucratic ethnocide” (Prins 2002, 9), or a set of “escarpment-like barriers and constraints” against Mi'kmaw culture (Borrows 1997, 419), the *Indian Act* would thus further suppress the realization of traditional Mi'kmaw livelihoods by administering them into obscurity.

Perhaps one of the most pernicious forms of ecological hegemoniality enabled by the *Indian Act* was the formal creation of reserves which were tracts of land set aside for the exclusive use of particular bands. Though informal efforts to contain the Mi'kmaq in designated zones had been attempted in the 17th and 18th centuries, the *Indian Act* rendered life on reserves the law of the land and shifted the consideration of the Mi'kmaq from that of a “nation” to “wards of the crown”. While the newly created Department of Indian Affairs thought of the reserves as places for the Mi'kmaq to “become civilized” and “learn the proper habits of industry and thrift” (Joseph 2018, 24), there was the alternative intention to further clear the way for European settlers to gain full access to the fish, game, water, and timber that

had previously constituted the foundation of indigenous migratory livelihoods. A negotiator for the Mi'kmaq Rights Coalition summarized the early experience of her relatives on the first reserves in Nova Scotia ³⁴:

“When the reserves were first started things became very different. The government dictated, had a policy, let’s take care of the Indians, put them there and get them educated. But, in reality we lost our livelihoods. We lost everything.”

Thus, if one key objective of the reserves was to ‘educate’ and ‘assimilate’, no less primary was the objective to “contain and relocate” (Joseph 2018, 25) and therefore prioritize settler over indigenous harvesting.

For example, in the early decades of the *Indian Act*, there were approximately 20 reserves scattered around Nova Scotia, but following various efforts in the early 20th century at consolidation, there currently exists 13 reserves covering 13,000 hectares of land (King 2012, 92-93). According to McMillan and Davis, this territory constitutes 0.003% of the total land in Nova Scotia and, in terms of land-based livelihoods, has had “limited potential for sustaining rural economic activity, and generally offers little in the way of agricultural potential and forest resources” (2010, 5). In terms of marine resources, they note that access has historically been “extremely limited”, and the reserves’ locations have largely “precluded ready access to shorelines and watercourses”. From the onset of the *Indian Act* we therefore see an acceleration of the trend away from “self-employment”, where hunting, trapping, and fishing “receded in significance as a source of livelihood”, and a parallel growth in wage labor, unemployment, and dependence on government for welfare (Wien 1986, 26-27). In other words, the reserve system was never meant to offer opportunities for the continuation of Mi’kmaq harvesting activities according to indigenous livelihood ethics, but rather to “protect the white man’s industry from the savage Indians, in an environment of exclusion that still exists³⁵.” Recognizing that the land set aside for the reserves was insufficient, agents operating under the auspices of the *Indian Act* sought to preclude the possibility of harvesters leaving the reserves to access greener pastures.

Thus, as a complement to the reserve system, Department of Indian Affairs officials created a “pass system” in 1885 which made it illegal for indigenous people to leave their reserves without formal permission (Whitcomb 2019, 55). The pass system was used to “control the movements” of residents and, when granted, dictated the specific time, place, and purpose of off-reserve movements (Joseph 2018, 51). Initially enacted in response to an

³⁴ Personal Communication, 26/01/2021, Mi’kmaq Rights Coalition, Truro, Nova Scotia.

³⁵ Personal Communication, Mi’kmaq historian, 26/01/2021, Halifax, Nova Scotia.

uprising against settler activities in Saskatchewan, the pass system eventually spread throughout Canada and carried the weight of prosecution for “trespassing” or “vagrancy” when violated. Though the implementation of the pass system varied by province, in Nova Scotia the effects are still remembered today. One Elder recalls stories from his grandfather who experienced the system firsthand before its abolition in 1951³⁶:

“ . . . during his time he had no choice. He had to live like a poacher, illegally hunting and fishing without permission. They even had to wear camouflage when hunting so they didn’t get caught by the authorities. . . they had to avoid the white man, they would get shot if caught. Salmon too, if they wanted to go fishing, they had to wait until the white man was asleep.”

Though the specific provisions of the pass system weren’t included in the original *Indian Act*, for nearly 70 years it effectively served to isolate the Mi’kmaq to their reserves, or to otherwise prevent “unauthorized” engagements off-reserve that might interfere with the economic activities of settler communities.

While the *Indian Act*’s creation of reserves and a pass system enabled further structural obstacles for traditional Mi’kmaq livelihoods, the provisions that created residential schools and criminalized indigenous culture engendered the loss of “the histories, the value systems, the spiritual, ecological knowledge” (Joseph 2018, 66) that gave an ethical foundation to those livelihoods. Ostensibly aimed at providing a “modern” European education that would further the acquisition of skills to participate in the industrial workforce, the residential school system that was initiated in 1886 sought in parallel to “kill the Indian in the child³⁷”. In other words, as a form of “cultural genocide”, the schools aimed to “destroy kinship networks”, eradicate “cultural practices through religious proselytism”, erase indigenous languages, and “interrupt the transmission of indigenous knowledge” from one generation to the next (McMillan 2018, 87). Launched in Nova Scotia in the early 20th century at the Shubencadie Indian Residential School, the resulting forced assimilation and demonization of indigenous culture had an almost immediate impact on the transmission of Mi’kmaq ecological knowledge. One Elder involved in promoting hunting and fishing livelihoods noted³⁸:

“When you criminalize hunting and fishing, you also criminalize the language used to refer to it. When you criminalize the language, you also criminalize the way that we hunt and fish and how we do it in an ethical way. So many have lost touch with the ways of netukulimk just because they have lost the language that it belongs to. So much has been lost.”

³⁶ Personal Communication, Mi’kmaq historian, 28/01/2021, Halifax, Nova Scotia.

³⁷ Truth and Reconciliation Commission of Canada, *Historical Overview*, <http://www.trcinstitution/index>

³⁸ Personal Communication, 22/03/2021, Antigonish, Nova Scotia.

Similarly, Elder Daniel Paul sees Nova Scotia's residential schools not as legitimate educational institutions, but rather as *Indian Act* enabled "institutions of enforcement, punishment, and terrorism" (2000, 259-260). Paul adds that the schools were meant to "control the lives of children and parents", to ensure that proper history was learned, and to communicate that European ways were superior to those of the inferior Mi'kmaq. The result, according to one Elder³⁹:

"Was that our values were corrupted, we adopted European values. . . so the youth today don't know their culture, it was a deliberate ploy to assimilate a conquered people. The black and brown people adopted Christianity, people here too, it makes no sense. We became greedy in our economic ways and forgot about the past."

In short, while the *Indian Act* primarily extended the 18th century's treaty-based exclusions and settler prioritization for access to natural resources into the 19th and 20th centuries, it also furthered the assault on indigenous ecological knowledge and ethical leanings that was initiated by the Jesuits and Franciscans over 200 years before.

Techno-Bureaucratic and Neoliberal Exclusions

In the late 19th century we witness a complimentary form of ecological hegemoniality emerge that further marginalized Mi'kmaw livelihoods by imposing increasingly onerous and stringent regulatory frameworks on natural resource harvesting. These techno-bureaucratic forms of administration were rooted in overarching federal legislation and trickled down over the decades into various policies, management plans, sets of regulations, and departmental bodies tasked with the enforcement thereof. Focusing on marine harvesting in particular, this techno-bureaucratic administration decidedly pursued "scientific-bureaucratic understandings and concepts of fish" (Todd 2014, 228) and, recognizing the growing market potential of various species, often took a position of "management for optimal production" (Huitric 2005, 21) in order to feed those markets. Hence, whereas the treaty process and *Indian Act* erected formidable barriers to resource access and cultural expression, the emergence of regulatory regimes rooted in 'modern' and 'scientific' understandings of marine harvesting added additional administrative hoops to jump through and bureaucratic mazes to navigate that have proved no less exclusionary.

No more than one year following the signing of the BNA, the *Fisheries Act* received royal ascent in the new nation of Canada in 1868 and repealed various pre-confederation statutes that had previously regulated colonial fisheries. Although amended 17 times up to the

³⁹ Personal Communication, 26/01/2021, Halifax, Nova Scotia.

current era, the *Fisheries Act* has since its initial signing embodied three general objectives: the proper management and control of the fisheries, the conservation and protection of the fisheries, and the protection of marine and coastal habitats (Dept. of Justice, Canada 2018). Considered one of Canada's "oldest and most important environmental laws" (West Coast Env. Law 2020), the *Fisheries Act* formalized and expanded the powers of the new federal government to regulate and administer the growing commercial fisheries industry outlined in *Chapter 1*, including the establishment of federal bodies (e.g., Department of Fisheries and Oceans (DFO), Environment Canada, etc.) to enact the law (Wiber et. al. 2010). Although its mandate and regulatory provisions applied to the entirety of the Atlantic fishery and all of its resource users, with time it became clear that *Fisheries Act* enforcement would serve to promote and protect non-indigenous fishers and the capitalist ecology they operated within. By contrast, for Mi'kmaw fishers the rules and regulations newly enforced under the act "would prove to be the most oppressive and contentious" in the late-colonial era and further marginalize them from traditional marine harvesting (Claxton 2019).

For example, with regards to the lobster industry, the first regulations authorized under the *Fisheries Act* came into effect in 1873 and dramatically impacted upon what DeWolf refers to as "phase one" (1870-1886) of the development of a commercial lobster industry in Nova Scotia (1974, 17-18). Based on concerns that overfishing was taking place at the time, the Inspector of Fisheries authorized the prohibition against the capture of soft-shelled and egg-bearing females. In addition, in the same year the government introduced the first seasonal closure of the fishery for a period of two months, which was furthered by the first "sectional closed seasons" according to geographic region in 1877, all in the name of protecting the stock and expanding the international trade (Wilder 1965). Although these early regulations have been described as problematic for all- generating a "semi-feudal culture of fishers" beholden to market actors (*Food Secure Canada* 2018, 4)- the outsized impact on Mi'kmaw livelihoods still dependent on the fisheries was undeniable. Claxton (2019) points out that these early regulations formally "criminalized indigenous harvesters" operating outside the regulatory framework and resulted in such heavy restrictions that "indigenous peoples' governance systems, fisheries, and economies were decimated". Most notably, when whole stretches of coastal territory were closed in the name of conservation, "no consideration of the rights of indigenous peoples" informed the decision making (DFO, *Fisheries Act Update* 2019), thus rendering Mi'kmaw harvesters further alienated from one of their few remaining livelihood opportunities.

As the commercial lobster fishery entered “phase two” of its development (1887-1918), it was increasingly recognized as the most important in Nova Scotia, which therefore furthered support for more regulations authorized under the *Fisheries Act*. In 1887 prohibitions on egg-bearing females were upheld and closed seasons for numerous regions were extended to six months a year to avoid spawning periods (DeWolf 1974, 21). Moreover, based on a series of studies demonstrating continued risk to the stock, and therefore its commercial viability, the years 1889 and 1899 saw the implementation of minimum size requirements for lobster retention, from 9 to 10 inches respectively. Adding to this “historical thickness of regulations”, the *Act* was further leveraged in 1918 to introduce the first license requirement for lobster fishing, which by 1945 was enhanced to restrict harvesters to single geographic districts (Bodigues 2002, 272). All in all, as Wagner and Davis (2004) highlight, this second phase of commercialization significantly escalated the regulatory exclusions faced by Mi’kmaw fishers in the previous era and nearly eliminated them from the fishery in total. The seasonal closures and licensing requirements were particularly onerous in that they came together in an administrative apex that both compounded the territorial exclusions of the *Indian Act* and created space for “systemic discrimination” in the issuance of licenses by departmental officials (2004, 330). Thus, the rise of these lobster *and* other marine species-specific regulations had by the year 1900 reduced the total Mi’kmaw population with access to fishing livelihoods to a mere 7%, which would only be further reduced to approximately 2% by mid-century (Wien 1986, 26).

By the early 1950s, fisheries management was entering a new phase of administrative exclusions that has been variously referred to as a “process of enclosure of the world’s oceans and fisheries” (Pederson et. al. 2014, 3), “stealth privatization” (Wiber et. al. 2010, 601), or even a “neoliberal turn in environmental governance” (Mansfield 2003, 313). Based on a series of essays supposedly demonstrating that the “inefficiencies of fisheries stem from their common-property nature” (Gordon 1954, 135), a half-century of additional bureaucratic interventions were launched that further narrowed the capitalist ecology within which fishers could operate. One example is Anthony Scott’s piece that argued the common property of fisheries should be allocated to “maximizing owners”, which would therefore reflect the “efficiency of sole ownership” and that secure property rights in the fishery would result in positive social outcomes (1955, 116-122). Culminating in Hardin’s well-known “tragedy of the commons” argument in the 1960s (1968, 1244), fisheries management from this point on would reflect “the *laissez-faire*, free market themes of contemporary neoliberalism” (Mansfield 2003, 316). While the lobster fishery has thus far avoided some of the most

pernicious outcomes, including corporate monopolization of catch through the rise of quotas (Pinkerton & Davis 2015; Bodiguel 2002) or the consolidation of fleets through vertical integration of processing firms (Davis 2015), the fishery's management structure from the 1960s to the present has nonetheless prioritized a version of *Homo economicus* pursuing Nova Scotia's lobsters at the expense of indigenous livelihood patterns.

Hence, authorized by the *Fishery (General) Regulations* (SOR/93-53), and lobster specific *Atlantic Fishery Regulations* (SOR/86-21), from the 1960s Nova Scotia's lobster fishery has been governed by a set of "input controls" (Copes 1986) geared towards promoting the kind of economic maximalization outlined above. For instance, in 1964 the first moves were made to limit the number of traps that could be utilized under a single license, ostensibly aimed at restricting access of so-called "non-bona fide fishermen" (Bodiguel 2002, 272-273); a determination that could be deployed to exclude nearly anyone. In a further effort to restrict access to "professional fishermen", three years later the lobster fishery became the first with "limited entry" in which a general moratorium was put in place for the issuance of any new licenses. Thus, a new entrant could either inherit a license from family, or alternatively buy one on the open market once available, both of which reflected the new status of license holding as a State-managed privilege as opposed to a right (Barnett et. al. 2017). Another input control that was formalized in the latter half of the 20th century is the geographic division of the fishery into Lobster Fishing Areas (LFA) which have corresponding harvesting seasons ranging from two to six months, as well as license limitations for each LFA. In addition to increasingly strict policies on minimum size requirements for lobster retention (i.e., carapace size), continued concerns around "bona fide" fisher status culminated in the 1976 implementation of license categories (A-C) that further sought to exclude and limit access for those considered "not dependent" on the fishery (DFO, IFMP).

It probably goes without saying that this late-20th century turn to neoliberal management further entrenched the exclusionary frameworks that Mi'kmaw lobster fishers experienced under the initial phases of commercial development. The commercial fisheries coordinator of the Indigenous Institute for Natural Resources (IINR) in Cape Breton highlights the challenges⁴⁰:

“. . . in recent decades, it's been nearly impossible for a Mi'kmaw fisher to legally pursue lobster. In the early 2000s, after the Marshall decision, a few bands got their hands on some commercial licenses but a lot of those fishermen found the regulations and costs too

⁴⁰ Personal Communication, 28/01/2021, Cape Breton Island, Nova Scotia.

burdensome and ended up leasing them out. But before that, there weren't many who could meet all the requirements, get a commercial license, and make a living."

One of the few Mi'kmaw lobster fishers to hold a commercial license unassociated with a band echoed the above point on 'bona fide' or 'professional' fisher determinations in noting⁴¹:

"... there aren't many natives like me. I got lucky and got a license through my father-in-law (non-indigenous) back in the 90s. Most natives are made to feel that they don't belong, that this is a white man's fishery, or that they don't fish the right way. They look at me differently, they say I'm one of them. I don't know why. . . maybe because I'm trying to make a lot of money like them. . .and, I follow the rules."

As expected, the outcome of increasingly restrictive input controls in Nova Scotia's fisheries in general reduced the total percentage of Mi'kmaw fishers to a mere 1.5% of the total population by the 1980s, with even fewer able to participate legally in the lucrative lobster industry (Wien 1986).

Lastly, it's worth highlighting here that, in addition to specific gear requirements that came into effect in 1980s, the aforementioned input controls are periodically codified by DFO in its *Integrated Fisheries Management Plan* (IFMP). Though mostly inclusive of input control updates, from the 1990s IFMP's have become increasingly focused on conservation, conservation strategies, and how stock status will be measured and researched by the department. In recent years, the conservation orientation of the IFMP has resulted in a number of landmark studies focused on stock health and necessary conservation measures, including the *Conservation Framework for Atlantic Lobster* in the mid-90s and the *Sustainability Framework for Atlantic Lobster* in 2007, both of which contributed to the adoption of the "precautionary approach" (PA) as the overarching framework for the management of the lobster fishery. Focused on instances when "scientific knowledge is uncertain", the PA dictates that fisheries management should err on the side of caution and readily adopt stricter harvest control rules that prioritize stock health and economic viability (DFO IFMP). While beyond the scope of the current discussion, the increasing focus on conservation and lobster stock status will be returned to in *Chapter 4* in a discussion of how supposedly "neutral and unchallengeable environmental science" can be used to justify regulatory frameworks that become exclusionary for certain social groups (Forsyth 2003, 76). In other words, while the relevant scientific assessments of lobster stock health in Nova Scotia may be biophysically grounded, the social framings of that science have in recent years constituted a further means to exclude Mi'kmaw harvesters attempting to operate outside the dominant capitalist ecology.

⁴¹ Personal Communication, 04/11/2021, as part of a larger group interview with a commercial fishermen's association, Cape Sable Island, Clark's Harbour, Nova Scotia.

In sum, the techno-bureaucratic and neoliberal-oriented regulatory frameworks that increasingly came into effect from the 1880s-1980s compounded the exclusions for Mi'kmaw fishers realized through the treaty process and colonial law of the previous century. These forms of ecological hegemoniality focused less on undermining the ontological foundations of Mi'kmaw ecology targeted by the missionaries and allied merchants of the previous era, and more on creating administrative, technical, and bureaucratic obstacles to prevent indigenous livelihoods from being realized in the first instance. By the latter half of the 20th century the degraded state of the indigenous ecology, coupled with the limited opportunities to exercise whatever remained of that knowledge and related practices in hunting and fishing livelihoods, had become intolerable for many and demanded action. Hence, starting in the 1960s indigenous communities in many parts of Canada, including the Mi'kmaq in Nova Scotia and New Brunswick in the 1980s, decided to push back against the centuries long process of ecological hegemoniality *not* through further engagement with the government and its regulatory institutions, but rather through the Courts and their proclaimed impartiality in upholding the rule of law. This shifting of strategy therefore set off an era of legal activism that persisted for nearly two decades and set the stage for contemporary efforts to leverage indigenous "Treaty rights" in the reassertion of ecological plurality in Nova Scotia's lobster fishery.



CHAPTER THREE

Treaties Revisited

Legal Activism, Economic Assimilation, and the Reassertion of Indigenous Lobster Harvesting Rights

Marshall is premised on the idea that treaties with aboriginal nations are not documents or written instruments but rather are relationships- or, more precisely, they represent a shared understanding of and commitment to a normative framework for cross-cultural relationships.

Mark Walters (2001, 78)

We have Treaty Rights to be in the waters fishing for a Moderate Livelihood and despite what some people may believe, this is NOT an illegal fishery. Our right to fish for a Moderate Livelihood was reaffirmed by the Supreme Court of Canada in 1999 and non-indigenous fishers and industry reps must understand that we will not be bullied into pulling our boats or gear out of the waters. Our communities will continue to exercise our fishing rights.

Chief Terrance Paul, Assembly of N.S. Mi'kmaw Chiefs (ANSMC 14/10/2020)

I. A Turn to the Courts: Legal Activism as Response to Ecological Hegemoniality

Though by the mid-1900s most non-indigenous Nova Scotians considered the rights of the Mi'kmaq to be long-settled historical obscurities, there was a measure of indigenous activism brewing in the background that would, by the close of the century, bring the 18th century treaty process back into contemporary relevance. Rooted in the mounting frustration about the “poverty, marginalization, and social despair” (Coates 2000, 62) engendered by the centuries of ecological hegemoniality covered in *Chapter 2*, the latter half of the 20th century witnessed indigenous groups throughout Canada take to the nation's courts to challenge what they saw as the illegitimate “nation-state's proprietorial claims and regulatory authority” over natural resources (Davis & Jentoft 2001, 224). For the Mi'kmaq in particular, there was a precedent from the 1920s for leveraging the courts to uphold treaty rights. In 1928 Chief Syliboy of Nova Scotia was charged for being in possession of furs in violation of the *Lands and Forests Act* (Tennant 2021); charges against which he defended himself by noting that, as an indigenous person, he had “by Treaty the right to hunt at all times.” Though the Court eventually ruled against Chief Syliboy and upheld the charges, the Magistrate nonetheless expressed sympathy for his case and provided at least marginal recognition of the treaties' continued relevance. Despite failing to alter the status quo, the pivotal case planted the seed that the courts were best placed to (re)grant access to the natural bounty and thus begin the process of restoring an indigenous ecology so long in decline.

Legal Activism and Indigenous Livelihoods

While the most noteworthy court decisions impacting upon Mi'kmaq hunters and fishers transpired in the 1980s and 90s, indigenous harvesters in British Columbia (BC) had begun to demand their rights through the courts as early as 1965. In that year, the pivotal case of Clifford White and David Bob of the Nanaimo band leveraged the precedent set by the Chief Syliboy case and argued that a set of 19th century treaties guaranteed their access to traditional hunting grounds without reference to contemporary regulations. Though initially charged under that province's *Game Act* for hunting without a permit and out of season, the Supreme Court eventually ruled that the treaties were still valid and could not be overturned by provincial regulations (Tennant 1990). Similarly, in 1973 the Nisga'a from northwest BC argued to the Supreme Court that they had never signed a treaty surrendering their ancestral lands and therefore deserved official recognition of their sovereignty thereto. Despite

rejecting the full claim to sovereignty, the Court did recognize that there was a pre-contact case to be made for indigenous governance and title; a ruling that 27 years later led to the federal government and Nisga'a signing a treaty recognizing the original land claim (Wildsmith 1995). Though these BC legal victories didn't apply directly to the Mi'kmaq, the cases "radically transformed the legal and moral foundations" (Coates 2000, 86) of indigenous rights claims and would soon impact similar cases on the east coast of Canada.

Notwithstanding the qualitative legal shifts and rising legal consciousness engendered by these early wins, it was the *Canada Constitution Act* of 1982 that served as a "turning point" and led to "an unprecedented expansion of First Nations recourse to the courts" that has direct impact on the claims of Mi'kmaw lobster fishers today (Coates 2003, 338). Initiated by the Liberal government in 1980, the *Act* marked the culmination of a process to repatriate Canada's constitution from Britain, thus putting it and its provisions under national control for the first time. Though inclusive of several modifications, the added *Section 35* is most relevant here in that it stated, "The existing aboriginal and Treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed" (Metallic & MacIntosh 20202). Whereas a "Treaty right" refers to "solemn agreements negotiated between the Crown and First Nations communities", the added reference to "aboriginal rights" contributes the "rights derived from Aboriginal peoples' occupation and use of the land when Europeans arrived" (McCallum 2004, 205). Taken together, the constitutional recognition of these two types of "rights" shifted the dynamic from one where indigenous harvesters were "vulnerable to adverse government action" and *de facto* court enforced legislation, to one where "both forms of rights" could be leveraged in court as constitutionally protected and affirmed (Wildsmith 1995, 122). The Mi'kmaq took note and just a few years later gained their first legal victory aimed at reestablishing their livelihood patterns of the past.

Brought to court in 1985, James Simon of the Mi'kmaw Shubencadie band was prosecuted for possession of a firearm and hunting without a license. Though admitting to violating provincial hunting regulations, Simon argued that the previously discussed *Treaty of 1752* guaranteed "free liberty of hunting and fishing as usual" and therefore that the regulations didn't apply to him. Initially rejected by lower courts, the Supreme Court overturned the decision in stating, "The treaty constitutes a positive source of protection against infringements on hunting rights and the fact that these rights existed before the treaty as part of the general Aboriginal Title did not negate or minimize the significance of the rights protected by the Treaty" (Walters 2001). In other words, the *Simon 1985* case demonstrated that the Court was indeed prepared to recognize both Treaty and aboriginal rights as the

foundation for a plaintiff's case, including the continued relevance of the 18th century treaties specifically and the legal case for honoring those treaties provided by *Section 35* of the *Constitution Act*. Despite being exclusive to “subsistence harvesting rights” and mainly referring to hunting activities, *Simon 1985* set a constitutional precedent and mobilized others to argue for their continued subsistence-based livelihoods.

For instance, in 1990 a Musqueam man named Ronald Sparrow, also from BC, was charged with violations of fishing regulations when he was caught fishing on the Fraser River using gear that violated size limitations (Minke-Martin 2020). Similar to Simon, Sparrow argued to the Supreme Court that the *Constitution Act* upheld his treaty rights to fish for salmon as an inherent aboriginal right, and that given those rights, the federal regulations according to which he was charged were inapplicable. Following precedent, the Court ruled decisively in Sparrow's favor and noted that aboriginal and treaty rights could evolve over time and should be interpreted in a “generous and liberal manner” by the government (Coates 2000, 89). Although noting that the government did have the right to regulate for conservation purposes, *Sparrow 1990* is most noteworthy for decisively granting the right to indigenous people to hunt, fish, and trap for what was referred to as food, social, and ceremonial (FSC) purposes. Regarding fishing specifically, the ruling led in 1992 to the launch of the Aboriginal Fisheries Strategy (AFS) by DFO, under which the department was charged with negotiating FSC licenses with individual bands. Though there are restrictions related to species, gear, fishing location, and the non-commercial intent of the licenses, the FSC fishery is widely utilized with 125 licenses issued every year, including approximately 30 per year for Mi'kmaw bands harvesting lobster (AFS, DFO). Though often considered inadequate to meet subsistence needs, the *Sparrow 1990* decision's allowance of FSC licenses was considered a major step forward at the time by Mi'kmaw fishers in reestablishing a measure of access to and control over marine resources.

A similar case unfolded that same year in Nova Scotia, in which three Mi'kmaw men were charged with fisheries offenses, including fishing for and possession of cod and salmon without the proper licenses. In what came to be known as the *Denny 1990* case, the men argued to the Nova Scotia Supreme Court that, as indigenous harvesters, their right to fish for subsistence purposes took precedence over fisheries regulations (Metallic & MacIntosh 2020). Echoing *Sparrow 1990*, the Court sided with the fishers and noted that, “an aboriginal right to fish for food in the waters in question had not been extinguished through treaty, other agreement, or competent legislation”, thus reaffirming that the “legitimate food needs” of the Mi'kmaw fishers should take priority over other uses of the fishery (Coates 2000, 89-90).

Though creating a “presumption of aboriginal rights” to access natural resources, the Court also reiterated, as in *Sparrow 1990*, that the government could intervene and introduce regulations in the name of “conservation” or “stewardship”. Leaving the interpretation of those terms up to the government, the courts had therefore created a legal grey area in which hostile federal or provincial policy could in the future infringe on those subsistence rights in the name of “natural resources management”; an issue that will be returned to in *Chapter 4* regarding the contemporary pushback against moderate livelihood lobster fisheries. Nevertheless, *Sparrow 1990* and *Denny 1990* made it clear that Mi’kmaw food fishing rights were recognized as law and that the onus was on the regulatory bodies to demonstrate why and when those rights should be limited.

While this early phase of legal activism beginning in the mid-1960s notably advanced access for indigenous hunting and fishing livelihoods, it was only a matter of time before the ‘subsistence’ limits placed on those newly earned rights would be challenged with reference back to the treaties of the 1760s. It was thus in 1993 that a Mi’kmaw man from Membertou, Nova Scotia named Donald Marshall Jr. was harvesting that “culturally significant resource” of eel with his wife in an effort to not only subsist, but to “secure an income” through a small-scale fishing effort (McMillan 2018, 110-111). On August 24th of that year, Marshall was fishing for eels in Pomquet Harbour near Antigonish when he was approached by a boat full of uniformed and armed DFO enforcement officers. Upon one of the officers demanding to see Marshall’s license to harvest eels, Marshall responded that, “I don’t need a license. I have a 1752 treaty” (cited in McMillan 2018, 112). Perhaps unsurprisingly, the DFO officers were unconvinced and proceeded to arrest Marshall and eventually charged him with catching eels with an illegal net, fishing out of season, fishing without a license, and also for selling his catch (463 pounds to the South Shore Trading Company) without a proper license (Minke-Martin 2020). Almost immediately, the case attracted widespread attention in that not only were the regulatory issues of licenses, gear, and seasons at stake, but so too was the notion of a “commercial” right inherent in Marshall’s attempt to earn a living from his harvest.

Once the case went to trial in 1994, the Marshall defense opted to reference not the *Treaty of 1752* that had largely underpinned the *Simon 1985* win, but rather the *Treaty of 1760* with its more definitive clauses on the right to earn an income (Davis & Jentoft 2001). Drawing on the references to “truck houses” for indigenous harvesters to trade their goods, including the right to earn “necessaries” from that trade, Marshall’s defense argued that the *Treaty of 1760* excused him from current fisheries regulations and guaranteed his “Mi’kmaw rights to trade the products of their hunting, fishing, and gathering” (McMillan & Prosper

2016, 636). In 1996, a Nova Scotia provincial court convicted Marshall of all charges but allowed the decision to go to a Court of Appeal. At the appeals court a year later, Marshall's defense more forcefully argued that through a "chain of treaties" Mi'kmaw harvesters had "treaty-protected rights to commercial activity" and therefore the 'food, social, ceremonial' limitations in place from the previous cases were not applicable in all instances (Henderson 1997). Despite these arguments, the Court of Appeal found that the treaties did not grant commercial fishing rights and upheld the charges against Marshall related to selling his catch without a provincial license to do so. Once again, the case was granted leave to appeal and found its way before the Supreme Court of Canada a few years later, by which time it had garnered intense support and attention from indigenous groups throughout North America.

In a landmark case, the Supreme Court overturned the Court of Appeal's decision in 1999 and ruled in favor of Marshall's argument that he had a treaty right to fish for commercial purposes. The Court noted that while the original Treaty's written clauses were foundational, the "extrinsic evidence" of the case proved that "historical and cultural context" allowed for additional "oral terms" of the agreement to be considered (*R. v. Marshall [1999] 3S.C.R. 26014*). The Court found the most important clarification of such to be that which was originally meant by the Treaty's term "necessaries", which, according to the ruling, should be understood in a modern context as "the equivalent of a moderate livelihood". The Court continued that a moderate livelihood could not be interpreted as "the open-ended accumulation of wealth", but rather as that which could sustain "Mi'kmaw families at present-day standards". Hence, as a "regulated right", it could be "contained by regulation within its proper limits" and still allow the fisher "his right to trade for sustenance". In other words, what came to be known as the *Marshall Decision* in 1999 upheld not only the rights of indigenous harvesters to access resources for subsistence purposes, but also to pursue a livelihood by commercially exploiting those resources outside of most regulations. The unexpected ruling caught everyone by surprise, including the government's regulatory bodies, and immediately "touched off an exuberant aboriginal celebration" (Coates 2003, 346) of a reinstated right that had been regulated out of existence in the modern era.

Interpreting the *Marshall Decision* in the broadest terms, Mi'kmaw fishers almost immediately set out to exploit the lucrative lobster fisheries of the Maritimes region, insisting that the ruling placed few limits on their harvesting and self-regulation of the fishery. Hence, in the fall and winter of 1999-2000 dozens of Mi'kmaw fishers defied federal lobster regulations and fished out of season, exceeded trap limits, and made the claim that no licenses were necessary to harvest or sell their catch (Tennant 2021). Equally swift was the response

from non-indigenous fishers who, fearing that the ruling spelled the end of the commercial fishery, aggressively protested the Mi'kmaw "illegal" harvesting and committed various acts of vandalism and threats of violence directed at the Mi'kmaq. In an unexpected twist, the Supreme Court agreed to a rehearing request by a non-indigenous lobbying firm and ruled a few months later that the government did indeed retain the right to enforce regulations in the name of proper marine stewardship. Hence, in what came to be known as *Marshall 2*, the Court clarified that the commercial rights granted "were not unlimited" and that regulatory intervention could be justified for "conservation or other important public objectives" (McMillan & Prosper 2016, 637). Nevertheless, the *Marshall Decision* was widely celebrated by indigenous communities throughout Canada as the broadest recognition of treaty and aboriginal rights to date and seemed to mark the beginning of a new era of greatly enhanced livelihood opportunities to come.

II. Economic Assimilation in the Post-Marshall Era

Caught off guard by the mounting successes of the indigenous-led legal activism, including the *Marshall Decision's* nullification of commercial limitations on Mi'kmaw fisheries, the government's response was to reassert the very same ecological hegemoniality that had resulted in the turn to the courts in the first place. In other words, as opposed to negotiating a space within the wider commercial lobster industry for a Mi'kmaw governed moderate livelihood fishery to emerge, and thus uphold the treaty rights recognized by the Supreme Court, the DFO was tasked with maneuvering and cajoling those harvesters eager to exercise their rights into the broader capitalist ecology of the commercial industry. Hence, in the two decades between the *Marshall Decision* and the recent outbreak of violence in St. Mary's Bay (1999-2020), the DFO pushed a program of economic assimilation in an ill-fated attempt to satisfy both the courts and the commercial interests of Mi'kmaw harvesters. In this 21st century chapter of the centuries long process to ensure a dominant capitalist ecology over Nova Scotia's fisheries, indigenous lobster harvesters were therefore presented with a range of economic development initiatives to ensure that the livelihoods to emerge would adhere to the official regulatory framework and market orientations of the commercial industry. Following decades of these post-Marshall interventions and hundreds of millions of dollars of support, the failure of the assimilationist project was obvious to many and set the stage for the assertion of treaty rights by Mi'kmaw lobster harvesters in the fall of 2020.

Post-Marshall Economic Assimilation

Although previous court cases had led to the implementation of DFO programs to support indigenous harvesters, such as the previously discussed AFS following *Sparrow 1990*, the post-Marshall initiatives were unique in that they specifically sought to integrate said harvesters into the neoliberal commercial context (IPR, Annex A 2020). Fiona MacDonald refers to this form of economic assimilation as “neoliberal Aboriginal governance” which highlights the State-crafted “responses to indigenous demands” that are part of a broader “strategy of neoliberalism” (2011, 257-258). For MacDonald, such efforts are often touted by the State as “enhancing Indigenous autonomy” and “appear to respond to Indigenous demands”, but in reality “serve a neoliberal welfare state agenda” and run in “opposition to meaningful autonomy for Indigenous people”. Following MacDonald’s insights, the important point to highlight here is that from the initial post-Marshall recognition that something had to be done to address both the rising fears from the commercial industry *and* Mi’kmaw demands to play a role in that industry, the federal government sought to envelop all new entrants into the fisheries within its official frameworks and regulatory regimes. In other words, the form of ecological hegemoniality that was launched in the year 2000 made it immediately clear that all demands for aboriginal and treaty rights vis-à-vis the commercial fishing sector would be subject to the “neoliberal re-articulations” unfolding therein (Pictou 2018, 6).

The first assimilationist effort was the Marshall Response Initiative (MRI) which sought to negotiate Interim Fisheries Agreements with individual Mi’kmaw bands interested in getting involved in the commercial sector (Panozzo & Baxter 2020). The MRI was based on a voluntary license retirement program in which DFO would purchase licenses from non-indigenous harvesters and transfer them to the bands to “ensure access to the commercial fishery on an immediate basis” (House Standing Committee on DFO 2020). In 2001, the MRI was extended to 2007 and began a supplementary effort to provide fishing vessels, gear, and training for Mi’kmaq new to the fishery. For lobster specifically, the transferred licenses would grant a specific number of traps to each band to be fished communally, which were then re-constituted as “communal-commercial” licenses. By the close of the MRI program in 2007, 32 out of 34 eligible First Nations bands had signed interim agreements with DFO and taken advantage of the training and gear provisions included in the programming. Having spent \$323 million on the licenses, gear, and vessel transfers, as well as \$130 million on related capacity building and training, the MRI was touted as a successful effort to respond to the Supreme Court’s *Marshall Decision* and pry open a slice of the commercial fishery for

indigenous harvesters (DFO Marshall First Nations Summary 2020). For DFO specifically, the massive seven-year effort was targeted at ensuring “an orderly fishery” (House Standing Committee on DFO 2020) that ensured everyone “abide by the same terms and conditions as applied to the non-native fishers” (Wiber & Milley 2007, 170).

Midway into the extension of the MRI, the DFO launched the supplementary At-Sea Monitoring Initiative (ASMI) and the First Nations Operations Management Initiative (FOMI) in 2003. Similar to aspects of the MRI, the programs were aimed at increasing “indigenous skills and experience” through non-indigenous mentoring and training, to “build internal capacity within First Nations communities” to maximize the benefits of commercial fisheries, and to “strengthen fisheries management practices” through the adoption of Fisheries Management System software and other accounting standards appropriate for a commercial fishing enterprise (Panozzo & Baxter 2020, 9). In addition, through the ASMI and FOMI newly integrated Mi’kmaq harvesters were expected to “develop the skills required to fish safely”, learn how to “maintain vessels”, and to “enhance economic returns for the benefit of their communities” (DFO ASMI/FOMI 2010). Jointly funded at approximately \$7 million, a key secondary objective of the initiatives was to enhance the “collaborative efforts” of various First Nations communities and DFO, and thus ensure that misunderstandings on the nature of the commercial fishery and the terms of the fisheries agreements could be avoided. In short, through the building of collaborative relations, mentoring, and education focused on the parameters of the capitalist ecology governing the commercial sector, a common vision for the fishery and indigenous rights exercised in relation thereto could be strengthened.

In order to complement trainings related to commercial capacity, in 2004 DFO launched the Aboriginal Aquatic Resource and Oceans Management (AAROM) program to promote its vision of “science and technical activities” around marine stewardship issues (DFO AAROM 2005). According to DFO, alongside the acquisition of fishing technical and enterprise management skills, there was a further need to assist indigenous groups in “acquiring the administrative capacity and scientific/technical expertise” required for effective ecosystem and watershed management (*ibid.*). Established as a permanent program in 2019, this long-running initiative not only seeks to promote a common vision of the science that underpins fisheries, habitats, and other ecosystem dynamics, it also builds on ASMI/FOMI efforts to enhance collaboration and joint initiatives between DFO and indigenous communities. While the AAROM makes light of the existence of “indigenous knowledge”, including the assurance that “indigenous knowledge will be incorporated into every business

line of the department” (DFO/ Coast Guard Reconciliation Strategy 2020), the pervasive themes of the initiative are that of DFO-delivered “capacity building” and education on the “science and technical processes” necessary to maintain a healthy and lucrative commercial fishery. Hence, the thinking went, with a proper understanding of and approaches to marine science and stewardship, the newly acquired commercial skills and equipment could best further the department’s purported objective of “improving the quality of life of indigenous peoples” (DFO AAROM 2005).

A couple of years later, DFO noted the successes of its post-Marshall and other indigenous related initiatives and promoted a “renewal” of such programming with its Integrated Aboriginal Policy Framework (IAPF). Promising to “take into account aboriginal and treaty rights”, the Framework’s objectives included “improving the stability” of fisheries by “resolving commercial access issues” and to support economic development by assisting with “greater access to economic opportunities, such as commercial fishing” (DFO IAPF 2006). For the Mi’kmaq, one of the most consequential initiatives launched under the Framework was the Atlantic Integrated Commercial Fisheries Initiative (AICFI), which was created in 2007 to further the perceived successes of the MRI and ASMI/FOMI. Including 34 of 35 eligible First Nations communities in the Maritimes, the AICFI was structured to help them “maximize the potential of their communal-commercial fishing enterprises”, “maximize economic benefits”, and thus “strengthen community economic self-sufficiency” (DFO AICFI 2007). To achieve these objectives, the AICFI provided “business development” training, “harvest training” to ensure knowledge of safety protocols and the mandates of regulatory authorities, and “expansion and diversification” capacity building to ensure continued “economic returns”, which could include support for “aquaculture development”. Taken together, the various components of the AICFI would result in greatly enhanced indigenous commercial capacity, professional enterprise development, and profit generation.

In 2017, the AICFI initiative was considered so essential to maintaining indigenous commercial harvesters within official regulatory frameworks that it was made a permanent program. The numbers tell the story. With the arrival of the 2020-21 fiscal year, the DFO had provided \$97 million through AICFI in capacity building and commercial enterprise expansion efforts (House Standing Committee on DFO 2020). In addition, over \$41 million had supported license acquisition, \$24 million had gone towards vessel and gear upgrades, \$15 million supported onshore processing facilities, and an additional \$6 million was provided for aquaculture startups (DFO Marshall First Nations 2020). All together, DFO claims to have provided 9,500 days of training, including vessel maintenance, enterprise

management, and marine safety, as well as integrating 1,700 Mi'kmaw harvesters on 320 vessels into the commercial sector in Nova Scotia alone. Also in 2017, various Mi'kmaw bands and DFO began negotiating Rights Reconciliation Agreements (RRA) in order to develop “time-limited, incremental treaty agreements” that seek to “advance treaty-related benefits” (Panozzo & Baxter 2020, 10-11). Through the RRA process, a band may acquire additional communal-commercial licenses, negotiate gear requirements, species determinations, and harvesting periods, albeit all within the confines of the *Fisheries Act* and *Atlantic Fisheries Regulations*⁴² that apply to the entirety of the commercial sector.

In its 21-year post-Marshall push to ensure that all indigenous commercial access to the fisheries manifest within official regulatory frameworks, the DFO has spent approximately \$550 million⁴³ throughout the region (DFO *Marshall Decision* 2021). In Nova Scotia alone, the initiatives have cost the taxpayer \$150 million and an inordinate amount of bureaucratic attention and regulatory enforcement by federal and provincial bodies (DFO Reconciliation Strategy 2020). Through the continued implementation into 2021 of the AICFI and ongoing negotiations of Rights Reconciliation Agreements, the federal government has held firm to the notion that any new fishing effort will be in accordance with the dominant capitalist ecology. At the level of ontology, the initiatives have emphasized the identifications and lucrative potential of ‘resources’, ‘harvestable goods’, and ‘commodities’; all of which constitute the entities of the oceanic environment. In like manner, a relational configuration that prioritizes engagement with ‘market actors’, ‘service providers’, and ‘partner enterprises’ was highlighted as primary, including the values of individualism and economic maximization that such relations are built upon. Lastly, and perhaps most importantly, the initiatives have pushed an ethical framework based on official regulations, bureaucratic enforcement, and official scientific discourse within which the emergent commercial livelihoods are expected to manifest. For DFO Minister Bernadette Jordan, 21 years of assimilationist initiatives have been “necessary for an orderly, predictable, and well-managed fishery”, constituted by an “overall management structure that conserves the resource”, and equitably “distributes economic benefits across Atlantic Canada” (DFO Ministerial Statement 2021).

⁴² See *Chapter 2*.

⁴³ This figure includes programming in Nova Scotia, New Brunswick, Quebec, and Prince Edward Island and includes initiatives targeting the Mi'kmaq, Maliseet, and Peskotomuhkati First Nations; all of which were beneficiaries of the *Marshall Decision* (Panozzo & Baxter 2020).

Official Success, Indigenous Failure

According to officialdom, including a number of government aligned and free market-oriented think tanks, the post-Marshall effort to integrate Mi'kmaw fishers into the commercial lobster industry was a resounding success. Often employing a standard set of microeconomic indicators and qualitative assessments of the indigenous uptake of “a business approach to government, management, and economic development” (Scott 2004, v), these selective analyses often predicted the end of the era of legal activism given the overwhelming “positive impact for the Maritime provinces and for the economic realities of its indigenous peoples” (Paul 2019, 1-2). According to the argument, as more and more indigenous harvesters were assimilated into the commercial industry and aligned their practices with official regulatory frameworks, the “sweeping benefits for the region and for Indigenous peoples” would extinguish the desire for recourse to the courts and satisfy the aspirations of those seeking out the fisheries livelihoods that had been undermined and denied over the centuries. In other words, as the post-Marshall programming progressed at engendering an “attitudinal change”, and thus eradicating “the deep suspicions that remain about the corporate model” (Scott 2004, vi), the ‘moderate livelihoods’ recognized by the Supreme Court were increasingly being realized and intercommunal tensions over the fisheries reduced.

For example, following a decade of post-Marshall economic assimilation efforts, DFO was widely reporting on a range of statistics ostensibly demonstrating the successes thereof. Reporting on commercial landings of those Mi'kmaw bands newly in possession of ‘communal commercial’ licenses, DFO notes that from a total landed value of \$3 million at the time of the Marshall decision (1999), said landings had increased to \$66 million by as early as 2007 (DFO Factsheet 2019). Primarily inclusive of lobster, the total landings had further increased to \$145 million by 2015, which DFO highlights as a 120% increase from the start of the program. In addition, DFO notes that as a result of increased landings, Mi'kmaw communities had “diversified fisheries-related business opportunities”, generating over \$25 million in additional indirect revenue for associated bands. As a result, employment in the fisheries sector had increased to 1,669 by the start of the AICFI, including a record total of approximately 1,300 Mi'kmaq legally harvesting lobster for commercial purposes. In proper bureaucratic fashion, DFO rounded out its program evaluation with a note on the output indicator of “days of fisheries training” delivered (7,731 to program participants), purportedly demonstrating the substantial degree of its parallel effort to educate those harvesters newly integrated into the commercial fishery.

Over the years, DFO's cheerleading of its post-Marshall assimilation efforts have been seconded by the free-market libertarian think tank Macdonald-Laurier Institute (MLI), which maintains a robust analytical focus on First Nations issues throughout Canada. According to the MLI, the government's efforts to recognize treaty rights and bring Mi'kmaw fishers into the commercial fold have been nothing short of a "legally based Canadian and indigenous success story" (Coates 2020, 2), with a host of microeconomic indicators proving the point. In one of its first major analyses of DFO's first decade of assimilationist programming, the MLI describes a veritable "rags-to-riches story" with plenty of "good news for Aboriginals and Canada" (Thayer Scott 2012). Echoing DFO, the MLI highlights that within 12 years the MRI and AICFI programs had succeeded at incorporating 27 out of 34 eligible indigenous communities into the commercial fishery, resulting in rising employment, a decrease in the employment-income gap, and fisheries related business "growing in number and in scope" (2012, *Executive Summary*). More specifically, this "sea change" in fortunes for Mi'kmaw harvesters engendered by DFO's efforts had by 2009 increased cumulative band profits to \$35 million, increased the number of commercial licenses held from 316 in 1999 to roughly 1,200 a decade later, enhanced fisheries related employment by 57%, and generated tens of business partnerships with neighboring indigenous and non-indigenous entrepreneurs. In short, for the MLI, the first decade of post-Marshall efforts constituted a "quantitatively and qualitatively successful program".

Commenting on the same time period, the similarly libertarian Atlantic Institute for Market Studies (AIMS) celebrated in a 2004 report the commercial prowess unleashed by the post-Marshall programming and the resulting "budget surpluses, capital reserves. . . profits and promise" for Nova Scotia's Mi'kmaq communities (2004, *Executive Summary*). Highlighting the successes of the Membertou band on Cape Breton Island in particular, the AIMS notes that by adopting the "business approach" and celebration of "individual achievement" embodied in the early years of government support, the band had greatly enhanced its fisheries enterprises. By 2004, Membertou fisheries alone were employing 20 people on a seasonal basis, had increased profits to \$4 million in annual revenue, and had expanded beyond salmon to harvest lobster, trout, bluefin tuna, and swordfish (2004, 7). As a result of the business training and professionalization of the fisheries sector, Membertou was set to dramatically increase its partnership with Clearwater Fine Foods- a major Atlantic-based fish products company- and thus increase employment of band members to approximately 60 at associated processing plants around the region. According to Nicole Johnson from the Shannon School of Business on Cape Breton, these and other economic

initiatives following the *Marshall Decision* had in just a few short years provided “a significant win for the Mi’kmaw community”, in that “while there are challenges ahead, the future is bright” (2010, 7, 9).

A decade later, the MLI doubled down on its success claims with a “two decades of commercial re-empowerment” report that purported to demonstrate how the continued assimilationist efforts had “sparked a renaissance in indigenous economic development” (2019, 31). For example, highlighting the continued implementation of the AICFI program, the report describes a “wave of First Nations entrepreneurship” in the fisheries sector that, by 2018, had continued to create jobs and enhance the financial standing of participating bands (2019, 18-21). On revenues in general, by 2014 bands were bringing in approximately \$91 million per annum; a figure that would continue its climb to \$129 million by 2016. Moreover, the “pronounced economic impact”, which was “far greater than commentators believed was likely in 1999”, had by 2018 included 320 new vessels operated by Mi’kmaw bands, 234 newly trained captains, and nearly 1,400 new indigenous harvesters in the commercial sector. Such successes had greatly increased the “own source” revenue managed by bands, thus creating the secondary benefit of enhanced independence from government budgetary constraints. For the MLI, such indicators of success demonstrate that for First Nations communities that had “previously secured little financial return from the fishing industry”, the tables had turned in their favor in that a “wide ranging economic benefit” was now available to the entrepreneurially inclined- an economic success story “perhaps unmatched in Canadian history”.

Such perceptions of success were not confined to non-indigenous analysts, with a number of indigenous-led reports similarly highlighting the benefits of the livelihood opportunities opened up in recent decades. For example, in 2010 the Atlantic Aboriginal Economic Development Research Program, sponsored by the Atlantic Policy Congress of First Nations, celebrated the “increased access to the commercial fishery for First Nations” and how such access had “created a great deal of change within First Nations communities in the region” (2010, 15). The Congress notes that while not all communities have benefited, the business development training, increased licensing, and boat and gear provisions for Mi’kmaw harvesters had “provided employment, incomes and economic opportunities to those who previously had none”. Similarly, in analyses by the National Indigenous Fisheries Institute (NIFS) in 2010 and subsequently in 2015, there was a consistent assessment of the post-Marshall efforts as “a successful economic development program” (NIFS 2010, 8). Commenting specifically on the AICFI initiative, the reports highlight the “increased business

management capacity of commercial enterprises”, the “economic benefits and growing local employment”, as well as the “independent-from government” business development that had facilitated the perception of indigenous self-government. By 2018, the NIFS would reflect back on the sum total of DFO’s efforts as having been “very successful” and generally honoring the treaty provisions upheld by the *Marshall Decision* (NIFS 2018, 7).

However, in a short note towards the end of its most recent report, the NIFS acknowledges that while the empirical data on the benefits of commercial access were undeniable, there had been throughout the post-Marshall era an even more widespread desire for “a shift from the way the commercial fishery has largely functioned” and for a more “holistic approach” to fisheries rooted in traditional livelihood methods (2018, 10). With this subtle point, the NIFS highlighted a much larger, and less positive, counter discourse that had been prevalent within indigenous communities since the Marshall decision. For some, the post-Marshall signing of fisheries agreements with DFO, participating in training programs, and accepting licenses and gear support was less about “asserting treaty rights” to earn a moderate livelihood, and more about “quieting rights” and forcing Mi’kmaq fishers into a regulatory framework that denies them the ability for self-government (APTN News 22/09/20). In other words, despite hundreds of fishers participating in the post-Marshall opportunities to get involved in the commercial fishery, DFO had failed to acknowledge the “legal pluralism” that differentiates between regulations applied to those in the commercial fishery versus those exercising their aboriginal and treaty rights outside of official frameworks (Denny 2020, 2-3). As such, one of the most common complaints from Mi’kmaq communities has been the failure of DFO to consult and to jointly define what a ‘moderate livelihood’ fishery could look like.

For instance, as early as 2001, only two years following the *Marshall Decision*, there were reports of frustrations that DFO had yet to meaningfully engage the relevant communities and seemed to be pursuing *ad hoc* solutions to essentially ignore the “constitutionally protected rights of Aboriginal peoples” (Isaac 2001, 2-3). As such, many bemoaned that alongside the eager implementation of the economic assimilationist efforts outlined above, there had “been minimal efforts by the federal government to consult Mi’kmaq people”, or even to acknowledge that the Supreme Court had mandated an alternative way forward (Bharti 2021, 2). Amber Bernard poignantly argues the case in reflecting on how the post-Marshall initiatives were initially presented as a “provisional program” that, once the violent backlash from non-indigenous fishers had relaxed, would be more fully negotiated (2020, 1). By contrast, successive Canadian governments over the two

decades failed to open up meaningful negotiations on how to define a ‘moderate livelihood’, and essentially punted the process to incoming administrations. Some even went so far as to suggest that the unwillingness to negotiate over the years or to allow for the emergence of a complementary indigenous framework for fisheries management had been interpreted as a continuation of “white supremacy” and “colonial dispossession” (Seymoure 2020, 6); a bad faith effort that undeniably sent the message that the capitalist ecology centuries in the making was the only model that would be tolerated.

In recent years, the government itself has even acknowledged the lack of consultation on its part and the failure to incorporate indigenous ecological knowledge in the way it honors the *Marshall Decision*. For instance, in a 2019 “action plan for the renewal and expansion of indigenous programs”, DFO noted that in its performance metrics of activities it needed to more fully integrate “indigenous definitions of success” and to better understand Mi’kmaq expectations of “desired outcomes of the programs” (DFO Action Plan 2019). Similarly, following the outbreak of violence in St. Mary’s Bay in 2020, the federal government appointed Allister Surette as special envoy to consult with and better understand the challenges faced by both indigenous and non-indigenous parties in the dispute. According to Surette, one of the primary problems was the “lack of clear direction from the government” over the 20 years under consideration, including the “continued lack of progress in defining a moderate livelihood and implementing the fishery” (cited in Withers 2021, 2-5). And finally, DFO Minister Bernadette Jordan herself was forced to acknowledge the same towards the end of 2020. Pressed on why the dispute had been allowed to resurface, despite years of DFO efforts to programmatically adhere to the Supreme Court’s ruling, Jordan stated, “. . . to do that we need to have space, time, and trust. We need to sit down and do what should have been done 250 years ago, we need to sit down and review fishery plans with First Nations” (cited in Beswick 2020, 2).

In addition to the lack of consultation, another primary frustration in the post-Marshall era was the perception that DFO was forcing the realization of treaty rights into the ever-narrower confines of the dominant capitalist ecology. By as early as 2004, the pushback against DFO’s assimilationist initiatives among Mi’kmaq communities had become so widely known that it attracted the attention of the United Nations Commission on Human Rights. In a report by the Special Rapporteur to the federal government, the UN noted that the DFO’s imposition of commercial-oriented licensing and season regulations on indigenous fishers in light of the *Marshall Decision* was a direct violation of “Aboriginal rights” and that the DFO should allow Mi’kmaq fishers to pursue their rights according to their own regulations (ESC,

E/CN 4/2005/88). Long-time fisher and collaborator on indigenous initiatives, Bull Stokes directly witnessed the frustrations among Mi'kmaq communities as it became increasingly clear that DFO had no intention to allow 'moderate livelihood' fisheries to operate outside of the commercial framework. He notes⁴⁴:

“ . . . we'd been working with First Nations and, well this sounds naïve now, but we thought this was a transformative moment for the whole fisheries. The Mi'kmaq fishers had a whole other set of values and understandings of the fishery that they wanted to put into practice in the moderate livelihood fishery. We thought this was the opportunity to challenge the status quo for indigenous fishers, but DFO decided to reinforce the status quo. They saw the Marshall decision as an opportunity to further their mission, which is to have a corporate, vertically integrated, industrialized fishery. It's a neoliberal model with no space for alternative frameworks.”

A fisheries coordinator for the Mi'kmaq Rights Coalition, who was caught up in the early optimism about the possibilities for a moderate livelihood fishery governed “according to traditional ways”, was equally dismayed with what transpired over the decades since. He elaborates⁴⁵:

“Looking back, they never wanted to allow us our own fishery. . . one that we could manage on our own. We weren't going out in those big boats, trying to catch as much as possible and make a bunch of money. Most of us just wanted to feed our families, make some to survive. . . that's it. That's what we wanted for the moderate livelihood fishery. When we follow our traditional ways, we take care of the environment, we take care of the fish. We don't take everything we can like these commercial guys. They are greedy. If they just would have allowed us to manage the fishery according to our ways, we wouldn't have affected the commercial industry. DFO basically said, join the commercial side or just stick with your FSC licenses.”

And it was precisely in the post-Marshall programming's lack of space for those 'traditional ways' to manifest that led others to lose hope in the DFO's willingness to truly honor the treaty rights. Dalhousie University Professor Chris Milley makes the point in highlighting that many Mi'kmaq communities after the *Marshall Decision* had become newly interested in *netukulimk* as an ethical foundation for guiding their natural resource harvesting (cited in Panozzo 2020). For Milley, “the government ignored the validity of the Mi'kmaq resource management concept of *netukulimk*, which differs from western resource management models. . . its benefits are for the community as a whole, not just for the well-being of the individual harvester”. A Mi'kmaq fishery governed according to *netukulimk*, according to Milley, would not have been “based on the premise of ownership, but on relationships and responsibility. If nature does well, then the community does well” (2020, 8-

⁴⁴ Personal Communication, 10/02/2021, Digby Neck, Nova Scotia.

⁴⁵ Personal Communication, 15/03/2021, Eskasoni, Nova Scotia.

9). In other words, a Mi'kmaw 'moderate livelihood' fishery following *netukulimk* as a livelihood ethic would have not only contradicted the commercial and individualist values that pervade the capitalist ecology, it also would have prioritized a different set of relationships and identified additional actors as the rightful beneficiaries of the fishery's bounty. As an intolerable prospect, DFO's assimilationist initiatives had the primary objective of "imposing its own neoliberal worldview on the notion of a moderate livelihood fishery" (Panno 2020, 9), and thus rejecting alternatives by assimilating fishers into the official framework. A commercial fishery liaison officer for the Indigenous Institute for Natural Resources (IINR), a Mi'kmaw-led conservation NGO, summarized the issue⁴⁶:

"Admittedly, the commercial fishery isn't for everyone. After Marshall, a lot of native fishermen thought that they wanted to get commercial licenses. . . but then once they got in they realized it wasn't what they wanted. It was too competitive, too cutthroat, some of them didn't feel welcome. For the markets, the lobsters are commodities and that's it. For some of the more traditional guys, that wasn't what they understood. . . . I work with the natives who did get involved in the commercial fishery but it's a very small number. Most just prefer to lease out the communal commercial licenses and stick to the smaller scale FSC stuff."

By 2017, the perception among Mi'kmaw communities that the DFO had failed to properly consult and to allow for a moderate livelihood fishery based on treaty rights had become intolerable. In that year, the Assembly of Nova Scotia Mi'kmaq Chiefs stated, "it has been 18 years since that decision, yet DFO has still not recognized this moderate livelihood fishery, which is distinct from a commercial fishery. . . the onus is on DFO to come to the table" (Dorey 2017). Two years later, when it was clear that DFO had no intention to come to the table, the Assembly became more assertive, ". . . despite having over 20 years, the government has neither established regulations for a moderate livelihood fishery, nor have they engaged the Mi'kmaq in formal consultation. . . We will continue to build a process managed and governed by the Mi'kmaq, with Mi'kmaq rules, for a moderate livelihood fishery. . . there needs to be a means for people to exercise their rights today" (Dorey 2019). In less than a year from the Assembly's final statement, Mi'kmaw fishers took matters into their own hands and launched moderate livelihood fisheries according to their own management plans, outside of federal regulations, and in defiance of the non-indigenous fishers' demands on the very same wharves. In other words, they sought the practical realization of ecological plurality in Nova Scotia's lobster sector.

⁴⁶ Personal Communication, 04/07/2021, Eskasoni, Cape Breton, Nova Scotia.

III. Lobster Wars Revisited: 2020 Launch of Moderate Livelihood Lobster Fisheries

No one imagined that it would happen again. When, immediately following the *Marshall Decision* in 1999, Mi'kmaw harvesters took to the waters to exercise their treaty rights, the violent pushback was immediate. Referred to as the “lobster wars”, the violence witnessed non-indigenous fishers burn Mi'kmaw boats, cut the lines of 3,500 lobster traps, ram transport trucks, destroy a sacred harbour, and innumerable physical altercations and racist outbursts (Demont 1999). In addition, DFO itself was caught on video in early 2000 in dozens of patrol vessels ramming Mi'kmaw boats, pepper spraying and beating fishers with batons, and confiscating nearly 1,000 lobster traps, all in the name of regulatory enforcement (Jordan 2000). Officially, the post-Marshall initiatives were meant to avoid such spectacles in the future and to integrate a limited number of indigenous harvesters into the commercial sector in a manner that seemed equitable, legal, and not a threat to conservation. However, given the aforementioned frustrations in recent years with the economic assimilationist nature of the initiatives, it should come as no surprise that by 2019 the Assembly of Nova Scotia Mi'kmaw Chiefs was supporting various bands to develop their own fishery management plans in order to unilaterally launch moderate livelihood fisheries (Dorey 2019). When those plans were put into practice in the fall of 2020 (Charles 2020), the lobster wars of 20 years previous were reignited, with equally devastating impacts on both the industry's reputation and the hopes for indigenous livelihood renewal.

Launch of Moderate Livelihood Lobster Fisheries

The most ambitious, and thus controversial, moderate livelihood fishery is that managed and implemented by the Sipekne'katik band on St. Mary's Bay in Southwest Nova Scotia. Under the leadership of its Chief Mike Sack, on September 17 of 2020 the band decided to “exercise its treaty right to fish and sell for a moderate living” under a “self-regulated” lobster fishery that would be “independent of the regulations outlined by the DFO” (Bharti 2020, 3). During a short ceremony that marked the 21st anniversary of the *Marshall Decision*, Chief Sack awarded the first moderate livelihood lobster license to a fisher named Randy Sack, the son of Donald Marshall Jr. (i.e., subject of the *Marshall Decision*), at the Saulnierville wharf. “My dad would be proud right now, I'm feeling pretty good,” Randy noted at the ceremony (Cooke 2020, 4-5). Along with nine other fishers licensed by the band, Randy was permitted to fish 50 lobster traps, thus bringing the total moderate livelihood traps

to be launched to 500, operated from 11 band owned boats. In what the band referred to as “Phase I” of its moderate livelihood fishery, Sipekne’katik fishers landed over 500,000 pounds of lobster in the first two months of its launch and immediately began seeking out buyers for its “treaty lobster” in order to take advantage of the “commercial” aspect of the *Marshall Decision* ruling (Orillia 2020, 3).

To govern the fishery, the Sipekne’katik band was supported by the Mi’kmaq Rights Coalition (MRC) over a two-year period to develop a Rights Implementation and Fishery Management Plan. According to the Fishery Coordinator at MRC, “. . . the development of the plan was ground up, we reached out to the community and got input on how it should be structured, how to fish, how to incorporate netukulimk. It’s a plan that we had to do ourselves, to access the commercial fisheries that we have a right to⁴⁷.” The Plan includes a phased approach to the fishery with full implementation planned to come into effect by 2022. The objectives of the plan include issues such as conservation, alleviating poverty, and providing stable and effective employment for members of the band (Panozzo 2020). In addition, the Plan stipulates that the band council is the sole body responsible for developing and authorizing regulations related to the fishery and that “band compliance officers” would be empowered to enforce the rules and regulations on relevant fishers. As the plan is implemented, a fisheries committee would determine if additional licenses or traps would be put to use and how eligibility requirements, harvest regulations, and season limitations would be crafted and enforced. Armed with this community-generated plan and proclaimed treaty right, Chief Sack stood on the wharf at Saulnierville that September day and stated, “We’re no longer looking for access, we already have access. . . for the first time, we’re going to support our fishers legally” (cited in Petracek 2021). And with that sendoff, his fishers set out into St. Mary’s Bay in defiance of DFO and the disapproving non-indigenous onlookers.

Two weeks later on October 1st, the Potlotek band, based on Cape Breton Island, launched its own moderate livelihood fishery on St. Peter’s Bay. Symbolically initiating the fishery on what’s known as “Treaty Day” in Nova Scotia- a day that honors the history of the Mi’kmaq in the province- band Chief Wilbert Marshall noted, “. . . our struggle is not with commercial fishermen, it is with DFO. The federal government has got to stop playing politics with this. We want to fish” (cited in Beswick 2020). While issuing tags for just 70 traps and four moderate livelihood lobster licenses, the band held a short ceremony on the wharf and openly declared to DFO that they had a plan, a conservation strategy, and a

⁴⁷ Personal Communication, 04/02/2021, Truro, Nova Scotia.

negotiated settlement with local non-indigenous fishers (Saltwire Network 30/09/2020). Similar to the Sipekne'katik band, Potlotek worked with the Mi'kmaq Rights Initiative to develop what it calls its Netukulimk Livelihood Fisheries Policy and Protocol, and associated Fisheries Management Plan, to govern the new fishery. According to one fishery coordinator, the fisheries plan was based on extensive community consultation and includes various details on conservation measures (e.g., v-notching, escape hatches, non-retention of berried females, etc.), safety, the roles of fishery guardians and the band council, and the communal nature of the livelihood effort (MacDonald 2020). Having generated a lot of community participation and excitement, the Treaty Day event was a festive occasion and attracted Mi'kmaq from other communities to wish the fishers well. Once disembarked from the wharf on the day of the launch, one new moderate livelihood fisher stated to the onlookers, "You'll have to forgive us if we look rusty, we haven't done this in 250 years" (cited in Beswick 2020).

In like fashion, on November 4th the Pictou Landing band launched the third moderate livelihood fishery from the north shores of Nova Scotia along the Northumberland Strait. In defiance of DFO, Chief Andrea Paul presided over a ceremony at band offices to distribute new lobster tags to eager harvesters and to bless the 30 band authorized traps per person. Following the event, Chief Paul stated, "It was a great day, our fishers were really happy that we were finally moving ahead with our plan. So at 9 o'clock they started lining up to pick up their tags, they're very happy" (cited in Ryan 2020). Alongside Sipekne'katik and Potlotek, Pictou Landing too consulted internally, learned from previous efforts of the Mi'kmaq Rights Initiative, and drafted its own fisheries management plan. Hence, its Netukulimk Livelihood Fishery Plan outlines specific approaches to environmental sustainability, specific dates and seasons, good governance, and the role of the band council in overseeing the fishery (PLFN Policy and Protocol 2020). Though not specifying how many licenses would ultimately be issued, Chief Paul declared that her fishers would remain within the Gulf of St. Lawrence Region and that, "they will all fish from small aluminum boats, rather than larger traditional fishing boats, which highlights the small scale of the fishery" (cited in Ryan 2020). Nonetheless, according to one non-indigenous fisher based in the town of Pictou⁴⁸:

"When the Pictou Landing natives made their announcement, it caught a lot of people by surprise. The white guys up here thought that it would stay down southwest⁴⁹, so a lot of people were nervous, angry. . . .everyone walking on tiptoes, and nervous about it."

⁴⁸ Personal Communication, Trey Anastasio, 13/04/2021, Pictou, Nova Scotia.

⁴⁹ Colloquial pronunciation for "Southwest".

By the close of 2020, the Membertou band in Cape Breton and the Bear River band in Digby County of southwest Nova Scotia had announced similar plans to launch moderate livelihood fisheries on to-be-determined dates. And in February of 2021, the Eskasoni band, also based in Cape Breton, declared its intention to launch a moderate livelihood fishery “to cover the whole of Atlantic Canada, because we are the biggest band in the region” (cited in Pottie 2021). Though not yet launched at the time, the bands all claimed to be working closely with their communities to develop their own self-governed management plans. They also all claimed a continued willingness to negotiate with the relevant federal and provincial authorities on the details of their fisheries plans, albeit on a strict “Nation-to-Nation” basis. In general, the mood throughout 2020 in these communities was both defiant and hopeful, in that “it seemed a path towards restoring one aspect of traditional livelihoods was being established.⁵⁰” However, in retrospect, a close look at the sometimes violent and belligerent responses from non-indigenous fishers, industry, and the DFO following Sipekne’katik’s launch in St. Mary’s Bay would have left little room for optimism at the time.

Lobster Wars 2.0

In November of 2019, one year before the launch of moderate livelihood fisheries, a non-indigenous fisherman was speaking to the *Chronicle Herald* newspaper about rising concerns that the Mi’kmaq were planning to launch their own commercial fishery outside of official regulations, “the tensions around this issue”, he noted, “. . . it’s like a loaded gun waiting to go off” (cited in Tennant 2021, 4). Almost immediately following Sipekne’katik’s launch in St. Mary’s Bay in September of 2020, the fisherman’s insights proved prescient. Two days after the Sipekne’katik fishers set their lobster traps, non-indigenous commercial harvesters set out on tens of boats and began cutting their lines so the traps would be lost at sea (Bernard 2020). The next day, another crew of commercial fishers scoured the bay for “illegal” Mi’kmaw traps and hauled over 100 out of the water, and then proceeded to drive them in a convoy of trucks to the DFO offices in the nearby town of Metaghan (Davie 2020). After unceremoniously dumping the traps in a heap in front of the offices, arguments broke out between the two sides, with accusations of racial slurs, threats, and harassment directed at the Mi’kmaq. According to one of the commercial harvesters, the Mi’kmaq were operating an “illegal” fishery, with “unauthorized” traps, no proper licenses, and outside of the official

⁵⁰ Personal Communication, Elder spokesperson, St. Francis Xavier University, 20/12/2020, Antigonish, Nova Scotia.

commercial season for Lobster Fishing Area 34 (November-May). Thus, “they had to be stopped⁵¹.”

In October, the situation further deteriorated. After Mi’kmaq fishers persisted in resetting their traps, non-indigenous harvesters began to target their catch. On October 17, an angry mob attacked a lobster pound (storage facility) near the town of Yarmouth where two Mi’kmaq were tending to their harvest (Levinson-King 2020). The mob of 200 surrounded the pound, cut the power, threw rocks through the windows, and screamed obscenities. Once the police arrived and escorted the Mi’kmaq from the building, they stood aside as the mob stormed the pound, stole the catch, and burned the building to the ground. That same day, another lobster pound utilized by moderate livelihood fishers from Sipekne’katik in the town of New Edinburgh, about 20 miles away, was targeted as well. In a similar stream of events, indigenous harvesters were threatened, vandalism occurred to their gear, and one individual’s car was burned. During that episode, Chief Sack tried to intervene and explain the details of the moderate livelihood fishery, only to be assaulted by a man decrying the “illegal fishery” (Cooke & Chishold 2020). The following week, hundreds of additional Mi’kmaq traps were seized around southwest Nova Scotia, including by DFO, two Mi’kmaq boats were vandalized, and another lobster pound in the town of Middle West Pubnico was incinerated (Lao 2020). For Chief Sack, the situation had quickly and unexpectedly devolved, “it’s terrorism, it’s terrorism on land, on water, in parliament, the law, everything” (cited in Bernard 2020).

Around the same time in October, the tensions trickled up into Cape Breton where the Potlotek band had recently launched its moderate livelihood fishery. On October 20th, the DFO claimed that the traps that had been set were both “unauthorized” and “operating out of season”, and therefore seized 200 traps out of the water (Baker 2020). Outrage from the indigenous communities around Cape Breton immediately followed, with hundreds gathering around the DFO’s local offices to protest the seizure. In addition, the Potlotek band was becoming increasingly vocal in objecting to the province’s regulations that their lobsters couldn’t be sold commercially. According to the Nova Scotia Fisheries and Coastal Resources Act, “it is prohibited for anyone to buy fish from a person who does not hold a valid commercial license” (Connors 2020, 3) Faced with zealous DFO and Provincial enforcement of the Act, the band was therefore unable to earn anything from its moderate livelihood fisheries. As the month wore on, tensions also started to increase with non-indigenous fishers,

⁵¹ Personal Communication, group interview with Eastern Fishermen’s Association, 06/04/2021, Metaghan Wharf, Nova Scotia.

as many Mi'kmaq began to experience harassment and, according to one, "claims from the settlers, saying that this is their water, their fish" (MacDonald 2020, 2-3). Reflecting on the tensions and criminalization of the fishery by DFO, Potlotek Chief Marshall lamented, ". . . things could get ugly. The DFO has to meet with us to clear up miscommunication and to prevent any retaliation. . . We don't want to do that, but you keep pushing somebody down, you keep pushing their buttons, what's going to happen" (cited in Macdonald 2020, 3)?

Five days following the Pictou Landing launch, non-indigenous commercial fishers began an intense lobbying campaign to stop the effort. Hence, on November 9th and then the 12th the Northumberland Fishermen's Association, which represents commercial fishers in LFA 26a (where Pictou Landing is located), sent letters to DFO Minister Jordan and the Parliamentary Standing Committee on Fisheries to outline the multitude of reasons that the fishery should be halted. The Association noted that without a definition of "moderate livelihood" there was no way of knowing the impact on marine life, that fishing out of season would decimate stocks, and that additional commercial efforts could "saturate the markets" and "reduce the price of lobster in the future" (NFA Letter 2020). When another month passed by with little intervention from DFO to stop the new fishery, local fishers once again took matters into their own hands. On December 12th, a crew of Mi'kmaw fishers approached a vessel that appeared to be stealing its traps set just off the coast. Once within a few meters, the thieves then proceeded to ram their boat and fired shots at the retreating fishers (Dorey 15/12/2020). Though no one was hurt, Mi'kmaw communities throughout the province were incensed by the incident and increasingly denounced the "economic racism", "mob terrorism", and "Indian Act worship" that was allegedly denying them their rights⁵². Alarmed by the increasing threat of violence, by the end of the year the Assembly of Nova Scotia Mi'kmaw Chiefs had declared a "State of Emergency" and demanded the DFO and local police to "assist in the protection of Mi'kmaw fishers, families, and supporters" (Dorey 18/09/2020).

Though the DFO had offered to engage in negotiations with those bands pursuing moderate livelihood fisheries throughout these tumultuous months, by early 2021 it was apparent that negotiations were making little progress. Another tipping point occurred in March of that year, when Minister Jordan publicly stated that DFO would step up its enforcement of unauthorized moderate livelihood fisheries. She stated, ". . . anyone caught harvesting lobster outside of the commercial season this year will have to contend with

⁵² Native Council of Nova Scotia, Letter addressed to Prime Minister Justin Trudeau, 03/11/2020.

fisheries officers, they will be on the water. . .there to enforce the Fisheries Act” (CBC Radio Post 09/03/2021). Immediately, prominent Mi’kmaq throughout the province promised to defy DFO. Chief Sack responded, “We can absolutely have a fishery that is peaceful. . .that ensures First Nations can exercise their Treaty rights, we’ve had a firm line that we’re not going to accept a DFO license, we’re not going to fish in a DFO season that they’re trying to impose on us” (cited in Moore 2021, 3-4). Mi’kmaq Parliamentarian Daniel Christmas noted, “. . .this is headed in completely the wrong direction. This regime signals a continuation of a colonial, top-down, prescriptive approach. It dismisses the pursuit of a Nation-to-Nation, treaty relationship” (Christmas 2021). Multiple bands throughout Nova Scotia similarly declared their intentions to reject the “colonial approach” of DFO and to continue to pursue their moderate livelihood fisheries (Dorey 2021).

The most assertive response, as in 2020, came from the Sipekne’katik band, who in April declared that it would relaunch its moderate livelihood fishery in defiance of DFO regulations. A band spokesman noted, “For us, it’s not about us fitting into the world that Canada or anybody else wants us to. . . we’re moving forward with our own seasonal schedule, through our plan” (cited in Withers 2021). The band further declared that it would begin selling the lobsters harvested under FSC licenses, which is a clear violation of the Aboriginal Fisheries Strategy regulations outlined above. Continuing the tit-for-tat, DFO promptly responded, “the department will ensure FSC license conditions are upheld. . . the FSC is not a commercial license, selling would be a breach of conditions” (Deeks 2021). As a result of the mounting tensions, threats of violence directed at Mi’kmaq harvesters, and harassment on the wharves as they prepared gear for the relaunch, the Sipekne’katik band sent an official request in May to the United Nations for international peacekeepers to protect their fishers. The band noted, “we’re going to send a letter to the UN and hope that they can come and keep the peace. . .and just ensure that our people are not mistreated” (cited in McKenna 2021). Though the request for peacekeepers never materialized, the United Nations Office of the High Commissioner for Human Rights (UNHR) did issue a letter to the Canadian government decrying the “racist hate speech, violence, burning and destruction of property, including lobster traps and processing facilities” (UNHR 103rd Session 2021). In a further embarrassment, the UNHR called on DFO to “respect, protect and guarantee the rights of Mi’kmaq peoples in relation to their fishing”.

As the tensions stretched into late 2021, there was little sign that the DFO was prepared to relent on the economic assimilationist project and allow for a marginal fishing effort outside the dominant capitalist ecology. By contrast, it continued to make public

declarations that, while still willing to negotiate how a moderate livelihood fishery could take place, its “overt and undercover” enforcement of the official lobster regulations would continue (Withers 2021). When Sipekne’katik fishers tempted fate one last time in late summer to launch their fishery, nine of their boats docked at Weymouth Wharf were cut loose, vandalized, and had nearly \$1,000 worth of live lobster stolen (CBC Post 05/10/2021). To add insult to injury, while rallying those same defiant fishers to stand firm, Chief Sack was arrested by DFO officers and accused of orchestrating an “unauthorized fishery”. The tense year came to a close with an unexpected return to the courts, as the Potlotek band sought an injunction from the Nova Scotia Supreme Court to prevent DFO interfering with its fishery. Though the outcome of the case at the time of this writing was uncertain, a small protest movement⁵³ had begun to emerge decrying the violence, perceived suppression of indigenous rights, and the latest iteration of ecological hegemoniality on display throughout the province. The sentiment was poignantly expressed by a participant at a press conference in the autumn at Saulnierville Wharf organized by the Assembly of Nova Scotia Mi’kmaw Chiefs⁵⁴:

“The current situation is intolerable. Canada is stealing food from the mouths of our children. We’ve been fishing sustainably since time immemorial. Canada must recognize First Nations as equal Nations, with equal laws and rights. This is genocide and cannot be allowed to continue. We should go out on the boats today, out of season, and see what happens.”



⁵³ See CBC reporting on protests outside of DFO offices in Halifax and Dartmouth (e.g., Julian 2021).

⁵⁴ Personal Communication, 09/09/2021, Anonymous, Saulnierville Wharf, Nova Scotia.

CHAPTER FOUR

A Fishery Collapse Foretold

Conservation Claims, Institutional Orthodoxies, and Story Lines of a Dominant Ecology

Any good fisheries policy has conservation at its core. The Liberal Government in Ottawa needs to explain how a moderate livelihood fishery will be conducted in concert with the commercial fishery. . . We believe in science-based solutions. We also believe that the Liberal Government should provide clear and immediate guidance on how a moderate livelihood fishery can operate within a conservation framework. The current regulations prohibit the processing on unlicensed, unregulated, and out-of-season harvests. We will ensure those regulations remain in place.

Conservative Party of Nova Scotia in the lead up to 2021 federal elections⁵⁵

. . . both science and the state bureaucracy are classically rationalist institutions. Their norms and structures insulate their processes and production from irrational forces of individual and collective reality. That the state bureaucracy is, nonetheless, capable of producing stunningly irrational results is common knowledge.

Alan Finlayson on the collapse of Atlantic Canada's cod stock (1994, 81)

As a researcher with experience in fisheries science, fisheries economics and marine policy, I see no evidence the Mi'kmaw fishery will harm lobster stocks.

Megan Bailey, Associate Professor, Marine Affairs, Dalhousie University, Halifax (2020)

⁵⁵ United Fisheries Conservation Alliance, <https://www.ufca.ca/news/m93hd5hfs8yrm6h>, accessed March 2022.

I. Industry Views: Moderate Livelihood Fishery as Conservation Threat

According to officialdom, as well as the commercial industry overall, the explanation for the aggressive pushback against the moderate livelihood fisheries in 2020 and 2021 was a concern around purported threats to “conservation”. According to the logic, Mi’kmaw harvesters operating outside of DFO’s regulatory framework- notably fishing seasons and maximum fishing effort per Lobster Fishing Area (LFA)- pose a threat to the sustainability of the lobster biomass. Couched within a “bureaucratic-scientific conservation” discourse (Blaser 2009, 14), anti-moderate livelihood fishery rhetoric draws upon concerns related to the biological processes of molting and reproduction, including migration patterns and periods of lobster inactivity, to defend DFO’s regulatory approach and the pushback, if not the violence, against the indigenous fishery. In other words, the moderate livelihood fisheries operating according to their own management plans are conceived of as standing in direct contradiction to science and the “techno-centric approaches to environmentalism” that aim to promote stock health and ensure the viability of a lucrative lobster industry (Johnson et. al. 2016, 7). In short, the recently launched Mi’kmaw fisheries are presented as an environmental and conservation threat, with the indigenous ecological knowledge shaping their management plans equally dismissed as dishonest and anti-science.

Rhetoric of Collapse

As soon as the Sipekne’katik traps hit the water in St. Mary’s Bay in September of 2020, the rhetoric of an impending fisheries collapse was broadcast loud and clear. The loudest of such voices decrying the “illegal” nature of the fisheries, including the conservation threats to the lobster biomass therefrom, was from the myriad fishermen’s associations throughout Nova Scotia. For instance, on September 20, only three days following Sipekne’katik’s launch, the Coalition of Atlantic and Quebec Fishing Organizations, began a media campaign outlining its concerns related to the Mi’kmaw fisheries (Mallet 2020). The Coalition noted, “this isn’t about the rights of Indigenous People to fish. This is about conserving the fishery for everyone- both indigenous and non-indigenous.” Regarding the fisheries operating outside of official frameworks, the Coalition stated, “. . . unless there is one set of rules driven by conservation of the fishery, Canada’s fishery will be destroyed.” In subsequent press releases, the Coalition expanded its criticism of indigenous harvesters’ practices, including the retention of egg bearing females and the harvesting of undersized

lobsters (ibid), all of which purportedly posed a threat to stock sustainability. An official from the Eastern Fishermen’s Association (EFA)⁵⁶ summarized the sentiment of the Coalition’s members, “. . . their traps are illegally setup and illegally baited. . . as a lobster biologist by trade, I find this absolutely appalling” (Mallet 2020, 3).

Soon thereafter, the Northumberland Fishermen’s Association, echoed the conservation concerns. Speaking to the Halifax Examiner newspaper, the head of the Association noted, “. . . lobsters spawn in the summertime, and molt then too. . . fishing in the fall could devastate the stock” (cited in Pannozzo & Baxter 2020, 6). He added, “. . . catch rates in the fall would be 20 times what they are in the spring because that’s when the lobsters are hungry. If we fished in the fall, the next spring there would be no lobsters”. In addition to concerns around fishing out of season, the Association also pointed out that adding additional “effort” (i.e., indigenous traps) would prove detrimental. One member of the Association highlighted that historically there was a “one in-one out” system, in which DFO would issue or redistribute one license for each one retired or sold. According to the fisher, “. . . following Marshall, DFO issued communal commercial licenses to the bands only when they had purchased other licenses from active fishers through the buyback program and kept the same level of effort, that was essential for the sustainability of the fishery” (cited in Pannozzo & Baxter 2020, 10). In other words, additional moderate livelihood traps, regardless of the time of year, would prove a tipping point, because, in the words of the industry itself, “the industry is fully subscribed and cannot handle any additional effort⁵⁷”, otherwise, a “collapse of the lobster industry was all but certain in the near term⁵⁸”.

Similarly, the President of the Bay of Fundy Fishermen’s Association, Colin Sproul, was equally vociferous in sounding the conservation threat alarm. Around the time the Potlotek band launched its fishery in October of 2020, Sproul was regularly communicating to the media the necessity of what might be termed an “equilibrium centered” (Folke 2006, 255) approach to lobster biomass sustainability. In expressing his outrage at the flaunting of DFO’s regulatory framework, Sproul noted, “Let’s be clear, it’s not appropriate for anybody to fish in a lobster molting or breeding ground during the closed season” (cited in Smith 2020). Sproul insisted that in addition to the ecosystem dangers posed by “Mi’kmaw fishermen out on the water at a time when lobsters are molting”, the additional pressure posed by excessive

⁵⁶ One of 12 member associations of the Coalition of Atlantic and Quebec Fishing Organizations.

⁵⁷ Personal Communication, Bull Stokes, 29/01/2021, retired fisher/ consultant, Digby Neck, Nova Scotia.

⁵⁸ Personal Communication, Ken Coates, 24/11/2020, Professor, University of Saskatchewan, Saskatoon, Saskatchewan.

indigenous food, social, ceremonial (FSC) licenses was also threatening the industry's future. According to Sproul, as well as several other fishers involved in this study, the Mi'kmaw FSC licenses are simply a cover for illegal commercial harvesting⁵⁹. As such, the excessive trap utilization for FSC licenses was causing "a ton of damage that we don't account for. . .threatening egg bearing females", all of which amounted to "an incredible amount of industrial fishing taking place in the summertime" (cited in Panozzo & Baxter 2020). Similar concerns were shared by many throughout the 2021 fieldwork phase of the current study.

For instance, when lobster harvesters are "in-season", there is typically a lot of banter on the docks and around the lobster pounds and Association offices that surround most wharves on any number of topics. Before setting off in the mornings, fishers often tease each other about who brought in the largest catch the previous day and occasionally offer tips to each other about lobster movements and bait preferences. In the late afternoon, after a long day of clearing and re-setting traps on the water, fishers continue the playful rhetoric on the docks, bragging about the day's haul and who "got em first". On a more serious note, fishers debate the prices being offered by the myriad lobster buyers, as well as strategies for collectively applying pressure to increase those prices. However, throughout 2021 discussions of the perceived "risks" posed by indigenous harvesters came to increasingly dominate the rhetoric on the wharves and in the communities surrounding them. Fishers, wharf managers, pound employees, and the hordes of retired fishermen that sit wharf-side observing the comings and goings constantly decry the supposed conservation risks newly visited upon their waters, as well as the devastation to their communities that would certainly transpire with the demise of the fishery. For them, a lack of enforcement of the official regulations was something of a death sentence for the region's oceanic biomass, including the coastal way of life that it enabled.

By way of example, on a rainy February day in 2021 at the EFA office on Metaghan Wharf, a handful of fishers sat around bemoaning not only the bad weather that had kept them off the water that day, but also the "threat" posed by the Sipekne'katik band's lobster fishing protocols. On the moderate livelihood fishery issue, there was little room for nuance. The EFA President noted⁶⁰:

“. . . how do you define a moderate livelihood? Is it the Mi'kmaw poachers making millions and pretending like they're feeding their families? The politicians don't want to touch the native issue. . .they know it's illegal, they know that the native fishing plan is a disaster for the

⁵⁹ See *Chapter 3* for the non-commercial limitations to FSC licenses.

⁶⁰ Personal Communication, 15/02/2021, Luke Pines, Metaghan Wharf, Nova Scotia.

lobsters. The fishery will collapse and then our community will collapse. The government would rather see an all-out war rather than put handcuffs on a native.”

Echoing the sentiments noted above, the EFA fishers were also particularly concerned about the vulnerability of the fishery at certain times of year, and the lack of attention to such vulnerabilities by the moderate livelihood fishers. For them, such callous disregard for lobster biology was a recipe for catastrophe. Fisher Michel Comeau clarified⁶¹:

“. . . nobody realizes how much lobster you can catch in the summer, they’re too easy to catch. The natives have already fished in the summer and its caused devastation to the stock. It’s already driven many fishermen out of St. Mary’s Bay. . it’s going to keep ruining livelihoods? It makes no sense. . . the lobsters are more vulnerable at certain times of year and in certain places. . .it’s just ridiculous to think you can fish however you want and everything will be okay.”

The EFA members were particularly incensed by the additional pressure on the fishery posed by indigenous fishers, notably the FSC licenses that already existed. For them, the entire concept was akin to an officially sanctioned criminal enterprise, with negative biological consequences all but certain. Fisher Jean Descolea stated⁶²:

“The FSC fishing has always been a problem, even in the 1990s, but 4-5 years ago it got a lot worse. They turned it into a commercial enterprise, were taking a lot more lobster than they were supposed to. It’s dangerous for sustainability, nobody knows how big the catch is, not even DFO. . .they don’t make them keep logbooks like us. We have an idea about how large the FSC landings are because we watch them directly. They don’t even throw the berried females back, they dump them in fucking ditches! The true story about all this is one of a native run black market. Adding moderate livelihoods to this will be a disaster.”

In other words, the common theme around the EFA offices in the winter season of 2021 was that while the *Sparrow 1990* and *Marshall Decision* cases may have granted the rights to fish for food, social, ceremonial *and* commercial purposes, any realization of those rights outside of DFOs regulations were both environmentally threatening and criminal. Though hundreds of miles to the north of Metaghan Wharf, the sentiment on Cape Breton Island struck a similar note.

At the Cape Breton Lobster Association’s (CBLA) annual general meeting in North Sydney in March of 2021, the supposed risks posed by the moderate livelihood fisheries weren’t far from the official agenda. Alongside discussions of new DFO safety gear regulations and export requirements, there was a near constant grumbling about the threats posed by the Potlotek and Membertou bands recently launched self-regulated fisheries (See

⁶¹ Personal Communication, 15/02/2021, Metaghan Wharf, Nova Scotia.

⁶² Personal Communication, 17/02/2021, Metaghan Wharf, Nova Scotia.

Chapter 3). Early in the meeting on the opening day, one member attempted to add an agenda item related to the next steps to “save Cape Breton’s lobster fishery”. He exclaimed⁶³:

“What do they want us to do? My father and his father were in this fishery and they didn’t have to worry about this shit. The natives fishing however they want will ruin it all, they know it too but don’t care. What are the next steps to stop this from happening, to stop what’s happening down in St. Mary’s Bay from happening here? Should we just sit back and watch it all be destroyed?”

During a coffee break on the second day, another CBLA member was equally pessimistic about Cape Breton’s future should the indigenous fisheries go ahead. For him, the issue wasn’t just about the right to fish, but also a wider network of criminality and greed on the part of the local bands. He commented:

“In St. Mary’s Bay, the catch is down 30-40% due to the moderate livelihood fishery. If there was one here, there would be no catch left. I don’t know what Potlotek and Membertou are planning but I’m worried. Look at the fisheries manager at Eskasoni band, he makes \$900,000 a year and they have the highest child poverty in the country. The bands aren’t communities, they are corporations. The only reason the bands down south called off their fishery this summer was that they didn’t want more police presence that would disrupt their cocaine trade. . . .which they run. It’s all corrupt and if they push it here they will destroy our livelihoods.”

Alongside these official expectations by the fishermen’s associations, similar perceptions of risk are common among individual fishers as well. One retired fisher in Merigomish on the Northumberland Strait, Percy Boyne, perceived the *Marshall Decision* as “a shit show” that would only lead to “community devastation” because “the natives think about conservation differently than the white guys⁶⁴.” For him, the indigenous fishery management plans posed a risk, as they “weren’t based on the same science as that of DFO”. Fisher Jared Stanford from Arisaig dismissed the Mi’kmaw approach to conservation and furthered the perception of the Mi’kmaw lobster harvesters threatening the industry. For him, “. . .looking from the outside, there is a conception that the natives have an intimate relationship to nature, its not true. They waste fish. And they will waste Nova Scotia’s lobster industry⁶⁵”. Ralph Dendricks, who fishes off Pinkney’s Point wharf near Yarmouth, lamented the treatment of indigenous people in Nova Scotia in times past, but noted, “that’s all history now⁶⁶”. In his view, “. . . yes, they were wronged, but if we let them go ahead, they will have 1,000 traps per boat, it will be the end of the fishery”. Others spoke in more apocalyptic

⁶³ Participant Observation, 05/03/2021- 07/03/2021, all quotes from CBLA Annual General Meeting, North Sydney, Cape Breton, Nova Scotia.

⁶⁴ Personal Communication, 25/02/2021, Merigomish, Nova Scotia.

⁶⁵ Personal Communication, 23/03/2021, Jared and David Stanford, Arisaig, Nova Scotia.

⁶⁶ Personal Communication, 03/11/2021, Pinkney’s Point, Nova Scotia.

terms, as something of an emergent threat to not just the fishery, but also to non-indigenous identity. Fisher Jonathan McWright, also based in Arisaig, bemoaned⁶⁷:

“I’m concerned for community, and I want to have the possibility to pass this on to my son. Fishing for me. . .it brings up my relationship to my grandfather, to who we are as a people, our history. The Mi’kmaw fishermen don’t follow their own teachings, they aren’t real Mi’kmaq. The moderate livelihood fishery will cause a collapse, it is detrimental to conservation. If they bring it here, there will be a war! I’m doing this for community, family, and life. . . not money.”

The secondary businesses that operate in parallel to the lobster harvesters, including buyers, exporters, gear and bait suppliers, etc., also perceive a direct threat to the lobster biomass, and thus their corporate prospects, from the Mi’kmaw fisheries. The private wharf manager at Lower Jordan Bay in Shelburne County, Jim Bauer, summarized the concerns as “a near panic” from all angles of the industry, as their “is too much effort. . . the natives are a big threat, and nobody thinks the lobster industry is going to last⁶⁸”. Similar to the Associations and individual fishers, these private companies closely monitor the stock health, landings, and seasonal migrations, as any fluctuations in a given year thereof could sink their enterprises. The perception of a Mi’kmaw threat to commercial landings is particularly acute among lobster buyers and exporters who fear they won’t be able to meet market demand and thus maintain client-purchaser relations. As the Export Sales Manager focused on Asian markets for Clark’s Harbour Fisheries Ltd., Nick Johnson was particularly indignant⁶⁹:

“. . .the media is painting all whites as barbaric racists. We are never going to have peace with the natives. . .the government is wrong to think that it can have two fisheries. The natives just want to sell lobster however and whenever they can. They use the conservation argument, that they are somehow better, to gain sympathy from liberal types. The government doesn’t have the balls to regulate them, they will let them destroy the stocks and then what. I can’t buy from the natives so I have nowhere else to go. I don’t see how my company can continue to meet expectations in China when they start to cut into the commercial sector.”

Another buyer at the East Bay Fishermen’s Coop at Ballantyne’s Cove, Paul Declerk, echoed the concerns that indigenous harvesters could have detrimental impacts on supply chains and market prices. He noted⁷⁰:

“. . . the natives around here that fish with communal commercial licenses aren’t a big deal, they don’t fish as hard as the white guys so nobody minds them. But if the moderate livelihood thing kicked off here it would be a big problem. They would add substantial effort and it could flood markets at the wrong time of year. If you have lobsters going to market outside the May

⁶⁷ Personal Communication, 25/03/2021, Arisaig Wharf, Nova Scotia.

⁶⁸ Personal Communication, 01/09/2021, Lower Jordan Bay, Nova Scotia.

⁶⁹ Personal Communication, 25/04/2021, Yarmouth, Nova Scotia.

⁷⁰ Personal Communication, 14/04/2021, Ballantyne’s Cove, Antigonish County, Nova Scotia.

to June period that our guys fish, then it will lower prices for others fishing at that time. It's also going to mean less stock for me to buy when our season does come around."

Lastly, the government itself has echoed the rhetoric of a fisheries collapse should Mi'kmaw moderate livelihood fisheries operate outside of official frameworks. For instance, in a statement to Parliament soon after the outbreak of violence in 2020, the Minister of DFO, Bernadette Jordan, stated that she would proceed to de-escalate the situation by ensuring that "conservation underpins everything we do" and that it would "never move forward with a plan that threatens the health of this species" (HSCFO Briefer 2020). Commenting on the situation in St. Peter's Bay, where the Potlotek band launched its fishery, the DFO media department noted that "fishing activity had significantly increased in the area", which was "well in excess" of what any 'moderate livelihood' should look like, and that such fishing effort was "clearly unsustainable" and certain to have negative localized impacts on the stock (DFO Media, 13/11/2020). In early 2021, DFO continued the rhetoric that "conservation and sustainability of fish stocks" would be top priority in navigating the moderate livelihood issue (DFO Statement, 03/03/2021). The Department noted that as it worked with First Nations to "exercise their Treaty rights", it would ensure an "orderly, predictable, and well-managed fishery" that did not increase fishing effort or violate the established seasons. An "orderly fishery", according to DFO, was one in which it "works to monitor biomass and determine appropriate fishing limits", because⁷¹:

"a real threat exists, we have to be proactive to protect the industry from certain practices, follow the science and we can protect the fishery from downward pressures. We cannot have anti-science arguments or practices. . . .what do you have then? We have to be vigilant and follow the science to take care of this wicked industry".

Romantic Hippy Bullshit

Alongside many industry proclamations of an imminent fishery collapse, there exists a consistent slandering of indigenous conservation practices, fishing techniques, and traditional knowledge that is often written into the moderate livelihood fishery plans. According to the dominant capitalist ecology, indigenous claims to a particularistic and environmentally sound approach to ocean stewardship was nothing but "romantic hippy bullshit"⁷² and a distraction from the real harm being done to the lobster stock. Thus, many non-indigenous fishers and their industry allies view Mi'kmaw claims to a unique ecological knowledge and associated harvesting practices as both anti-science and unmoored from the reality of indigenous

⁷¹ Personal Communication, 24/06/2021, Stan Franks, DFO Research Scientist, Dartmouth, Nova Scotia.

⁷² Personal Communication, 27/01/2021, Will Smith, Canadian Association of Fish Harvesters, Halifax, Nova Scotia.

environmental destruction that they claim to witness. In other words, when Mi'kmaw harvesters, and their supposed “elite friends in the universities in Halifax”⁷³, speak of concepts such as *netukulimk* as guiding moral frameworks in their livelihood pursuits, it is often viewed as an affront to the positivistic epistemology that is deployed in “the service of single-stock, large-scale and commodity-oriented fishery” (Reid et. al. 2020, 244) that the industry envisions. Hence, not only is indigenous ecological knowledge described as a silly anachronism, but also as a smokescreen that enables environmental destruction.

For example, in early 2021 the spokesman for the Gulf N.S. Fishermen's Association warned this writer to “watch out for the religious stuff Kerry Prosper is spouting out” regarding the Mi'kmaw relationship to the natural environment⁷⁴. Prosper is the Mi'kmaw elder cited in *Chapters 1 & 2* and is often a lead advocate of *netukulimk* revival and advises various Mi'kmaw bands on how to incorporate its principles into their harvesting plans.

According to the spokesman:

“ . . . for the Mi'kmaw everything is communal, it's a communist model. How can this model work in today's society? I don't believe much of it. . . the moderate livelihood fishery is all about profit, look how high the stocks are. The talk about traditional knowledge is a distraction, nobody knows anything about that, they are just fishing to get a piece of the pie from the whites. It might be shared communally but they are still going to take as much as they can.”

The wife of a retired fisher in Merigomish was equally dismissive of the idea that the Mi'kmaq had any unique claims to environmental knowledge, or even knowledge of the lobster fishery itself, and how best to manage it. She noted⁷⁵:

“I'm an old lefty, but I'm totally over the woke generation! I take offense to the idea that the natives can conserve the fishery without following the rules. How is that? The academics and media keep portraying them as somehow more environmentally sound than the rest of us. . . but they don't even follow DFO's science. If you let them fish as they want, according to their ways, there will be a lot, a lot of problems.”

The fisher from Arisaig quoted above, Jonathan McWright, was less dismissive of the notion of traditional ecological knowledge itself, yet skeptical of its practical realization in a competitive capitalist industry. While claiming to have “respect for the concept of *netukulimk*”, he considered the younger generations of Mi'kmaw harvesters as wildly destructive and greedy⁷⁶. He related:

“ . . . it's not the elders that violate their own teachings, it's the younger guys out on the water. They don't follow it or know anything about it. I probably know more than they do.

⁷³ Personal Communication, 18/06/2021, Jason Starr, CBLA, Ingonish, Nova Scotia.

⁷⁴ Personal Communication, 26/02/2021, Lester Downs, Antigonish, Nova Scotia.

⁷⁵ Personal Communication, 25/02/2021, Mary Boyne, Merigomish, Nova Scotia.

⁷⁶ Personal Communication, 07/06/2021, Arisaig, Nova Scotia.

They take the moulting ones, the small ones, the ones with eggs. . . I think they should follow their traditional concepts and values, but it's just the almighty dollar that guides them now."

Others often bring up the aforementioned violations of the FSC license conditions as proof of the "silly romanticism" that portrays the Mi'kmaq as "somehow better able to take care of the fishery" than their non-indigenous counterparts⁷⁷. Citing violations related to the non-commercial nature of the FSC catch, trap limits, and size retention requirements, these critics see in the Mi'kmaw handling of their FSC rights a capacity for environmental destruction unmatched in the commercial sector. Moe Jennings, who runs a lobster live well company called Aqua Marine Systems, makes the point⁷⁸:

". . .the Mi'kmaw thing is crazy. They are milking it to no end. They have to play by the rules. Even before the moderate livelihood issue, they were breaking the rules with the food licenses. The natives are getting rich by breaking the rules. But they claim to have some connection to the land. . . but they sure haven't shown it in how they fished before. It's all a big risk to the long-term, to profitability, to the industry as a whole."

Fisher Adam Stoney from Cape Sable Island echoed Jennings' concerns that the history of Mi'kmaw FSC harvesting portends an ominous future for a fishery "full of moderate livelihood harvesters". For him⁷⁹:

"We are out here doing our best to be good stewards. I work with several NGOs on various issues, like ghost gear clean up and others. After seeing how they abused the FSC licenses, basically turning it into a commercial enterprise that was in the summer, when it shouldn't have been, how can we trust them. The natives pretend like they are environmentalists, even the academics at Dalhousie⁸⁰, they are a bunch of native fans, they always take their side. But we know what they are capable of after seeing it for years with the food licenses. They will exploit it as they wish and cause major problems. They don't care about conservation."

Put simply, the industry rhetoric is that the lobster biomass of Nova Scotia's inshore sector is "under a huge threat, even a native assault"⁸¹, as a result of the agitations for expanded moderate livelihood fisheries. And no matter what indigenous or their "elite ally" claims to sound conservation practices and environmental stewardship say, the perception is one of a foreboding doom to the lobster industry and the coastal communities it supports. For the doomsayers, it's simply a matter of science and the managing of natural resources according to its orthodox claims.

⁷⁷ Personal Communication, 25/02/2021, Joan Jennings, journalist at Halifax Examiner, Tatamagouche, Nova Scotia.

⁷⁸ Personal Communication, 10/08/2021, Dartmouth, Nova Scotia.

⁷⁹ Personal Communication, 01/10/2021, Cape Sable Island, Clark's Harbour, Nova Scotia.

⁸⁰ Dalhousie University, based in Halifax, Nova Scotia.

⁸¹ Personal Communication, fisher Ralph Dendricks, Pinkney's Point, Nova Scotia.

II. Institutional Orthodoxies and Story Lines of a Dominant Ecology

The purpose of the current discussion is not to minimize or discredit the concerns of the commercial industry presented above, nor is it to take a scientific stance on whether or not the additional effort and out-of-season harvesting by Mi'kmaw fishers will have a detrimental impact on the lobster biomass of Nova Scotia. The former would represent a failure to properly elucidate a prevalent subjectivity and communicative pattern that is an omnipresent feature of the relevant communities. The latter is beyond the scientific expertise and scope of the current study and, as is outlined below, appears to be an unsettled question even among the adherents to the dominant “environmental resource management” (Stevenson 2006, 167) system that claims a certain monopoly over such truths. Rather, the remainder of *Chapter 4* demonstrates that while the dominant capitalist ecology may leverage “the professional institution of science” to shape fisheries policies and understandings of environmental risk (Finlayson 1994, 2-3), a critical reading thereof reveals how that very institution’s unscrutinized scientific orthodoxies contribute to forms of exclusionary rhetoric that disproportionately impact upon indigenous livelihoods. In other words, concerns around “conservation” are understood by the current study as less of a foundational explanation for the government and commercial industry’s recent rejection of self-governed Mi'kmaw fisheries, but rather as the last stand of ecological hegemoniality in Nova Scotia’s fisheries sector.

Institutional Orthodoxies

Given that concerns around out of season harvesting and additional effort in particular LFAs permeate the rhetoric outlined above, it is little wonder that the official regulations around which such concerns revolve have received increased scrutiny. Though others have questioned the official stance on the risks posed by additional indigenous fishing effort (e.g., Denny 2020; Beswick 2020), as well as the potential for raw racism to be behind supposed environmental concerns (e.g., Baxter & PannoZZo 2020; Friedman 2020), the current study argues that the dominant discourses around these issues have become unquestioned and unexamined, and therefore part and parcel of the ecological hegemoniality expanded on in *Chapters 2 & 3*. Hence, the current discussion highlights that while an institutionalized scientific establishment is leveraged in the construction of lobster fishery regulations, there is little appreciation for the “biophysical uncertainties or political conflicts” that shape and

determine the final form of those regulations (Forsyth 2003, 10). As such, in the construction and enforcement of policies, the objectives and outcomes of related fisheries science are presented as neutral and authoritative, when, as is demonstrated below, the scientific knowledge may rest upon shakier ground than is assumed. Nevertheless, such supposed environmental certainties offered by officialdom often lead to certain discursive practices (i.e., story lines) that serve to further exclude Mi'kmaw fishers.

Critical political ecologist Tim Forsyth uses the term “environmental orthodoxies” to capture this phenomenon and highlights the ways in which particular “received wisdoms” and “vague statements” of environmental science come to be institutionalized and authoritative (2003, 36-38). For Forsyth, environmental orthodoxies are based less upon established scientific facts, theories, or even hypotheses, but rather the “perspectives of particular groups” and their inevitable social and political embedding. Such unquestioned orthodoxies often draw on images of environmental degradation or overuse, and therefore highlight the role of human action in bringing about environmental change or crises. As such, environmental orthodoxies are often closely linked to status quo power relations and can be leveraged in the creation of “oppressive environmental discourses” that serve to “restrict the socio-economic activities” of marginalized communities (Forsyth 2003, 167; Sowman et. al. 2021). Lastly, it's worth highlighting that when put to service in the construction of regulatory frameworks around natural resource harvesting, environmental orthodoxies, as “generalized expectations based on prior assumptions”, are often removed from official debate and considered established fact unworthy of further examination or critical appraisal. Or, as in the words of one fisher interviewed for this study, “. . .when the science is science, what else is there to talk about. . . it's already done. No need to reinvent the wheel⁸²”.

Building on Forsyth's insights, the current study sees that in the contemporary dispute, DFO's environmental science and fisheries regulations related to LFA fishing seasons and allowable level of effort per LFA (i.e., license and trap limits) manifest as “institutional orthodoxies” in their own right. As is evident in the rhetoric of collapse, these two issues assume pride of place among the conservation concerns that have supposedly led to the commercial industry's rejection of self-governed Mi'kmaw lobster fisheries. As such, the scientific establishment and regulatory framework that govern these temporal and spatial access issues are fiercely defended by the industry as apolitical, objective, and in the business of “managing for optimal production” (Huitric 2005, 221) the lobster biomass cum

⁸² Personal Communication, 02/09/2021, Eric Hotten, Shelburne, Nova Scotia.

commodity. As a reflection of these expectations, DFO identifies as its primary conservation objective the “sustainable use” of the fishery that avoids an “unacceptable reduction in productivity” and ensures the “healthy functioning of the ecosystem” (DFO IFMP 5.1, 2021). While also identifying the protection of biodiversity and marine habitats as secondary conservation objectives, DFO prioritizes its recognition of the economic importance of the lobster fishery and its desire to “create the circumstances for economically prosperous fisheries” (DFO IFMP 5.2, 2021). To achieve these objectives, DFO’s scientific research overwhelmingly focuses on the fluctuations of Nova Scotia’s lobster biomass (i.e., stock status).

In order to assess such fluctuations, DFO relies on what are known as “fishery independent” and “fishery dependent” data sets, both of which are considered by the department as “essential and complementary in order to get as close to an exact understanding of the fishery as possible⁸³”. Fishery independent data refer to DFO-led annual trawl surveys that collect samples of multiple species in geographically delimited areas in order to assess various biological morphologies and ecosystem dynamics (DFO Technical Report 3376, 2020). Fishery dependent data refers to a combination of commercial logbooks submitted by individual lobster harvesters, as well as research generated by an entity called the Fishermen and Scientists Educational Society (FSES). Commercial logbook data is mandated by DFO and includes information on catch date, location, and total estimated catch. The FSES is an independent organization of retired DFO scientists, academic marine biologists, and independent fishers which facilitates the collection of at-sea sampling data by the Associations and conducts independent research on lobster reproduction and mortality issues. According to the President of the FSES, the organization has proved essential at improving the trust and collaboration between the industry and DFO, “which historically was quite dismal and so has increased industry support for the types of regulations that are at play with the native issue⁸⁴”.

The analysis and peer review process of these data sets is coordinated by DFO’s Canadian Science Advisory Secretariat (CSAS), which produces what it calls “departmental scientific advice” on issues such as stock dynamics, marine ecology, and risks to the species (DFO CSAS 2021). As such, CSAS facilitates a “peer review science process” to review the data and then presents the findings at advisory committee meetings. Such meetings include

⁸³ Personal Communication, 24/06/2021, Stan Franks, DFO Research Scientist, Dartmouth, Nova Scotia.

⁸⁴ Personal Communication, 12/07/2021, Rich Garvin, Halifax, Nova Scotia.

representatives from industry, DFO, the provincial government, and environmental NGOs and result in a consensus on any number of issues to be published. The outcomes of the peer review process, including *Science Responses* and *Science Advisory Reports*, contribute to “annual stock assessments” for particular LFAs and report on an array of primary, secondary, and context indicators of stock health.⁸⁵ In addition, CSAS produces annual *Research Documents* that draw exclusively on fishery dependent data for broader “framework assessments” of biological status, biomass abundance, and exploitation rates⁸⁶. Fishery independent data are published in *Technical Reports* which draw on trawl surveys to identify issues related to stock health, distribution, migratory patterns, and abundance⁸⁷. The ultimate outcome of the entire scientific effort is recommendations to the Minister of DFO on the harvest rules that constitute the input controls governing the lobster fishery (See *Chapter 2*).

One such input control that has been informed and upheld over the years with reference to the DFO scientific process is the enforcement of lobster fishing seasons. Though the first seasonal limitations on the fishery were experimented with in the 1870s (See *Chapter 2*), the current manifestation is rooted in efforts in the 1960s to dramatically reduce pressure on the biomass. According to DFO, the seasonal limitations are “informed by science” and seek to “minimize negative impacts” related to harvesting during the life stages of moulting, mating, and egg laying⁸⁸. Hence, given that these biological processes generally take place in the summer and early fall, most LFA fishing seasons “aim to avoid these vulnerable times” and the potentially negative impact on the stock that harvesting then would have. While noting that seasons also “provide markets with a steady supply of product”, a point that will be returned to in the coming pages, DFO claims that its primary purpose for enforcing the seasonality of the fishery is to promote “lobster productivity”. For most in the industry, these biological processes highlighted by DFO are simply common sense and are rarely questioned by them or the broader industry. For Susie Muller at the environmental NGO High Seas⁸⁹:

“some understandings of ecological or biological processes are just accepted. . .and this issue around moulting, mating, and fishing seasons is one of them. I don’t know how much the DFO science process reviews its stance on seasons. . .but it’s generally presented as established fact. Other issues like carapace size and trap dimensions are discussed, but the seasons. . .not so much”.

⁸⁵ For *Science Response* and *Science Advisory Reports* drawn on for this study see “Stock Status Update for American Lobster in LFA 34 for 2020” and “Assessment of American Lobster in LFA 34” found at <https://www.dfo-mpo.gc.ca/csas-sccs/index-eng.htm>, accessed June 2021.

⁸⁶ See “2018 Framework Assessment of the American Lobster in LFA 27-33” (ibid).

⁸⁷ Personal Communication, 15/10/2020, Lee Cook, DFO Aquatic Science Technician, Digby, Nova Scotia.

⁸⁸ See DFO, “Fishing seasons for inshore lobster fisheries”. www.dfo-mpo.gc.ca/fisheries-peches/aboriginal-autochtones/moderate-livelihood-subsistence-convenable/lobster-homard-eng, accessed September 2021.

⁸⁹ Personal Communication, 09/02/2021, Halifax, Nova Scotia.

As such, the necessity of LFA seasons is taken by industry as a ‘generalized expectation’ of proper fisheries management.

Another apparent institutional certainty which rarely gets critiqued by the scientific process, and is therefore held as an inviolable element of the regulatory framework, is the limit on licenses and allowable traps. Though the first limits on trap numbers were introduced in 1964 and a moratorium on license issuance was rolled out in 1967 (Bodiguel 2002), in the decades since these “effort control” measures have come to be understood by both government and industry alike as “fundamental to the overall sustainability” of the lobster stock⁹⁰. Thus, for the last half century there has been a fixed number of commercial licenses authorized for each LFA and a corresponding trap limit per licensed vessel. In response to concerns raised by commercial fishers in 2020 about increased fishing effort from moderate livelihood fisheries, DFO Minister Jordan noted that these particular effort control measures were essential to maintain and that the level of fishing effort “cannot increase” as it is fundamental to “protecting our stocks and the industry for generations to come” (Deeks 2021). Professor Anthony Charles describes the common institutional and industry assumption of the lobster fishery as being “fully subscribed”, and therefore that there is “no extra unutilized lobster in the ocean” that would justify additional effort (2021, 3). In other words, as in the defense of lobster fishing seasons, the official case for license and trap limitations in the name of stock sustainability manifests as orthodox reasoning and represents a scientific certainty undeserving of further scrutiny or modification.

Storylines of a Dominant Ecology

At the level of lobster harvesters, secondary industries, and throughout the communities to which they belong, these institutional orthodoxies generate forms of rhetoric, even sloganeering, that have contributed to the prophecies of a fishery collapse. These rhetorical tools are deployed as unalterable truths, in that they are backed by the institutionalized DFO science process and help to simplify the biological and ecological complexities that are often overlooked by that process in the construction of its orthodoxies. Maarten Hajer similarly refers to “storylines” as socially constructed forms of narrative that position actors and clarify issues of “blame”, “responsibility”, and “responsible behavior” within broader environmental science debates (1995, 64-65). For Hajer, storylines serve as “essential political devices” and allow for a particular community- be it a group of allied

⁹⁰ Personal Communication, 10/02/2021, retired fisher/consultant Bull Stokes, Digby, Nova Scotia.

scientists or harvesters themselves- to overcome fragmentations in the understanding of a particular problem and to adopt a common narrative that unites them as a coalition (1995, 65). Though the storylines themselves are often uttered by actors employed in the commercial sector, they nonetheless serve to unite those actors with the scientific and regulatory authorities governing the industry as a whole. The result is a consensus on the risk of a fisheries collapse in the face of self-governed Mi'kmaw fisheries.

Perhaps the most ubiquitous storyline uttered throughout Nova Scotia by the commercial industry and the communities that surround the province's fishing wharves is that there are "seasons for a reason". Though this particular storyline existed before the recent flare up of tensions over the moderate livelihood fisheries, it has become much more prevalent since the fall of 2020 and has served to ally the aforementioned actors behind DFO's regulatory framework. One fisher who has historically worked quite closely with indigenous communities on various environmental protection issues provides a glimpse into the way the storyline draws on the supposed certainties of institutional orthodoxies to construct a narrative of risk. Bull Stokes noted⁹¹:

“ . . . it's not even about the increased number of licenses that would need to be issued to allow for the moderate livelihood fishery. It's about the molting periods. There are seasons for a reason and it's precisely because molting happens in the summer. It's not about licenses but about when and where you fish. The lobsters come into St. Mary's Bay for moulting. . . there is space for extra licenses but they can't be put to use during molting.”

Though Stokes disagrees with the other common assumption that increased fishing effort poses a risk to the stock, he nonetheless deploys the storyline to elucidate the critical nature of the biological processes that are often referenced by DFO to defend its stance.

Fisher Jason Donati seconded the notion that the consensus around the risks posed by out of season fishing had served to improve the relationship between the commercial sector and DFO. For him, while there may be disagreements on certain issues, the implied science around seasons was unmistakable and bereft of the political influence that caused fisheries problems in the past. He exclaimed⁹²:

“ . . . it's about survival of the industry, of the livelihood. We're okay with seeing the DFO enforcement officers. They are doing their job. There is a history of mistrust between fishers and DFO. . . I think it's a lot to do with the collapse of the groundfish in the 90s. That's what happens when politics affects DFO's regulations. But for this. . . the seasons exist for a reason. The natives think they can fish whenever they want but what then? They didn't care about the lobster 50 years ago when it was less lucrative. But now, they should follow the DFO rules and pay attention to the science.”

⁹¹ Personal Communication, 05/05/2021, Digby, Nova Scotia.

⁹² Personal Communication, 23/03/2021, Antigonish, Nova Scotia.

Donati's sentiment around the necessity of the presence of DFO enforcement officers was widely expressed throughout the industry, and, according to a representative from the Lobster Coalition of Canada, was not commonly held before the launch of the Mi'kmaw fisheries.

Irving Geoffries clarified⁹³:

"In the past, the harvesters deplored DFO. . .they really hated seeing them show up on the wharves or on their boats. Checking logbooks, safety measures, or whatever. But the First Nations fishery problem has changed that quite a lot. . . especially around the seasons issue. The industry as a whole understands that there are seasons for a reason and that regulation has to be enforced. We can't have violence and most people don't want to enforce the regulation themselves. That would not be good. So, seeing more DFO officers provides some relief I guess."

The storyline is also a ubiquitous presence throughout the communities that depend on the wharves and the profits they generate through the lobster trade. As such, it's not uncommon to see "season for a reason" emblazoned on the windows of shops and gas stations, to be printed on flags flying from front lawns and street corners, proclaimed on bumper stickers and T-shirts, and even in the common chatter of townsfolk who are either retired from the industry or had family involved at some point in the past. One woman living near the wharf in Louisbourg, Cape Breton reflected on her grandfather's days on lobster boats and how the fishery is so much better managed today. She noted⁹⁴:

". . . back then it was a free for all, the wild west! There were rules but they weren't enforced, nobody paid attention. But now lobster is so important that the rules are better and people pay attention more. Like the season issue that is a hot topic today. That wasn't a thing when my grandfather was fishing. But now it's better understood and managed, there are seasons for a reason and that has to be enforced. If you violate the rules, whether native or not, there have to be consequences. . . fines, jail, banned from the fishery, I don't know!"

While the comment is an example of the storyline's reference to a supposedly established scientific fact, and thus its necessity for conservation purposes, it also hints at the themes of 'blame' and 'responsibility' highlighted by Hajer. In other words, alongside the storyline's utility in constructing a social consensus around the necessity of a particular regulation, it also serves a political purpose in identifying what a transgressor might look like and the fate he should face. Hence, during the fieldwork phase for this study "seasons for a reason" rhetorically identified both scientific truths and the criminally liable.

Another common storyline heard throughout the industry in late 2020 and during the 2021 fishing season, and which has directly contributed to the rhetoric of collapse presented

⁹³ Personal Communication, 26/05/2021, Halifax, Nova Scotia.

⁹⁴ Personal Communication, 08/06/2021, Anonymous, Louisbourg Wharf, Cape Breton, Nova Scotia.

above, is related to the level of effort that is understood to allow for sustainable stock levels. Hence, given the institutional orthodoxy that the current level of licenses and traps per license in each LFA represents a certain maximum sustainable yield (See DFO IFMP 2021), a common refrain within the industry is that there are “too many fishermen and not enough fish”. As in the case on seasonality, this storyline is prevalent among both harvesters engaged in casual banter on the wharves, as well as among those working in the secondary industries around those harvesters, and is typically employed in conversations related to supposed “illegal” or “fraudulent” fishing. An employee at the lobster export company Tangier Lobster Inc. reflects the notion that excessive effort and illegality often go hand in hand. Tony Thompson commented⁹⁵:

“. . . the fishery is already fully subscribed, it’s an intense industry. And then you have guys who don’t follow the rules as much, fish too many traps or whatever. It’s like what they used to say about the trawlers, there are too many fishermen and not enough fish. I think DFO’s trap limits in the LFAs are probably about right. But it has to be enforced. . . . because otherwise there is too much effort no question. The stock won’t last.”

Thompson’s mention of trawlers is a reference to the overfishing of Atlantic cod in the 1970s and 80s and the common refrain at the time that there was simply too much fishing effort for the stocks to be maintained (See Finlayson 1994; Brubaker 2000). However, following the stock’s collapse in the early 1990s, and the moratorium put on the species by DFO in 1992, the storyline became much less common in the Maritimes⁹⁶. That is, until the reemergence of the dispute over indigenous lobster fisheries in St. Mary’s Bay.

While Thompson’s lament references generalized rule breaking and overfishing, since the fall of 2020 the storyline has more specifically been linked to Mi’kmaw fisheries operations. As outlined above in the ‘rhetoric of collapse’, one common complaint from the industry is that the FSC licenses put undue pressure on the stock and therefore must be reined in. During a short break from repairing damaged traps at his wharf-side workshop, Shelburne-based fisher Eric Hotten made the point⁹⁷:

“. . . the FSC licenses have always been unnecessary. Ever since that court case, they have been causing a lot of pressure on the lobsters, even here around Shelburne County. There are too many fishermen and not enough lobsters to sustain either the industry or the stock. Every lobster they take out of the water for the food and social stuff is one that doesn’t go to the commercial industry. We can’t control climate change but we can control the natives!”

⁹⁵ Personal Communication, 30/04/2021, Tangier, Nova Scotia.

⁹⁶ Personal Communication, 10/11/2021, Liz Bakimo, Fisheries Management Specialist, Canadian Wildlife Coalition, Dartmouth, Nova Scotia.

⁹⁷ Personal Communication, 02/09/2021, Shelburne, Nova Scotia.

A few miles down the coastline in Lunenburg County, fisher Mike Aspotogan echoed the concerns around the pressures from the FSC fishery and once again linked the perception of overfishing to one of a criminal enterprise. He noted⁹⁸:

“The FSC fisheries are a joke. They catch more with 10 traps, which is how many they are allowed, than I can with 50. It’s so easy to fish in the summertime, you could catch the lobsters with scuba gear. They illegally sell the catch, for cash under the table, and they don’t pay taxes. It’s all deception, they break all the rules and are destroying the fishery. There are too many fishermen and not enough fish.”

However, the most common usage of the storyline during the fieldwork portion of this study was directly related to the moderate livelihood fisheries. Whether aboard their boats pursuing the spring catch in Ingonish harbor in Cape Breton, or 400 miles south preparing lobster for market at one of the myriad export companies around Yarmouth, harvesters and industry actors alike were certain of the dangers posed by moderate livelihood effort increases. Thus, the issuance of additional commercial licenses by Mi’kmaw bands, which would be fished at variable times of year regardless of DFO regulations, was nothing less than anti-science lunacy and a direct contradiction of the maximum sustainable yield analytics of the overarching orthodoxy. Though the bands were promising to allow far fewer traps per license than the official DFO issued commercial licenses- in accordance with the “moderate livelihood” provision of the *Marshall Decision*- the additional fishing pressure was unacceptable to many. The manager at Meteghan wharf was concise⁹⁹:

“. . . the moderate livelihood fishers can’t go forward until they’ve acquired official licenses from DFO. If not, they’re simply stacking traps on the ones already out there. There’s been a lot of pressure for a long time. . .and now this? There are too many fishermen and not enough fish for that.”

Fisher Adam Stoney, quoted above, expanded his concerns around FSC fishing to include the additional moderate livelihood effort that, for him, was certain to come to his corner of Cape Sable Island eventually. He continued:

“We’ve been lucky so far. The natives haven’t started it here yet. I would put overfishing as the number two threat to the fishery behind climate change. . . and looking at the two risks together, it brings up that old saying of too many fishermen not enough fish! DFO’s effort controls are in place for a reason. It’s not arbitrary. Those extra traps would cause problems for us here in Cape Sable.”

Hence, as in other storylines, “too many fishermen not enough fish” typically references back to the science that supposedly underlies the related institutional orthodoxy. Therefore, its

⁹⁸ Personal Communication, 15/09/2021, St. Margaret’s Bay, Lunenburg, Nova Scotia.

⁹⁹ Personal Communication, 09/01/2021, Anonymous, Meteghan Wharf, Meteghan, Nova Scotia.

usage identifies the ‘good behavior’ of those who don’t increase fishing pressure and apportions ‘blame’ on those who seek to operate outside of official frameworks. Taken together, these two prominent storylines *and* the continued agitation from Mi’kmaw communities seeking to exercise their Treaty rights for a moderate livelihood fishery were certain to result in the perception of an imminent fishery collapse outlined above.

III. Problem Closure and Its Contestations

For the dominant capitalist ecology, the institutional orthodoxies coming from officialdom *and* the resulting story lines that reflect those orthodoxies at the level of industry lead to a “problem closure” (Forsyth 2003, 79) stance that forsakes any additional inquiry into established fisheries policy. Hence, problem closure removes from negotiation the contours of certain policies and serves to ally all those who stand to benefit from the status quo of a regulatory framework. However, when such problem closures manifest in a highly contentious context with long-denied access to natural resources and traditional livelihoods at play, a critical reexamination from certain quarters is all but certain to arise and to examine those orthodoxies under new light. Regarding the two aforementioned regulatory offenses that the self-governed Mi’kmaw lobster fisheries purportedly commit, such a critical reexamination took root in late 2020 and sought to question the orthodoxies deployed to undermine the Mi’kmaw fisheries’ legitimacy. Under this new critical light, a novel discourse has arisen that identifies in the government and industry conservation claims nothing less than a tool of exclusion and industry greed that knows no bounds. For the current study, the exclusionary outcomes of the purported conservation concerns and dogmatic regulatory enforcement are understood as a continuation of the ecological hegemoniality that has increasingly characterized the industry since the 17th century, and thus a contemporary effort to prevent the return of ecological plurality to Nova Scotia’s lobster sector.

Data? What data?

The problem closure that characterizes the key regulatory, and thus conservation, concerns around the moderate livelihood fisheries is under scrutiny for both its failure to collect certain data, as well as its failure to consider existing data that might undermine the institutional orthodoxies outlined above. Led in part by academic marine biologists, Mi’kmaw-led conservation groups, as well as a limited number of sympathetic commercial fishermen, the issues of both lobster fishing seasonality and acceptable levels of fishing effort have been put back on the table (See Beswick 2021). Regarding the unwillingness of DFO to

collect or consider additional data, Dalhousie University professor Greg Bates has been particularly outspoken in highlighting the shortcomings. In the fall of 2020, shortly after the moderate livelihood fisheries were launched, Bates began speaking publicly about the dearth of “scientific information on lobster biology and lobster ecology” that should inform fisheries policies in Nova Scotia¹⁰⁰. For Bates, the reactions to the Mi’kmaw fisheries in the fall of 2020 and the ongoing concerns around conservation risks related thereto are “dogmatic positions and rhetoric but not a lot of science¹⁰¹”. The problem, according to him, is that DFO has an established way of studying the fisheries, has a set of trusted partners that it collaborates with, and considers certain topics to be so well established as to be unworthy of more public resources.

For example, Bates sees DFO’s lack of empirical data to justify its lobster seasons as an abject failure of institutional science, notably as it relates to an ongoing dispute over regulatory enforcement. As presented above, the data that DFO uses to justify its seasonality is the fishery dependent data that is collected in logbooks during the commercial season. In other words, there exists data from a mere handful of months (per LFA) that are largely outside of the summer molting and mating season that purportedly need protecting. As such, there is a fundamental absence of knowledge on such issues as shell condition related to surface temperature, summer migrations, or catch-per-haul potential in up to nine months per year for certain LFAs. For Bates, this means that DFO doesn’t have any justification for its “totally unnecessary summer-winter dichotomy” that undergirds the fishing seasons, and that in most other contexts this lack of data would be considered insufficient to make concrete statements on lobster biology or ecology¹⁰². The most frustrating part of the equation, according to Bates, is that DFO refuses to explain or address this obvious data shortcoming and the “over-sensationalization about unknowns” that it creates¹⁰³.

In response, in the spring of 2021 Bates began working closely with the fisheries department of the Sipekne’katik band to develop a research project that would address exactly those “gaping holes in our knowledge that are somehow besides the point for DFO¹⁰⁴”. The study was to include an at-sea-sampling component launched from band commercial boats in the summer and would try to “fill in the gaps” on exactly what happens in the fishery when

¹⁰⁰ See Press Conference at Sipekne’katik band offices, 22/04/2021, www.facebook.com/TreatyFishery/videos/503027850, accessed October 2021.

¹⁰¹ Personal Communication, 24/06/2021, Dalhousie University, Halifax, Nova Scotia.

¹⁰² Personal Communication, 2/15/2021, Dalhousie University, Halifax, Nova Scotia.

¹⁰³ Panel Discussion “Learning Lodge on Mi’kmaw Livelihoods”, 24/11/2020, St. Francis Xavier University, Antigonish, Nova Scotia.

¹⁰⁴ Personal Communication, 10/11/2021, Dalhousie University, Halifax, Nova Scotia.

the commercial season closes. Though the study was put on hold after DFO threatened to confiscate any traps launched out of season, the more important point is the refusal of DFO to participate or to consider it a legitimate scientific effort (Seguin 2021). One DFO research scientist noted, “. . . we weren’t interested in it, there is a lot of misunderstanding, and we will continue to rely on the data that we get and the trawl surveys¹⁰⁵”. However, as a condition for issuing the research permit for the study, DFO required that all data from it be submitted on a regular basis and that before any conclusions were drawn from the data that it be subjected to its own internal peer review process “to address just those misunderstandings”. For Bates and the Sipekne’katik fisheries officers, the intransigence on the part of DFO vis-à-vis a novel and needed data collection effort was nothing short of a dereliction of scientific and regulatory duty. Though the study was underway at the time of this writing, in Bates’ words, “there continues to be a complete lack of interest or support on the part of DFO”.

Professor of marine biology Robert Steneck from the University of Maine has also been quite vocal in highlighting the dearth of data that has been used to justify what he sees as “pretty exclusionary policies”¹⁰⁶ vis-à-vis indigenous fishers. Almost immediately following the outbreak of violence in 2020, Steneck testified to the Canadian Parliament and reached out to local media to indicate the kinds of data collection that could be done to clear up questions related to the purported conservation risks. One such example focused on fishing effort was a “before-after control-impact study” in the exact coves and coastal stretches that moderate livelihood fishers were planning to harvest (Minke-Martin 2020, 4). For Steneck, without such targeted data there was “almost no way to justify DFO’s current stance with the data that does exist . . . to not look more closely at the potential impact of that effort with a targeted study defies logic¹⁰⁷”. However, Steneck expressed that he was little surprised by the unwillingness of DFO to put in the extra scientific effort, because:

“Unfortunately, the idea of having science inform policy in fisheries management is more relegated to history books than to current practice. You get the regulators and even scientists who form into tribes and their opinions get fixed or hardened and no amount of information can shake that. People don’t want to change unless they have to, there are other interests at stake too.”

In other words, as in the case of seasonality highlighted by Bates, the problem closure on acceptable levels of fishing effort precludes the possibility of institutional science pursuing a geographically targeted study to examine the impacts of indigenous fishing effort.

¹⁰⁵ Personal Communication, 24/06/2021, Anonymous, DFO Research Scientist, Dartmouth, Nova Scotia.

¹⁰⁶ Personal Communication, 01/11/2021, University of Maine, telephone interview.

¹⁰⁷ Personal Communication, 01/11/2021, University of Maine, telephone interview.

Alongside this academic critique, a select few commercial fishers who work closely with Mi'kmaw bands and NGOs on marine stewardship issues also decry the way DFO's problem closure stance often forecloses on new opportunities for learning about the fishery. A number of harvesters involved in this study described a good working relationship with the bands' fisheries departments in the past, as well as the Mi'kmaw Environmental Association NGO, on marine ecology and conservation studies, but consistently bemoaned DFO's absence on such efforts and the unwillingness to take seriously the data produced. One commercial fisher from the Bay of Fundy, Chuck Porters, was particularly incensed by DFO's stance on harvester-led conservation initiatives. For him, the development of fisheries regulations by DFO was less about a commitment to working with harvesters and considering the deep knowledge of the marine environment that they have, but rather a "decision-based evidence manufacturing" scheme¹⁰⁸. Porters clarified:

“. . . DFO doesn't manage the fishery anymore, they just manage fishermen. They've left little role for us or the Mi'kmaq. And how have they done? It's a disaster. I work closely with Bear River and Sipekne'katik and we want to put together a study that's all science, no talk about rights or treaties, just science. Let's go out and measure the fish, do all the tests, and get on the same path. The chiefs will join, fishermen, and DFO. . . but they don't want any part in it.”

Hence, echoing the academic assessment, Porters and other harvesters like him- both indigenous and non-indigenous- see the only way out of the current dispute as through a new scientific lens and a path around the institutional problem closure that denies that lens credibility.

Alongside the reluctance to pursue additional scientific efforts than what are typically considered by DFO's CSAS process, there is a similar dismissal of data that already exists that could be used to challenge the relevant orthodoxies and negotiate a solution to the fisheries dispute. In November of 2020 Professor Steneck raised the issue in testimony to the Canadian Parliament¹⁰⁹ by pointing out that there is already a controlled study underway on fishing effort and seasonality in the Gulf of Maine, which constitutes the oceanic border between the state of Maine and southwest Nova Scotia. According to the testimony, the fishing effort in the adjacent coastline of Maine was substantially higher than that in southwest Nova Scotia (1,709,600 traps vs. 391,600), yet the Catch Per Unit of Effort (CPUE) and total landings for both jurisdictions were almost equal over the last four decades.

¹⁰⁸ Personal Communication, 12/03/2021, Windsor, Nova Scotia.

¹⁰⁹ See Statement by Professor Robert Steneck, 27/11/2020, Standing Committee on Fisheries and Oceans found at <https://sencanada.ca/en/committees/pofo/44-1>, accessed March 2021.

Moreover, Steneck added that according to each relevant fisheries' institutional analyses, the stocks are healthy on both sides of the Gulf and have shown no signs of long-term decline. As such, Steneck sees little evidence that an additional 550 Mi'kmaw traps laid as part of the moderate livelihood effort would have any noticeable impact on the stock. Steneck has also highlighted the evidence from Maine on year-round fishing and how it relates to the seasonality required by DFO.

For him, the DFO claim that lobsters needed to be protected during the summer molting and mating cycles was a bit outdated and that DFO need only look south to Maine to see that these biological processes continue apace at a sufficient rate even during a 12 month per year effort. He noted:

“This is an economic story, not a biological one. Evidence shows that reproduction is at an all time high in Maine and we fish all year. It’s almost impossible to accurately predict the precise time of these things. . . the population has no problem with current practices and so it certainly leads to questions about DFO’s stance.

In fact, for Steneck, DFO's stance that the seasons must be regulated in such a way so as to protect critical biological stages has been contradicted by studies from around the world. But, “they don't have to travel the world for the evidence, the Maine fisheries offer a perfect controlled study, for two different sets of regulations imposed on the same fishery, look at what happens”. Though his testimony to Parliament was well received, Steneck clarified that there was “no indication that DFO is or would consider the data right at their hands from Maine” in its attempts to resolve the dispute with Mi'kmaw bands¹¹⁰. One fishermen's association from Maine summarized what it considered DFO's perplexed and seemingly anti-science stance on the issue (cited in O'Connell 2021):

“It looks like the season for a bad reason is a reason to get rid of the season for a reason!”

The commercial harvester Adam Stoney seconded Steneck's sentiment that there seemed to be an unwillingness on DFO's part to consider data that already existed, even when it was from the Nova Scotia's own lobster fishery. Regarding the seasonality issue, Stoney pointed out that only two thirds of the LFAs' fishing seasons actually avoid the summer months (LFAs 13, 14, 31-38) when DFO claims the critical processes of moulting and mating are taking place, while another third harvest, at least partially, through the supposedly critical months of July and August (LFAs 15-18, 25, 27-30). While volunteering for multiple conservation focused NGOs, Stoney noted that this opportunity to further the science on seasons just by looking at Nova Scotia was a common topic. Just off the water from a “ghost

¹¹⁰ Personal Communication, 15//12/2021, University of Maine, telephone interview.

gear” clean-up effort in partnership with the environmental NGO Coastal Conservation, Stoney paused to elaborate¹¹¹:

“Because this issue about the natives fishing out of season is so critical to some, then why don’t we dive deeper into the data that we have here. DFO gets the logbooks from all the LFAs and several of them do fish in July and August. Is the lobster behavior really that different just up the coastline from St. Mary’s Bay to PEI¹¹² where they fish in August? Or even closer, look at the Bay of Fundy, LFA 35, they fish all of June and July. Let’s consider that data and come back to the issue of a few more traps in the summer for the moderate livelihoods.”

Nonetheless, whether from Maine or Nova Scotia’s own experience, the problem closure that characterizes the industry’s regulatory framework leaves little space for either new or existing data to be factored in. The apparent risk, it seems, is the exposure of cracks in the institutional orthodoxies that undergird that framework and thus a threat to the dominant capitalist ecology therefrom.

Hegemoniality’s Last Stand

The point of departure for the current study is not to take a stance on the scientific issues of lobster biology and ecological processes that underpin the justifications for DFO-enforced regulations. Nor is it to claim a position on whether or not increased effort or out-of-season harvesting from Mi’kmaw fisheries pose a threat to the sustainability of the lobster biomass. As noted above, these issues are beyond the scope of the current study and are best left to the marine biologists to determine. Rather, the point of departure is to highlight the exclusionary social effects that transpire when the science around marine stewardship and conservation of marine life manifests as institutional orthodoxies and generates simplified storylines that serve to ally those in positions of privilege or power. As was on full display in the fall of 2020 and intermittently throughout 2021, the storylines of “seasons for a reason” and “too many fishermen, not enough fish” have led to the perception of a massive environmental and livelihood threat when indigenous fishers sought to harvest lobsters according to their own fisheries management plans. As a result, the largely non-indigenous commercial sector pushed back and rallied around DFO’s official regulatory framework; a response that served to disrupt and criminalize the early iterations of moderate livelihood fisheries. This despite very little, or even contradictory, scientific data that stocks have been or would be negatively impacted by the Mi’kmaw harvesters (e.g., Luck 2021; Withers 2021).

¹¹¹ Personal Communication, 01/10/2021, Cape Sable Island, Clark’s Harbour, Nova Scotia.

¹¹² Prince Edward Island.

Others have variously interpreted the conservation risk claims and violent pushback by DFO and industry despite the paucity of scientific evidence related thereto. As hinted at above, one line of thinking positions the rejection of self-governed Mi'kmaw fisheries within the context of lobster economics and the value of providing a stable and consistent supply of Canadian lobster to international markets that manifest a near constant demand (Baxter & Pannozzo 2020). The argument holds that DFO defends its seasonality and effort control measures not specifically because of concerns around stock sustainability, but in order to not flood markets with lobster at any one time of year, and to therefore keep prices high for the industry. Professor Steneck ascribes to this line of thinking and describes DFO's regulatory approach as "brilliant for markets" and much superior, "from a capitalist perspective", to what exists in Maine "where the markets get flooded at certain times of year and prices crash¹¹³". In other words, stock risk analyses play very little role in the regulations, but, according to Steneck, "scientific conservation always has to appear to be behind fisheries management".

Another common interpretation of the rejection of self-governed indigenous lobster fisheries sees the problem as "an access story" (Charles & Bailey 2021), in which access to lobsters for one group means less access to another. In other words, this view sees Mi'kmaw harvesters being pushed into the dominant capitalist ecology not because of legitimate concerns that moderate livelihood fisheries operating according to their own seasons on band issued licenses would decimate stocks, but rather that they would get first access if everyone else had to follow DFO's seasons. Thus, from the non-indigenous harvester perspective, "the actual threat is to their livelihoods, as fewer lobsters left to catch means less profit¹¹⁴". An alternative, yet similar, line of thinking sees in the dispute "a fundamental legal question about who gets to regulate", as opposed to a scientific debate around conservation risks (Eastern Door 2021). This perspective interprets the issue as one of power, in which one side insists on "imposing its rules" and a "staggering lack of awareness" that Mi'kmaw fishers have their own approach to conservation and understandings of the marine environment (Denny 2020, 4). Hence, claims to certain environmental rules of thumb (i.e., story lines) and prophecies of catastrophe when those rules aren't closely adhered to (e.g., the 'rhetoric of collapse'), are nothing more than tools to keep lobsters in the hands of a greedy industry.

For the current study, while these interpretations do have merit, they are best thought of as part and parcel of the broader ecological hegemoniality that has characterized the

¹¹³ Personal Communication, 01/11/2021. University of Maine, telephone interview.

¹¹⁴ Personal Communication, 26/02/2021, Lester Downs, Gulf Nova Scotia Bonafide Fishermen's Association, Antigonish, Nova Scotia.

industry for centuries. Hence, DFO and the commercial industry's insistence that the official regulatory framework and related conservation practices be adhered to in the realization of Mi'kmaw treaty rights is a continuation of the techno-bureaucratic exclusions that the dominant capitalist ecology began to enact in the mid-19th century (See *Chapter 2*). More specifically, the leveraging of institutional orthodoxies related to best conservation practices is less about legitimate concerns for the sustainability of the biomass, but rather a 21st century version of the capitalist ecology ensuring its continued dominance over the lobster fishery in the face of renewed resistance. And it is precisely in the dominant capitalist ecology's perception that the realization of self-governed Mi'kmaw fisheries represents a return of ecological plurality that the pushback has been so vociferous and sometimes violent. For, the reemergence of ecological plurality represents not just a threat to the dominant ecology's conception of how best to conserve the lobster stock, but even more expansively to the ontological assumptions it adheres to, the relational configurations that sustain it, and the livelihood ethics that its adherents follow. In short, the emergence of a self-governed Mi'kmaw fishery represents a slight shift back towards the ecological plurality axis of the hegemoniality↔plurality continuum in Nova Scotia's lobster fishery, and the capitalist ecology is reasserting its dominance via a dogmatic adherence to techno-bureaucratic regulatory exclusions masked as science-backed policy.



PART II:

Ecological Plurality Emergent

CHAPTER FIVE

Lobster Inc.

A Dominant Capitalist Ecology Four Centuries in the Making

The asymmetry between nature and culture then becomes an asymmetry between the past and future. The past was the confusion of things and men; the future is what will no longer confuse them. Modernization consists in continually exiting from an obscure age that mingled the needs of society with scientific truth, in order to enter into a new age that will finally distinguish clearly what belongs to atemporal nature and what comes from humans, what depends on things and what belongs to signs.

Bruno Latour (1993, 71)

. . . the lobster fisherman does own his own firm and usually is able to set his own schedule. A man who cannot operate a boat and handle his fishing gear alone at sea does not last long in the business. Yet on the whole, such stereotypes are misleading. They obscure the fact that the lobster fisherman is caught up in a thick and complex web of social relationships. Survival in the industry depends as much on the ability to manipulate social relationships as on technical skill.

James Acheson on the lobster gangs of Maine (1988, 2)

I. The Certainties of Naturalism

Though the emergent “ontological privilege granted to humanity” of the earliest fisher-settlers to the New World mirrored the 16th and 17th century incrementalism of modernity’s rise (Descola 2013, 174), various features of the “modern constitution” (Latour 1993) have been consistent of the capitalist ecology up to the contemporary moment. In today’s terms, the ontological assumptions of the dominant capitalist ecology manifest along two spheres of knowledge and practice. The first relates to the nature of reality itself and how the ontological partition between the key human protagonists on the one hand, and non-human beings and entities of the lobster fishery on the other, requires different ways of knowing, shaping, and predicting the others’ behavior. In the act of partitioning, the human actors restrict assumptions of personhood to themselves, yet identify variable degrees of agentive potentiality among others. The second sphere builds on the personhood identifications bifurcated by the partition and assigns either intentional or denied sociality thereto. Hence, those identified on the human side of the duality are understood to require *intentional sociality* as they are moral subjects with will, intention, and perhaps even an unknown ‘culture’ shaping their behavior. By contrast, those assigned to the non-human side of the duality are understood as amoral objects that are *denied sociality* and understood to be knowable as ‘nature’ through the sole medium of empirical science. Taken together, these ontological assumptions constitute the “world” upon which the dominant capitalist ecology constitutes itself and one particular version of the “certainties of naturalism” (Descola 2013, 172).

Object(ive) Truths, Subject(ive) Curiosities

When the fishers from the Cape Breton Lobster Association (CBLA) who dock at Ingonish wharf unload their boats after 12-14 hours on the water, one of the first things they do is line up the “gut buckets” along the dock. These colloquially referenced vessels contain the day’s bycatch- all the non-lobster species that were caught in the traps but not returned to the water- and provide a significant topic of banter among fellow fishers. According to DFO regulations, certain species of bycatch are forbidden to keep, such as cod and cusk, while others are allowed to be retained and used for lobster bait. Those in the latter category include sculpins, cunner, and rock crab and are considered an important and valuable aspect of the catch as they serve to reduce bait costs that would be spent otherwise. Fishers often brag about who got the most sculpin, supposedly the best for bait, compare total ‘gut bucket’ hauls,

and complain that not enough herring make their way into the traps which would significantly reduce their dependence on the bait dealers around Ingonish and surrounding towns. Another common sight, and source of revulsion among the town's onlookers, is the playful bombardment of each other's boats and trucks with the dead bycatch, which, according to the fishers' estimation, is no good to use anyway since it would no longer be fresh at bait time the following morning.

The most revealing aspect of this daily dock-side drama is the fishers' focus on the biological and ecological factors at play in their bycatch fortunes. As the CBLA conducts an annual "at-sea sampling" study of bycatch species, quantities, and mortality rates, the fishers often reflect on those research outcomes and make light of whether or not their bycatch hauls are consistent. They also argue over such factors as weather, water temperature, invasive species, or all that "fucking garbage from the tourists"¹¹⁵ that may be impacting on various species migrations. Moreover, they bemoan the decades-long reduction in DFO research funding that they consider to be essential in helping to uncover the causes of species fluctuations around Cape Breton Island. When volunteers are requested by the Association for future at-sea sampling projects, the fishers are eager to offer up their boats as research vessels, or at least to ensure that those who do volunteer are sober, diligent, and qualified for the task. The at-sea sampling technician who supported the CBLA during the 2021 spring season noted the profound respect and reverence she experienced as a "real scientist" when accompanying the fishers at sea, including the value they placed on the objective knowledge she might help to unearth on the evolving bycatch fortunes¹¹⁶. In other words, the 'gut bucket' contents around Ingonish wharf are not only considered a key line item on daily profit calculations, but also an ecological mystery that only the scientific method could illuminate.

Similarly, a daily comparative reckoning and debate transpires at Meteghan wharf among members of the Eastern Fishermen's Association (EFA) on each's respective lobster fortunes, including explanations for haul fluctuations throughout December followed by a steep biomass decline in April-May. Once docked, members often try to unload their catch as quickly as possible in order to spy the haul of others. Knowing that catch quantities is a sensitive topic and closely guarded secret, some fishers pretend to be fetching tools from their trucks or paying their dues at the wharf manager's office; all in an effort to discreetly pass by unloading boats to assess the fortunes of their EFA colleagues. The reason for the curiosity is

¹¹⁵ Personal Communication, 15/06/2021, Anonymous fisher, Ingonish wharf, Cape Breton Island, Nova Scotia.

¹¹⁶ Personal Communication, 18/06/2021, Anna Wolf, Ingonish, Cape Breton Island, Nova Scotia.

the desire to gain insight on what promoted the larger hauls by some and not others, including factors such as bait type, fishing location, or time of day, in order to shift strategy if need be. Some even mount the nearby electricity poles or the cabins of their boats to assess whether the “Classy Lady”, “Easy Life”, or perhaps even the “Papa’s Devils”, vessel loaded the right “guts” and dropped traps at the best time and place. Playful antics aside, the fishers at Meteghan wharf also take the scientific process seriously and regularly debate what factors might be impacting the catch per unit of effort.

For them, as well as several other fishers involved in this study, the behavior of lobsters is an ongoing mystery to the average fisher, which draws on and is impacted by a multitude of ecological factors that no one competitive fisher could ever truly understand on his own. Thus, when not engaging in the tongue in cheek folk science of spying their dock mates’ wet wells and bait boxes, EFA fishers commonly discuss the recent DFO trawl survey outcomes, hot topics in marine oceanography articles, and their own plans for upcoming at-sea sampling and collaborations with DFO on the sharing of commercial logbooks for analysis through the CSAS process (See *Chapter 4*). Hence, as in the CBLA members’ commitment to the scientific process in order to increase bycatch retention, EFA members demonstrate a profound respect for what they call “the facts”, “the nonbiased scientists”, or the “honest experts” that know and understand the drives of the ever-perplexing lobsters. Information that, according to one fisher, “turns you from a chump floating aimlessly, into a fisher with a plan¹¹⁷”. Otherwise, short of such scientific insights, the beguiling crustacean could never be apprehended and commodified on a scale that would justify the cost and complexity of operating a commercial lobster boat.

These examples highlight how the “nature” side of the ontological partition manifests in the identifications, assumptions of agency, and ways of knowing the non-human actors and entities in the lobster fishery. Thus, whether examining the contents of the ‘gut buckets’ or assessing the evasive tactics of lobsters, there is a clear identification of “objects” among the biophysical realities of the environment. These object status identifications are directed at all non-human forms, forces, and sentient beings, and highlight the primacy of what Arhem calls the “physical causation” (2016, 3) of all movement, metamorphoses, and action on their part. In other words, in the oceanic world “nature” constitutes the realm of things and their relations, and is thus solely responsible for the happenings that transpire therein. Beyond the typical bycatch species and lobsters themselves, such object status identifications are directed

¹¹⁷ Personal Communication, 1/12/2021, Anonymous fisher, Meteghan Wharf, Nova Scotia.

at a range of other “groundfish” species (e.g., haddock, pollock, redfish), mammalian predators like the right whales and seals, as well as marine flora, such as kelp and rockweed, that occasionally impact lobster behavior. In addition, fishers conceive of a similar object status among the inanimate forces of the weather, currents, and waves that consume their daily anxieties, as well as the inert physical gadgets and tools that enable their livelihoods in the first instance (e.g., gear, boats, wharf). Taken together, the object identifications conceived of by the capitalist ecology are part and parcel of a singular objective nature that exists in parallel to the human protagonists.

Given the primacy of ‘physical causation’ over will and intention in comprehending the behavior of the fishery’s objects, it is understood that there are certain objective truths that can be identified about them that would facilitate their control, capture, or predictability. Thus, the focus on scientific insights by the CBFA and the EFA outlined above are common throughout the industry and include such examples as wharf managers studying the tides and storm patterns to ensure structural integrity, exporters focusing on water temperature fluctuations to predict dips in supply, and environmental NGOs assessing increased groundfish predation on lobster eggs as a result of climate fluctuations. In addition, the ontological partition doesn’t necessarily restrict purposeful behavior to human non-objects as some have suggested (e.g., Miller & Davidson-Hunt 2013), but rather conceives of the goal-directed endeavors of animate objects as mechanical, reactive, and simply part of the biophysical flow of matter and energy. In other words, a form of agency restricted to the “natural” world. Thus, in order to better know the objects of the fishery, to shape or predict their behavior, or to more efficiently put them to human use or to commodify them for the markets, their objective properties are sought out through the exclusive epistemology of natural science. For, as amoral beings and entities, the truths of their existence and the roles they play in the fishery cannot otherwise be known.

However, it is worth highlighting that certain of the capitalist ecology’s objects, most notably when related to in an intense and ongoing mechanical manner, at times reflect the qualities of responsiveness and engagement in the eyes of their human handlers. Examples highlighted below include fishers maintaining and ‘caring for’ their boats and traps in a near constant and seemingly affectionate style, as well as the conflicted, antagonistic, and sometimes personal relationality that transpires between fishers and their lobster prey. In some ways, these relations reflect what Latour referred to as the “proliferation of hybrids”- somewhere between object and subject- that modernity simultaneously allows for, yet denies the existence of (1993, 34). Though these occasional one-sided verbal interchanges appear to

designate other subjects (e.g., fishers cursing lobsters), and the deliberate and thoughtful touch extended from fisher to object from time to time signals an understanding of mutual empathy (e.g., fishers constant washing and polishing of boats), one should not misperceive a crack in naturalism's hard dichotomies. For, in most such instances of apparent communication and extended empathies between subject and object we see just below the surface subjects communicating to and competing with other subjects. Hence, fishers swearing at, naming, and extending commands to the lobsters is really meant as directives to the deck hands to perhaps illegally keep a berried female, to move traps to a new location, or even to release the entirety of the captives of a trap for further growth and maturation. Similarly, the near constant caressing, sanding, sweeping, tuning, and upgrading of fishers' boats and traps, not to mention the tongue-in-cheek communication directed thereto, reflects less of the empathetic care and attention directed towards their families, and more of an ongoing attempt to have better looking, better running, and more efficient boats than their wharf-side subject competitors. In other words, while the capitalist ecology's primary subjects may on the surface relate to their most cherished objects with personhood-like qualities, they nonetheless confine them to 'nature' and ultimately engage the 'physical causation' that is known as their driving force.

By contrast, on the other side of the ontological partition, a certain near unknowable subjective curiosity reigns supreme, that which others have referred to as the "opacity of the other" (Buitron & Steinmuller 2021). For, as subjecthood is strictly confined to the ecology's human protagonists, we see not the lens of science or objective calculations of empirical data points to understand, engage, or manipulate behavior between subjects. Rather, the human subjects are understood to have will and intentionality, emotions and desires, and are therefore perceived to exist beyond the absolutist scientific grasp that the fishery's objects fall within. Thus, as opposed to the dictates of biophysical energy that direct and determine the fate of the fishery's objects, the capitalist ecology's subjects seek out and find themselves enveloped in complex social webs that they are constantly navigating, circumventing, constructing, or perhaps being subjected to, in order to understand, be understood, and relate to other subjects.

Consider the fishery careers of the capitalist ecology's opaque subjects, which are often referred to as an "inherited duty", in that many fishers and others in the secondary industries report a compulsion to maintain the coastal communities and fishery livelihoods that their forefathers pursued and worked to uphold. Though fishery licenses and the 'rights' to harvest are not officially inherited, as all official accreditations are granted and passed on

between fishers through official DFO processes, there are in many communities across the province strong social pressures for younger generations to take up the profession and come under the wing of their fathers or grandfathers and carry on the harvesting livelihoods that undergird the social norms and routines of the community at large. While newcomer harvesters to a community, or especially to a particular wharf, can eventually become welcome and integrated, they often report intense social engagement and forms of surveillance of their practices and social habits in the early years as fellow fishers and community alike seek to assess their ‘bonafides’ and, in perhaps a discriminatory manner, their “native or non-native status”¹¹⁸ as they seek to become part of a harvesting community. In other words, the fishery’s subjects, whether new to a community or of a long line of place-based livelihood seekers, are immediately compelled to meet social expectations, to reveal their moral standing in navigating regional norms, and to earn the respect and admiration that a sometimes-mythologized history of fishers worked so hard to achieve. Hence, in the capitalist ecology, as science encompasses its objects for knowledge, understanding, and relatability, social entanglements of many a variety encompass its subjects for much of the same.

For another poignant example of the ecology’s reckoning of subjecthood, take the variable honoring of the territorial customs of the fishers of Antigonish County as an example. Throughout the region and around the wharves of Arisaig, Lismore, and Livingstone Cove, the descendants of Scottish settlers enforce an informal and unwritten code of fishery territorial claims, referred to as “berths” in the literature (See Wagner & Davis 2004), that typically see the land boundaries of a family farm extended out to the lobster habitat. While these unwritten customs are particular to geographies with centuries of Scottish settlement- notably along the coast of the Northumberland Strait- they nonetheless have carried on through the generations in the region and still inspire much pride and something of a moral commitment to their enforcement around the aforementioned wharves. Sometimes referred to as “gentlemen’s agreements” or “codes of honor”, these delimited spaces are considered the sole proprietary claim of the fisher from the adjacent coastal property and are fiercely defended as such. A handful of more recently arrived fishers without coastal property have managed to carve out, over generations of negotiation, a mutually agreed upon claim to a corner of the fishery and often defend their “god given rights”, or even “familial obligation”, to exclusively harvest there. Once settled business among the relevant fisher communities, the

¹¹⁸ Personal Communication, 24/03/2021, Jonathan McWright, Arisaig, Nova Scotia.

territorial claims of the more recent arrivals are equally honored and considered “settled rights” to be observed¹¹⁹. The territories are often informally marked by natural features of the land, such as from “that boulder jutting out to the sea to the third farm passed the cove”¹²⁰, with any violation of the agreements met with fierce, and sometimes violent, reprisals from the offended. Though universally recognized by both the fishers and the surrounding communities alike, albeit not by DFO, violations of the code by harvester usurpers do take place.

That’s exactly what happened in the first weeks of the spring season of 2021 around Arisaig wharf. When fishers harvesting that stretch of LFA 26a started noticing pre-dawn boat lights off the coast before they had set out to drop their traps, they became immediately suspicious. In the weeks that followed, a group of three fishers took turns disembarking earlier than was typical from the wharf on reconnaissance missions and to track the boat that was suspected of violating the ‘code of honor’. Though the initial suspicions were directed at Mi’kmaw moderate livelihood fishers, the offender from nearby Lismore was eventually caught setting overnight traps and was traced back to his home wharf near the town. The immediate response from the harvesters at Arisaig was one of outrage, vehement anger, and befuddlement, with a rhetoric of revenge, plans to “cut traps”, and desires to “get even” pervading the community. Violations of the territorial code were violations of one’s livelihood, thought of no differently than theft. A parallel sentiment was one of disbelief, as the violator was known to the community, was formerly a member of the Gulf Nova Scotia Association (as most in the region were), and had even had his berth encroached upon in the past as well. He was even considered well to do, from a “good local family”, and historically in good standing with the surrounding communities. The explanation was thus more social, as opposed to one of economic need.

For, two years previous, when the offender left the fishermen’s organization, apparently as a result of disagreements over dues increases, he had become more socially isolated. He no longer attended the group’s annual general meetings, no longer volunteered with other members to sit on DFO’s advisory panels, and had seldom been seen at the social events that take place around Arisaig wharf and the local church in the summers. Moreover, because of disruptions to typical social life caused by the Covid-19 pandemic throughout 2020, the individual had become even more estranged from the local fishing community and

¹¹⁹ Personal Communication, 08/05/2021, Anonymous fisher, Lismore Wharf, Nova Scotia.

¹²⁰ *ibid.*

had lost touch with others. Some speculated that he was drinking too much, or possibly having marital issues. Fisher Jonathan McWright had previously considered the individual a friend but had a hard time seeing how he could be trusted again in the future. He noted¹²¹:

“... it’s just something you don’t do. These agreements have been in place for generations. And to just violate our trust like that is unacceptable. A lot of us have come around to the idea that we need to engage more with others nearby, at the local wharves, these things are more respected when there’s a face to a place.”

As McWright suggests, the transgression eventually came to be understood by many as less of an act of theft, and more of an outcome of frayed social ties, community breakdown, or simply the psychological whims of an individual experiencing personal difficulties. In other words, the communal ‘gentlemen’s agreements’ seemed to only be valid when there were gentlemen acting communally to reinforce their moral legitimacy.

The social drama that unfolded around Arisaig wharf reflects the ontological counter-side to the objective truths and scientific certainties understood to exist, as Blaser describes naturalism’s understanding of objects, “out there in nature” (2013, 551). For, on the human side of the partition the capitalist ecology posits “subjects” with will and intentionality, carrying along personal histories and social enmities, embedded in community obligations and ‘codes’ to honor; all of which result in animate and communicative protagonists navigating an evolving fishery sphere. The consummate subjectivities are understood to create complex and even opaque human actors that are beyond the hard scientific laws governing those beings and entities of an object status, and are therefore alternatively viewed as curious, conflicted, and moral beings unknowable through the scientific process. Beyond fellow fishers, the most prominent subjects identified by the capitalist ecology include Association heads, DFO enforcement and science personnel, advocates from environmental NGOs, academic researchers, employees of the secondary industries (e.g., buyers, exporters, equipment dealers, etc.), Mi’kmaw fishers and activists, and the communities within which the lobster industry is embedded. Manifesting their own personal interests (e.g., buyers pursuing the lowest price possible) and forming their own collectivities (e.g., a coalition of NGOs), the human side of the partition stands in stark contrast to the singular objective status of ‘nature’ discussed above and is therefore viewed as a plurality to which simple truths or rules of thumb simply cannot be applied. Hence, in contrast to the scientific method applied to objects, degrees of sociality are directed at the curious subjects of the fishery in order to understand, coerce, and sometimes manipulate their behavior.

¹²¹ Personal Communication, 15/05/2021, Arisaig Wharf, Nova Scotia.

Intentional vs. Denied Sociality

It is thus upon this particular subject-object dichotomy, which characterizes the identifications of the capitalist ecology's version of naturalism, that varieties of social intercourse take shape. On the subject side of the ontological dualism, human actors interrelate through various forms of *intentional sociality* that seeks to navigate the complex drives and social embeddedness of the fishery's key protagonists. Intentional sociality refers to forms of communication, engagement, or social intercourse that are understood to be between beings of an equal subject status, to be goal directed and value reflective, and that are considered necessary in order to understand and relate to one another. The capitalist ecology conceives of subjects as equally communicative, or as belonging to the same "sociocosmic field" (Viveiros de Castro 1998, 475), and therefore capable of negotiating, constructing, or reassessing the norms that dictate proper comportment vis-à-vis the fishery. Intentional sociality between human subjects is therefore not only a moral requisite, but also a strategy to influence, shape, or direct the behavior of others operating beyond the authorities of 'nature' in order to benefit oneself. And its plethora of forms is reflective of the variable vantage points from which a subject engages.

For instance, the fishers from Middle West Pubnico in Digby County actively seek out on a daily basis at least three local buyers in order to engage a competitive bidding war on price guarantees for their day's catch. This sociality is replete with accusations of dishonesty, backstabbing, and coercion, and is shot through with the value of competition better known to a battlefield. Wharf managers from Blue Rocks and The Ovens in Lunenburg County rally the local community with fund raisers and social events to raise resources for dock repairs and toxic spill clean-ups. This social intercourse is embedded in values of solidarity, communal sacrifice, and appreciation, as the lobster fishery is understood as the economic pillar that sustains the community. Similarly, association heads demand attention on the radio waves to decry the moderate livelihood fisheries and to communicate the devastation to the fishery that is sure to transpire. The intentionality behind such efforts is geared towards swaying public opinion, leveraging a sense of justice, and engendering a certain moral outrage at the purported indigenous transgressions. And the non-indigenous fishers at Saulnierville wharf badger, berate, and sometimes physically attack Mi'kmaq harvesters exercising what they believe to be their Treaty rights to fish for a moderate livelihood. Though fellow subjects, the Mi'kmaq are conceived of as a nuisance at best, or threats to the entire industry at worst, in

absolute need of intentional sociality to reveal their motivations, shape their moral inclinations, and ultimately halt their harvesting of lobster.

In the case of the violated lobster berth mentioned above, the fishers from Arisaig wharf were compelled to engage those at Lismore, including the surrounding community, to understand the reason for the offense. As a moral subject with an unknown will, intentional sociality was directed at uncovering the wider social circumstances of the offender, the reasons for his moral transgression, and the possibility of his reintegration to the community of fishers governed by ‘gentlemen’s agreements’ and ‘codes of honor’. Absent such efforts, the individual would remain opaque, a complete unknown, a social and moral question mark, a potential future threat, something akin to the mammalian predators that stalk the coastline. In other words, intentional sociality brings the individual back into moral proximity with the fishers of Arisaig and allows the space for future communicative opportunities with them. Otherwise, he ontologically drifts towards the nature side of the partition.

By contrast, with regards to the capitalist ecology’s conception of the fishery’s objects, various forms of *denied sociality* characterize the ontological status of those understood to be on the opposite side of the dichotomy. Because the fishery’s objects are presented as amoral, and thus non-communicative, the forms of social engagement and intercourse reserved for subjects are considered inappropriate and unnecessary. In stark opposition to the personhood qualities extended to non-human beings and entities by an animist or indigenous ontology (Menzies & Butler 2006), the capitalist ecology places objects firmly within a nonsocial and amoral matrix that is thoroughly unrelatable through human social forms. In other words, objects are often described as simply “matter and energy”, or “flesh and bones”¹²², devoid of spirit and social consciousness, and are necessarily denied sociality as it is believed to be beyond their ontological constitution. Though, as mentioned above, while certain of the capitalist ecology’s subjects appeared at various moments during this study’s fieldwork phase to direct intentional sociality to objects such as boats or lobsters, such social intercourse is better understood as a conduit to communicate to and better compete with other subjects. In addition, because objects are understood to be strictly of ‘nature’, and therefore driven exclusively by ‘physical causation’, the capitalist ecology sees them as exclusively knowable through the lens of science and the gathering of empirical data, not social intercourse. And it is only therefrom that the objects of the fishery can be understood, apprehended, and more efficiently hooked or trapped.

¹²² Personal Communication, 24/06/2021, Stan Franks, DFO Research Scientist, Dartmouth, Nova Scotia.

And it is thus that the ‘gut bucket’ investigators at Ingonish revert to the epistemology of the natural marine sciences to track the sculpins and cunners and to corner the rock crabs for later use. And it is why the EFA fishers cum dock-side spies at Meteghan investigate DFO’s trawl survey reports, track water temperature fluctuations, and engage the ‘honest experts’ studying marine ecology to track lobsters and best place their traps around St. Mary’s Bay. For, the lobsters and currents, the sculpins and waves, the herring and wind, the pampered right whales and the leaky wooden bottom of the 20-year-old vessel operate off the moral plane of humanity and are thus denied the opportunity to cross the ontological partition and engage in social intercourse. That is not to say that the fishery’s objects and the fishery’s subjects manifest no relationships across the divide engendered by modernity’s “practice of purification” (Latour 1993, 11), but that the objects must be kept separate by a de-anthropomorphization that allows them to become “resources” when the capitalist overlords see fit.

II. A Grid of Positive and Negative Relationality

Upon the naturalist ontological assumptions of the dominant capitalist ecology, there emerges a hierarchically organized grid of coherent, yet malleable, relationships from which Nova Scotia’s commercial lobster industry takes shape. These relationships reflect certain values depending on one’s place in the fishery, subject-object identifications, and adherence to the norms and expectations of the commercial sector. From the vantage point of the key protagonists of the capitalist ecology, certain relationships reflect a *positive relationality* in which all participants stand to benefit in some way from the transaction. By contrast, other relationships are marked by *negative relationality* in which one antagonist stands to lose, suffer, or be negatively impacted while the other benefits or profits from the transaction. Both positive and negative relationality may transpire solely between subjects (i.e., human actors) that engage in intentional sociality as outlined above, or equally between subjects and objects that are denied sociality yet maintain a form of relationship in the context of the fishery. Hence, the relational grid of the capitalist ecology not only reflects the naturalist assumptions of those involved in the commercial fishery, but also highlights, prioritizes, and situates the necessary relationships demanded by market capitalism. And it is from the totality and reinforcement of this configuration of relationships that the capitalist ecology has maintained its hegemonic stance up to the contemporary moment.

Positive Relationality

The road to Yarmouth Bar wharf is narrow and winding, sometimes ice covered and dangerous in the winter months when the fishers of Yarmouth County are in season. Yet when the trucks come barreling in from the surrounding hamlets of Greenville, Overton, and Dayton, something of a drag race transpires down the perilous stretch as the fishers compete to launch their boats and reset their traps first along this narrow stretch of the Gulf of Maine. Along the way, there is jockeying for wharf-side parking spaces, tongue-in-cheek argumentation over the limited space on the docks to load gear, and several high-speed near encounters as the boats seek to out navigate one another around the rock seawalls protecting the wharf. The competition continues throughout the day as the fishers jealously keep watch over their territorial waters, ensure that no traps have been set too close to their own, and demand secrecy from their hired deck hands about bait preferences and observed lobster movements. Much has been said about these competitive and cutthroat values of the fishery (e.g., Sabau & Jong 2015; Wiber et. al. 2004), including one observer's assessment that the turn to neoliberal fisheries management has generated certain "insidious rationalities" among fellow harvesters (Davis 1991). Yet, alongside these persistent forms of competition, the relationships between fishermen are counterbalanced by the inclination towards cooperation and mutualism- that which Acheson refers to as a "dancelike interaction" (1988, 3)- as their fates are understood to be inextricably tied up together.

Hence, the fishers at Yarmouth Bar, as well as the surrounding wharves of Sandford, Port Maitland, and Chebogue Point, proudly recount instances of coming to the aid of each other's distressed vessels off the coast, of loaning gear and money to fellow wharf occupants, and even offering storage space for one another's traps and boats in the off-season. This type of camaraderie is common among fellow wharf users throughout the fishery, as finding dock space at a wharf is oftentimes difficult and sometimes includes long wait lists, and the subsequent social integration and familiarity with others an equally onerous task. The result is strong social connections and a place-based identity, often shared familial relations, and a certain standoffishness directed at what are considered "outsiders" who attempt to dock their boats in the somewhat closed social space of the wharf. Nevertheless, as fellow members of the Plymouth Rock Fishermen's Association, these fishers regularly attend meetings together to discuss negotiation tactics with DFO, to plan at-sea-sampling projects, and of course to vent about the dangerous possibility of a moderate livelihood fishery being launched by the nearby Acadia Mi'kmaw community. Fisher Jim Bauer speaks in terms of "brotherhood" and

“respect” as the key attributes of the relations between the fishers of particular wharves or associations, and notes¹²³:

“. . .we can't be everywhere and know all things at all times. So we look after each other, we help each other out when we can. We are competitive but we are also friends. We help each other out. Most of us are from the same community. . .we are definitely in the same boat in terms of our livelihoods. When the fishery is well-managed, we all benefit.”

Thus, despite the actual catching of lobsters being understood as a zero-sum game to the industry (hence the competition), the knowledge, practical requirements, and navigation of regulations and market fluctuations are thought of as beyond what any one fisher could acquire on his own. Mutualism in the relations therefore ensures that the playing field is even, that if someone from Sandford forgot to acquire enough bait, he won't be kept off the water, or if an accident happens in the race to Yarmouth Bar, the fisher will still get a lift to his boat where the competition can resume.

A similar social solidarity transpires in the town of Yarmouth on the opening day of the lobster season between local harvesters and the community to which they belong. On November 29 of 2021, the “Dumping Day” was a particularly raucous affair, with the main streets of the town leading to the public wharf lined with screaming and clapping onlookers cheering their “heroes” and “saints”. As the fishers made the pre-dawn drive to the wharf, they were showered with thanks and praise, given free coffee and pastries from local businesses, and asked to pose for photos with young children too sleepy to understand what was happening. The Dumping Day tradition is understood to be over 100 years old and reflects the community's understanding that successful lobster harvesters translate into a successful and thriving community. In fact, most coastal communities throughout Nova Scotia fully depend on the industry for local revenue generation, and thus schools, social services, and public works are only funded when the fishers “do their duty for the community”. Thus, communities like the one in Yarmouth fiercely defend their local fishermen, lobby for policies that support their livelihoods, and slap down any accusations of greed or racism against them in the contemporary moderate livelihood dispute. One onlooker described the fishers as “knights of the sea” who, through their harvesting of lobsters, “make this community what it is, so we support them hands down¹²⁴”.

These relationships among the fishers of Yarmouth County, and between the fishers and their communities, reflect forms of positive relationality within the capitalist ecology, in

¹²³ Personal Communication, 02/09/2021, Shelburne, Nova Scotia.

¹²⁴ Personal Communication, 29/11/2021, Anonymous onlooker, Yarmouth, Nova Scotia.

which a tangible benefit to all is expected to transpire therefrom. As noted, fellow fisher relations result in enhanced and up-to-date knowledge of the fishery, advice on how to navigate ever-evolving regulations, and a degree of reciprocity when practical needs arise from other harvesters. Positive relationality between fishers and their communities is reflected in the two-way affluence that is generated when each “does their duty” to support the other. As communicative subjects, this realm of positive relationality is replete with *intentional sociality* and the intersubjective communicative patterns that take place between moral actors. Other actors that reflect positive relationality with intentional sociality as they relate to one another include those operating in the secondary industries, such as buyers, exporters, or gear dealers, fishermen’s associations, DFO, market actors, and certain environmental NGOs. Thus, buyers benefit when loyal harvesters provide a stable supply of commodity, a relationship which in turn ensures an income from the day’s harvesting efforts. Environmental NGOs benefit when fishers partner with them on abandon gear clean-up projects, which then projects an image of fishers as environmentally conscious ocean stewards. The intentional sociality between associations and DFO results in the former having their voices heard on regulatory matters, while the latter gets to highlight its efforts at “consultation” and “partnership” with the industry. As the key adherents to the capitalist ecology, these actors’ relations are hierarchically primary over others and constitute the daily functioning of the commercial sector.

On the opposing side of naturalism’s partition, subject relations with certain of the fishery’s objects reflect positive relationality as well. Take fisher Jason Starr’s relationships with his fishing gear. In the months leading up to the start of the season for LFA 27, off the north coast of Cape Breton Island, Starr spends weeks repairing, polishing, and painting old and constructing new wooden lobster traps. For him, “true” lobster harvesters make their own traps by hand and would never resort to the steel or plastic traps on offer at gear shops around Ingonish harbor. Starr cuts his own planks, sands the edges, shapes the entrances, and meticulously nails the traps together by hand. Once constructed, he measures the perimeter, the bait chamber, and the escape hatch to ensure adherence to DFO regulations and offers final adjustments to ensure conformity across the hundreds of traps he maintains. When fishing, Starr keeps a small hammer and a couple of screw drivers next to the hydraulic hauler in order to repair traps that come up damaged and immediately return them to service. Starr sees the self-made traps as essential to his approach to fishing, which should be maintained as “small scale”, “traditional”, and “non-corporate”, and his relationship to them as one of pride, affection, and dedication to the fishery. Moreover, he maintains that when the traps are well-

made, maintained, and regularly serviced, they simply work better and increase the day's haul. Accordingly, the traps "respond" and "appreciate" the time and attention they receive from Starr. The traps, in other words, "are more important than the stoners that I sometimes have to hire to haul them up¹²⁵".

Starr maintains a similar relationship to his boat "In Memory", which he inherited from his father about 10 years ago when he started fishing on his own. For him, a fisher's boat is a prized and valued possession, an asset that can't be quantified, an entity that has to be "treated right and taken care of. . .like a family member". In season, Starr's boat is mopped and polished a couple of times a week, its gear organized and stowed away daily, and the ubiquitous cigarette butts littering the deck throughout the 14-hour workday regularly swept off as "snacks for the seagulls". In the off-season, Starr repaints his boat, upgrades the technology of the depth sounder and chart plotter GPS systems, and services the engine to the exact recommendations of the dealer he purchased it from in North Sydney. Like his traps, Starr considers the treatment of one's boat as an act of pride and a reflection of one's professionalism and social standing in the fishery. When treated properly, one's boat is understood to run well, to not "freeze up" on cold mornings, and to offer the agility and "rolling, pitching, and yawing" necessary to retrieve one's traps around Middlehead peninsula where he fishes. Though understood as an inanimate object, Starr regularly calls his boat by its name and regards it, or at least its essence, among his friends and relatives when contemplating how to spend his time on non-fishing days. Though, as mentioned above, such care and attention afforded one's boat is often a manifestation of the competitive and cut-throat relationality that transpires among the fishery's subjects. In that, well-cared for and aesthetically pleasing gear not only enhances one's competitive edge on the water, but also symbolizes to other subjects the 'professionalism' and 'bonafides' so coveted by all.

Starr's relationship to his gear is not uncommon and could be said to include object relations maintained with the docks, the surrounding wharf amenities, and perhaps even the much-coveted lobster license. As in the relations among the key adherents to the capitalist ecology outlined above, these subject-object relations reflect a positive relationality and something of a mutual gain therefrom. For instance, harvesters who positively engage with their boats and traps, more efficiently track and trap their prey, bring in a larger haul, and ultimately earn more profit. Though amoral and inanimate, the objects are understood to "appreciate" and "respond well" to being taken care of properly, such as when a boat's engine

¹²⁵ Personal Communication, 18/06/2021, Ingonish, Cape Breton Island, Nova Scotia.

is regularly serviced, and to therefore function more smoothly, or “as they’re supposed to”, as a result of relations with a “professional” and “honorable” fisher. However, given the strict ontological dichotomy at play, these relations are characterized by a *denied sociality* vis-à-vis the fishery’s objects. Hence, these subject-object relations are less reflective of social intercourse between communicative actors, but rather as mechanical and utilitarian relations geared towards the achievement of clear objectives. In other words, though the capitalist ecology allows for relationships among both subjects *and* subject-objects, including ones that reflect a certain mutualism or reciprocity, the foundations of naturalism are maintained by denying any form of true sociality when an object is involved.

Negative Relationality

Whenever EFA member Michel Commeau has free time in the off-season, he travels between the wharves of Bear Cove, Saulnierville, and St. Alphonse along the Acadian Coast to “check-in” on any food, social, ceremonial (FSC) fishing taking place by Mi’kmaw harvesters. As presented in *Chapter 3*, off-season FSC harvesting was made legal in 1992 by the Canadian Supreme Court, yet, given concerns of overfishing and illegal sales of the catch, it has been a constant irritant to the primary actors of the capitalist ecology ever since. Commeau, as well as several others who dock at Meteghan, ostensibly offer support and assistance to the harvesters, even at times offering to help unload the hauls, repair traps, or service their boats. However, in recent years the supposed good will on offer has presented as more of a front for the surveillance of Mi’kmaw harvesting. Commeau and his colleagues sometimes show up early in the morning before the FSC harvesters have arrived, count the number of traps on deck, and even check the amount of fuel in their boats in order to gauge how long they plan to be on the water. Other times, they greet the harvesters on the docks, casually ask how the harvest went, and informally assess the size of the haul. As the trust between the two groups had plummeted during the fieldwork phase of this study, the surveillance was being conducted from more of a distance, with harvesters simply spying the Mi’kmaq from their trucks, or even from their own boats offshore.

For Commeau, to simply ignore the Mi’kmaw FSC harvesters was something akin to economic suicide, as they “would certainly take advantage, even more than they are now”. He clarified¹²⁶:

“... DFO isn’t watching them, they aren’t enforcing the FSC rules. If we didn’t watch what they were doing, they would ruin the stocks. They don’t care what the rules on trap numbers are, they also don’t care if they aren’t supposed to sell them. We used to try to be friendly, we

¹²⁶ Personal Communication, 20/04/2021, Meteghan Wharf, Nova Scotia.

would offer to help them or whatever, but it was really just to make sure that they could see us there.”

In other words, Commeau and his colleagues couldn't simply stop the FSC harvesting, but they could engage the Mi'kmaw harvesters socially on the docks in an effort to monitor and pressure them into following what to them were the “legitimate rules”. Similarly, others from Meteghan who had contract captained Mi'kmaw boats fishing with communal-commercial licenses had also tried to maintain close relations in order to prevent them from pursuing moderate livelihood fishing. According to the thinking, if the non-indigenous captains were in good standing with the limited number of Mi'kmaw commercial harvesters that they worked with (following DFO's regulations), they and their communities would be less likely to pursue lobster fishing outside of the official frameworks. According to one captain, the relationships were a bit “phony”, but in the years since the *Marshall Decision*, “had allowed us to keep an eye on them, to understand their plans”¹²⁷.

Similar relations prevail between a number of primary actors in the commercial sector and a vaguely defined set of “elites” or “activists” that maintain a prominent public profile in critiquing the industry. Alternatively understood as “tree huggers” from conservation NGOs, “socialist” academic researchers, or sometimes even “out of touch media types”, the reigning perception is that these groups are “classist” against fishers and out to criticize the industry at all costs. For instance, Michael Chance from the lobster processor Burkens Seafoods Inc. is regularly contacted by academic researchers interested in studying his facility's hygiene practices, sustainable seafood labeling, and treatment of its migrant labor. Fisher Mike Aspotogan is regularly pressured by the Ecology Resource Coalition NGO for him and his colleagues at the Plymouth Rock Fishermen's Association to improve their toxic waste disposal practices around St. Margaret's Bay. Industry consultant Bull Stokes maintains near constant communication with several “hostile” journalists in order to defend against accusations of racism at the Digby Fixed Gear Council organization that he manages. And fisher Oliver Cotton from Lunenburg decries the “uninformed pro-Mi'kmaw sentiment” that he sees at several “activist owned” businesses around town, which requires him to constantly clarify industry concerns around conservation and “proper fishing practices”.

These relationships around the Meteghan and Lunenburg area wharves, including those between the varied primary actors and their “elite” critics, reflect the *negative relationality* that pervades certain aspects of the capitalist ecology. As a result of the

¹²⁷ Personal Communication, 22/04/2021, Anonymous captain, St. Alphonse Wharf, Nova Scotia.

intentional sociality between these subjects, through these relations one party stands to lose or to be negatively affected by the outcome of the relationship, while the other benefits in some manner. For instance, as the Meteghan fishers relate to the FSC harvesters, the latter are intimidated on the wharves, sometimes bullied into cutting short their harvesting, and accused in the communities of flaunting the rules and overfishing. Against this negative outcome, the Meteghan fishers feel justified in that they have prevented unsustainable fishing and reserved more lobsters for the markets. Similarly, when an “activist” NGO highlights environmentally destructive practices, they are celebrated in the media as having helped to reign in a destructive industry that requires more regulations. By contrast, the fishers are put on the defensive and forced to explain themselves to DFO and are ultimately pressured into clean-up efforts with the NGO that they typically can’t afford. The media also quite often puts the industry on the back foot, forcing it to explain what some critics have called its greed, overfishing, and “market worship”¹²⁸. In these instances, fishermen’s associations are once again forced to go public to explain the industry, its concerns, and why the media has it wrong on so many issues. The essence of this negative relationality was captured by one fisher who had participated in an NGO-sponsored coastal clean-up project, “with these guys. . .they never go away, and we just can’t win”¹²⁹.”

Crossing back over the ontological partition, the capitalist ecology manifests additional relations with certain of the fishery’s objects- sometimes conceived of as “forces”- that reflect the negative relationality outlined above. Take the relations that the industry maintains with the “predators” and “pampered mammals” that populate Nova Scotia’s coasts. The most prominent predator relationality that pervades the concerns of industry actors across the province is that of the grey seal. Despite scientific evidence to the contrary (e.g., Bowen 2006), prominent voices are thoroughly convinced that the explosion in the seal population is having a negative impact on lobster stocks, as they supposedly prey during molting periods. The industry is particularly incensed by the “politics of cuteness”¹³⁰ pushed by various animal rights groups, that has resulted in numerous restrictions on seal hunting and the protection of their habitats. The burgeoning seal populations often track the harvesters’ boats, seeking dropped bait or simply to appease their own curiosity, seemingly “taunting us because they know we can’t do anything about them”¹³¹. The various species of “groundfish” (e.g., cod,

¹²⁸ Personal Communication, 25/02/2021, Joan Jennings, journalist at Halifax Examiner, Tatamagouche, Nova Scotia.

¹²⁹ Personal Communication, 08/15/2021, Anonymous, Stonehurst East Wharf, Lunenburg County, Nova Scotia.

¹³⁰ Personal Communication, 05/02/2021, Luke Pines, Meteghan, Nova Scotia.

¹³¹ Personal Communication, 08/20/2021, Percy Boyne, Merigomish, Nova Scotia.

haddock, pollock) are equally despised by the industry, as they are understood to prey on lobster eggs. After having experienced catastrophic stock collapses in recent decades, some groundfish species are making a comeback and repopulating Nova Scotia's coasts. For the industry¹³²:

“... it's a bit of an awkward stance that we take. We often claim to be good stewards, to support ecosystem dynamics, and to protect the whole habitat. But we would actually be devastated by the return in large numbers of the ground fish. If those species come back like they were 50 years ago, this industry would die. It's a complicated relationship.”

Thus, like the seals, the groundfish have come to be thought of and related to less as an essential part of a thriving and diverse marine ecosystem, and as more of a threat to the one particular slice of that ecosystem that actually matters.

The capitalist ecology's relations with the region's right whales result in similarly negative outcomes for industry actors, notably from the costs their protected status incurs among fishers. For instance, in the last decade, with fewer than 400 right whales remaining, the Canadian and American governments have imposed numerous regulations on the fishing industry to prevent deaths from collisions and line entanglements. These include mandatory speed restrictions, closed fishing areas, and expensive gear upgrades; all of which result in expensive outlays for fishers, sometimes fines, and severe disruptions to their harvesting. The industry loathing of the “pampered” right whales was on full display at the Cape Breton Lobster Association annual general meeting in March of 2021. At the meeting, members heard of new requirements for rope and safety gear upgrades that were being imposed by the American government as a condition for export. One fisher noted that the “damn whales are better looked after than the fishermen” and that with each new restriction and requirement that comes into force, “we have to pay more attention and dedicate more time to the whales than we do the lobsters¹³³.” Another member bemoaned all the attention the whales get from animal rights groups and certain “activist NGOs”, noting that:

“The whales are somehow now at the top of the food chain. . .and we are being forced to pay attention to them. This was never the case when I started 30 years ago. Everybody is so liberal now and we have to love the whales or else we're out.”

In other words, to be involved in any of Nova Scotia's fisheries means to be forced into a relationship with the protected whales, albeit one perceived as unworthy of the one-sided costs.

¹³² Personal Communication, 12/07/2021, Rich Garvin, Fishermen and Scientists Research Coalition, Halifax, Nova Scotia.

¹³³ Participant Observation, 08/03/2021, CBLA Annual General Meeting, North Sydney, Nova Scotia.

Alongside the pampered and predatory, lobster harvesters and their industry allies maintain a constant relationality with what are sometimes colloquially referred to as “unstoppable forces” or “acts of God” that manifest in the weather and ocean currents, waves, and tides. For the harvesters especially, there is a perception of being in a near constant state of war with the weather and the oceanic anomalies that it creates, with storms and swells often referred to with “he” or “she” personal pronouns as they’re cursed and belittled. For in bad weather and its aftereffects in rough seas, the fishers see nothing but threats to both their lives on unstable boats and their livelihoods in disrupted harvesting. Secondary industry actors too see weather-induced threats to supply and thus unmet deliveries and strained contractual agreements. As objects, the weather and ocean swells are treated with a mechanical relationality that sees all manner of barometric pressure monitors, wind speed gauges, digital psychrometers, seismometers, and accelerometers constituting the relationality thereto. Thus, though not yet commodified, these amoral object forces of the fishery are similarly understood through the scientific lens offered by these gadgets, which therefore seek to diminish the negative outcomes that these ubiquitous non-social forces regularly inflict on the industry.

Last, but not least of the subject-object relations that are characterized by negative relationality, is that between industry actors and the lobsters themselves. Though the capitalist ecology denies the species any form of personhood or communicative capacity, it does see in the crustacean an animate being that displays a certain mechanical agency as it seeks to retain its freedom and oceanic environs. The evasive behavior of the lobsters, coupled with the harvesters increasingly sophisticated trapping techniques, is often referred to as a “cat and mouse game”, a “rolling of the dice”, or even “chasing dinner” by fishers. As they are forced by regulation to return all undersized or egg-bearing (berried) females to the water, the fishers claim that they start to recognize individuals as they are often caught several times in a season. This familiarity sometimes results in the lobsters being named, sworn at for returning to the trap, and sometimes, though controversially, thrown in a bucket to die in the sun. Not to be confused with social intercourse, the naming of and cursing at lobsters reflects a mechanical or utilitarian relationship, in that the discourse communicates to the deck hands which are acceptable for retention and the captain’s preference for either following or violating the regulations on that day. For, as noted above among the EFA fishers at Meteghan, the lobsters are simply amoral matter and energy that can only be understood and manipulated through science, rather than persuaded or influenced through social forms.

As in the negative relationality that transpires in the relationships between subjects outlined above, the mechanical relations maintained between certain of the capitalist ecology’s subjects and objects also result in winners and losers. Thus, in relating thereto, predatory seals and groundfish get sustenance and protection, while fishers and markets get denied lobsters and commodities. Right whales are afforded slower boats and neon buoys and ropes that are easier to avoid, while fishers are stuck with the bills for upgraded gear and wasted fuel. The natural forces of the weather and waves get technological attention, while the harvesters, buyers, and exporters get fear and anxieties about meeting production and contract quotas. And lastly, particularly evasive lobsters get to live another day, while their harvester predators get to track them again in like fashion. Conversely, the traps are successful and the harvesters haul is increased, while the unfortunate crustacean gets banded, live packed, and put on a plane to China the same night. In short, the sum total of this negative relationality serves as a counterforce to the win-win positive relationality outlined above- be it strictly between subjects *or* subjects and objects- and completes the relational grid of the capitalist ecology.

	Intentional Sociality (fishery’s subjects)	Denied Sociality (fishery’s objects)
Positive Relationality	<ul style="list-style-type: none"> -Lobster harvesters -Secondary industry actors (buyers, exporters, gear dealers) -Environmental NGOs -Industry trade associations -Fishermen’s associations -Community -Conservation researchers/technicians -Fisheries and Scientists Research Society -Department of Fisheries and Oceans (DFO) -Wharf managers 	<ul style="list-style-type: none"> -Gear -Traps -Buoys -Technology -Boats -Docks -Wharves -Pounds -Lobster license
Negative Relationality	<ul style="list-style-type: none"> -Mi’kmaw harvesters -Media -Social justice activists -Activist NGOs -Academics 	<ul style="list-style-type: none"> -Lobsters -Grey seals -Ground fish (haddock, cod, pollock, etc.) -Right whales -Weather -Ocean currents -Marine flora

FIGURE 1. Relational Grid of Capitalist Ecology, including Positive and Negative Relationality Quadrants.

III. Livelihood Ethics in the Quest for Crustaceans

With regards to the economic drive to earn a simple living and gain sustenance, or alternatively to significantly profit from voracious market demand, the relational grid of the capitalist ecology gives rise to a set of ethical sensibilities that shape how and for what ends objects can be harvested, commodified, or otherwise made materially beneficial to the fishery's subjects. In the case of the commercial lobster sector, these livelihood ethics embody what this study refers to as a *techno-bureaucratic deference* that identifies who has the authority to regulate harvesting activities, how and when those authorities should be exercised, and what conditions might call for regulatory modifications. This deference heavily draws upon the epistemology of the natural sciences for total knowledge of the fishery and invests in the State the governing mandate to leverage that knowledge to further the industry's objectives. Moreover, these livelihood ethics reflect what heretofore will be referred to as a *moral framing* that shapes the capitalist ecology's understandings of the purpose of the fishery, legitimate versus illegitimate practices, and the values that are expected to guide the primary adherents' behavior in their livelihood pursuits. Though non-codified, the moral framing of the commercial sector embodies a certain "popular consensus" (Thompson 1993, 188) around the proper commercial handling of lobsters and their trade and demands reprisals against those who dare to cross those moral norms. The capitalist ecology's livelihood ethics are therefore a direct reflection of its ontological and relational foundations and are drawn upon when the beings and entities that it recognizes are put to human use for a material gain.

Techno-Bureaucratic Deference

When fisher Mac Calvert digs out his commercial logbook from beneath a pile of rubber boots and discarded claw bands, he grumbles at the annoyance and tediousness of the mandatory documentation task. However, fishing off the north coast of Cape Breton from the North Sydney wharf, he knows the importance of the process and the use to which the logbook details are put by DFO. As such, he barely blinks an eye when the traps come up and he jots down the haul weight, number of "tossers" (too small to keep), and presence of berried females. Calvert is similarly committed to participating in the annual at-sea-sampling projects that the CBLA organizes, and he readily invites the university students cum technicians from Acadia University aboard his boat to support the process. In the spring of 2021, the technicians were taking samples to document lobster carapace size, shell disease, sex, egg stage for females, shell hardness, and missing limb status. In the process, the deck hands hoist

up the trap, the technician identifies 3-4 lobsters to sample, and Calvert supports the process by slowing the boat and handing over the samples to the assessment table. Once the technician's job is complete, Calvert determines whether or not they should be returned to the sea for further growth and maturity, or kept for sale.

For Calvert and many other members of the CBLA, the DFO science process (See *Chapter 4*) is the sole authoritative entity that can assess the health of the lobster stock and make management decisions in an unbiased and scientific manner to the benefit of the industry¹³⁴. Thus, he dutifully, and 'honorably' (See below), keeps his mandatory commercial logbook and annually participates in the voluntary at-sea-sampling and sharing of related data to DFO. Though disagreements have arisen between his Association and DFO in the past, he and other harvesters trust that DFO's scientists have access to the necessary data, are unbiased, and objective in making management recommendations. Though a number of independent researchers and NGOs conduct their own studies on conservation and fisheries management related matters, the primary actors in the industry look to DFO for the most authoritative voice on how to balance stewardship against economic imperatives. Other Associations, such as the Fundy United Association and the Gulf Nova Scotia Association, carry out their own at-sea sampling projects and readily share the data with DFO in order to support future regulatory decisions on such things as carapace size adjustments, season fluctuations, or escape vent sizes on traps. In other words, though many would agree with the "fiercely independent we guys" sentiment of one fisher involved in this study¹³⁵, there is little hesitation in looking to DFO for its scientific conclusions and the regulatory modifications they inform. This deference manifests as not only a duty, but also an expectation of others in that when all share their data there is something of a collective benefit that transpires from the scientific conclusions that are derived therefrom.

A similar deference to DFO's technical and bureaucratic offerings takes place in the regulatory determinations it makes regarding the aforementioned resource system, users, and units (See *Chapter 1*) that constitute the commercial sector. For instance, on delimiting the contours of the resource system (i.e., the lobster fishery as a whole), fishers along the Northumberland Strait on the north coast regularly exhibit their adherence to DFO's lobster fishing area (LFA) regions and the varied official rules that govern each. Split between LFAs

¹³⁴ It's worth highlighting that the commercial fishers identified in *Part III* of *Chapter 4* that criticize the DFO science process (i.e., on the issue of "problem closure") are in an absolute minority. The overwhelming majority from the commercial sector see the DFO science process as the sole authority on such matters.

¹³⁵ Personal Communication, 29/09/2021, Anonymous, Margarettsville Wharf, Nova Scotia.

26a and 26b, the fishers from the region, who mostly belong to the Northumberland Strait Fishermen’s Association, regularly meet to ensure a common understanding and recognition of the marine border between the two. Because different regulations govern the number of licenses, allowable traps, and minimum carapace size between each LFA, the fishers see it as essential to educate themselves on the border and how to avoid it when setting traps. Though most from the region don’t know why the split between LFAs 26a and 26b exists, there is a general assumption that DFO has good scientific reason for doing so and that it should be honored. Fisher Trey Anastasio from Pictou explains¹³⁶:

“DFO makes the LFA determinations for a reason, they aren’t arbitrary. Even though the seasons are the same for each, maybe it’s a way to split up the fishers and keep the traps from piling up. Or maybe it’s the migrations or molting in the summer? DFO draws the borders, and we honor them. . .and we have to educate the new guys about them too.”

Other fishers from Digby and Shelburne counties echoed the sentiment in seeing DFO as the sole arbiter in determining the “landscape” of the fishery, and for ensuring that the individual regions, including the disputed region with the U.S. in the Gulf of Maine, were properly administered and regulated. For, “if not DFO, would we allow for a tragedy of the commons¹³⁷?”

A deference to DFO’s bureaucratic apparatus also takes place in the identification of “proper” or “legitimate” resource users (i.e., harvesters) and the commodified units (i.e., lobsters) they wish to sell. Take the steps William Erns goes through at the Mobley Lobster Company in Yarmouth in determining that the fishers he buys from are properly licensed, operating officially and with the proper number of traps. Though Erns knows most fishers around Yarmouth Bar where he works, at times others from Pinkney’s Point or Wedgeport wharves approach him to sell their catch. As a condition of purchase, Erns requires proof of a current and valid commercial license, as well as indication that the traps used were set in the correct LFA given that the border between 33 and 34 is close to Yarmouth. Occasionally, when a seller is new, Erns reaches out to the harvesters that he does know, as well as other buyers around the region, to assess what he refers to as the “good standing” or “bonafides” of his potential new client. In his estimation, the lobster fishery is successful and lucrative for businesses like Mobley Lobster Company precisely because it is well managed and regulated. Erns clarifies¹³⁸:

¹³⁶ Personal Communication, 13/04/2021, Pictou wharf, Nova Scotia.

¹³⁷ Personal Communication, 19/06/2021, Jason Starr, Ingonish, Cape Breton Island, Nova Scotia.

¹³⁸ Personal Communication, 21/04/2021, Yarmouth Bar, Nova Scotia.

“Why rock the boat? DFO seems to be doing it correctly, with the limited licensing and trap limits. These guys, the legitimate ones that follow the rules and such, they are making a killing. Some of the bureaucracy is annoying, but someone has to govern the industry for it to be this successful. That’s only DFO, the province couldn’t handle it.”

In other words, as in the quote above, Erns’ perception that a fishery commons, or “fishing chaos” as he puts it, would ruin the industry and that regulatory enforcement is therefore essential. As such, he and most other buyers in the province take the extra steps to ensure that both the resource users and the units they’re offering have DFO’s bureaucratic backing.

The livelihood ethics’ techno-bureaucratic deference is also on display in the ways the province’s myriad fishing wharves are managed and regulated to facilitate industry operations. Though variably overseen by fishermen’s associations, local communities, or fishers’ cooperatives, the wharves universally have a set of rules, regulations, and terms of use that are in place as a condition of access. Such terms include registration of docked boats, proper disposal of waste and spent equipment, predetermined hours of access for recreational purposes, and designated locations for parking and storage of disused equipment. Hence, unlike wharves that are exclusively for recreational purposes, the use of commercial wharves comes with the expectation that you understand the rules, that you recognize the authority of the management committee, and that you adhere to the regulations that govern “proper conduct”. Most fishers understand and respect the necessity of the regulatory gateway to the sea that the wharf becomes and dutifully jump through the bureaucratic hoops that its use demands. The wharf manager at Glace Bay summarizes¹³⁹:

“. . .to use the wharf, which you have to if you want to be a fisherman, means that you pay your dues, that you complete the annual registration, that you report waste disposal, that you follow the rules, and most importantly, that you keep your gear in its designated space so as to not impede others’ access.”

Thus, as in the acceptance to DFO’s overlordship of the fisheries science and species, space, and user delimitations, the capitalist ecology sees in wharf management a necessary and efficient regulatory framework that facilitates the smooth functioning of the commercial sector. Absence such rigid management systems, livelihoods within the lobster industry would be “improper, a free for all, and something like the anarchy the natives want to impose¹⁴⁰.”

In many ways, the techno-bureaucratic deference is a direct reflection of the “story lines” discussed in *Chapter 4*. Hence, when there are “too many fishermen, not enough fish”

¹³⁹ Personal Communication, 10/06/2021, Anonymous, Glace Bay, Nova Scotia.

¹⁴⁰ Personal Communication, 15/12/2021, Anonymous fisher, Middle West Pubnico, Nova Scotia.

and “seasons for a reason”, the impression is generated that an overarching, all-knowing, and omnipresent force is necessary to avoid the potential conservation related problems that led to the story lines in the first place. Put differently, deferring to DFO’s science process, regulations, and bureaucratic management is understood as good ethical practice, honorable and reflective of professionalism precisely because they are the only “control mechanisms” (Martin 1978, 35) in place to prevent the over harvesting that an unaccountable market economy, or amoral rapacious fisher, would allow for. Thus, whether you earn a livelihood from catching, buying, or exporting lobsters, or alternatively from selling the gear, boats, or technology used in the harvest, navigating the techno-bureaucratic maze is not only required, but also a necessity for the long-term sustainability of the industry and one’s reputation.

Moral Framing

Equally fundamental to the capitalist ecology’s livelihood ethics is the moral framing that both construes the overall purpose of the fishery *and* communicates the values that are expected to shape one’s livelihood pursuits. Regarding the former, it is important to remember the motivations of the earliest European settler-fishers to exploit the bounty therein. While some may have harvested marine resources for daily sustenance, the majority beginning in the 16th century pursued the harvest to feed the growing market demand from Western Europe to the Mediterranean, and the West Indies (Choyce 1996, 47-58). As settler communities in Nova Scotia grew, so too did the markets grow and diversify in order to serve both overseas customers and those in the settler communities themselves (Calhoun 1991). With the arrival of the 19th and 20th centuries, the industry’s increased professionalization and technological advancement was coupled with an “enhanced commercialization”, especially for the most lucrative species, and thus a further reliance on markets to reward fishers and dictate the course of the industry (Wagner & Davis 2004, 325). In other words, from its earliest iterations and into the 21st century, the capitalist ecology has envisioned the *purpose* of the fishery to be one that feeds market demand, be it local or afar, and generates a moral requisite to meet that demand whenever it arises.

Consider the daily routine of Nick Johnson, the chief procurement officer at Clark’s Harbor Fisheries, Ltd. in Yarmouth County. Johnson’s job is to sell lobster, to whomever is willing to pay the most. In the 1990s and early 2000s, most of his product was exported to the United States and Europe. However, in the last 10 years, Johnson’s focus has been on East Asia. Waking up each day at 3 A.M., Johnson starts his calls to fellow procurement officers at various seafood importers in South Korea and China. They discuss shipment schedules, live

versus processed orders, quality control measures, eco-labeling, Covid-19 prevention efforts, and, of course, the current price per pound of lobster. By 10 A.M., Johnson's middleman in Vancouver at ChiCan Seafood Ltd. is awake and helping to coordinate the shipments, payments, and translation complications working between English, Korean, and Mandarin. For Johnson, precision and logistics are everything, as his lobsters have to be bought off the docks at Clark's Harbour and Shelburne, trucked to a live pound at Yarmouth for packaging, trucked again to Halifax International Airport, and flown to Seoul or Shanghai within 30 hours of coming out of the water. Though complex, Johnson sees it as "the best business model" as the East Asians are "paying so much more than anybody 15-20 years ago¹⁴¹." To him, there is an "obligation" to get the lobsters on planes, as that's what's fair and just in the market economy he operates within. He notes:

"This isn't charity. We're not feeding the homeless. This is how it works. . .if Sobey's¹⁴² here in Nova Scotia wants to pay more then I'll go with them. But nobody here will pay \$30 for a lobster. No way. Besides that, I have an obligation, a business relationship that's been in the making for 10 years, we have to meet our delivery quotas."

A similar sentiment exists among harvesters, who regularly chuckle at how "even the poorest Nova Scotians" used to have access to lobsters, before they became such a lucrative export commodity.

Fisher David Stanford from Arisaig recalls that in the 1970s the biggest customers were local supermarkets, even farmers markets in the nearby towns. "Back then", he notes¹⁴³, ". . .that's who was paying the most, the little shops, sometimes the ones in Halifax, but nobody else offered anything." In those days, lobster was considered a "poor man's lunch" or "what's left in the cupboard", as low prices meant local markets and poorer customers. However, in the 1980s and 90s all of that began to change as globalization increased, consumers tastes around the world were shifting to seafood, and demand and prices skyrocketed. For Stanford, everything changed:

"Suddenly us poor fishermen were sitting on a gold mine. It's like we woke up to other opportunities. New buyers came in. They were offering \$7, \$8, \$9 a pound. Of course we went with them, we couldn't sell locally after those opportunities. Nova Scotians could barely even afford lobster anymore. That's unfortunate, but we have a business and we follow the demand."

Echoing Johnson's drive to export, harvesters like Stanford see market signals, not social need or communal obligations, as that which motivates them in their livelihoods. "The market

¹⁴¹ Personal Communication, 11/08/2021, Yarmouth, Nova Scotia.

¹⁴² Local supermarket chain.

¹⁴³ Personal Communication, 23/03/2021, Antigonish, Nova Scotia.

is king”, as one industry consultant explained¹⁴⁴, and if fishers want to survive in this cutthroat industry, “then they have to understand why they are fishing, or what the fish are for in today’s economy”. In other words, the purpose of the fishery is to meet the market demand that allows for its survival, and if your livelihood within the fishery contributes to that purpose, then you are among the morally righteous actors like Johnson and Stanford.

Alongside this market driven purpose, the moral framing of the capitalist ecology embodies, communicates, and even demands particular values that shape the requisite livelihood practices. For instance, what manifested as a near ubiquitous value during this study’s documentation of subject-subject relations, and thus pervaded all levels of the commercial sector, is that of *competition*. Though referenced above in the discussion on positive relationality, it’s important here to highlight how competitiveness in all aspects of the industry is not only essential to one’s economic survival, but also understood as a proper, just, and righteous moral attribute for a professional in the industry. Thus, the most highly regarded buyers are considered the ones who out compete the others on offering the best “shore price” for lobsters. The most reputed exporters are the ones that out compete the others on transport time and fuel costs. Celebrated equipment dealers offer stronger traps and ropes and are the first to offer the newest technological gadget. Fishermen’s associations compete with one another to offer the lowest dues, the best access to DFO, and the best collective representation. Even wharf management committees compete to attract resident fishers by pronouncing their better access, newer facilities, and superior safety records. And of course, the fishers themselves are in a daily cutthroat scramble to be the first at the wharf, the first on the water, the first to lay traps, and to bring in the biggest hauls.

The fishers at Meteghan wharf put the value of competitiveness on full display when their season kicks off each year in late November. Though friends (or at least friendly) in the EFA offices on the wharf, once on the water the fishers are stern opponents and all business. They keep a constant eye on others’ traps and “cut rope” when considered to be laid too close to their own. They sometimes argue about territorial markers around St. Mary’s Bay and upset each other’s boats with aggressive wakes. They spy the hauls of others and try to be the first to reset traps when a particularly bountiful cove is discovered. Once back at the dock, there is sometimes a race to negotiate first with buyers as some have limited storage space or quota for certain higher prices. The clandestine spying of each other’s hauls at the wharf discussed above in *Section I* is also a manifestation of the competitive spirit and shows a willingness to

¹⁴⁴ Personal Communication, 27/01/2021, Will Smith, Canadian Association of Fish Harvesters, Halifax, Nova Scotia.

mimic others' techniques and bait preferences if it means a larger haul. There is even a measure of competitiveness at the end of the season in the conspicuous consumption of new trucks, new boats, and new gear as a form of outward boasting of success and fisheries prowess. EFA head Luke Pines summarizes¹⁴⁵:

“...sometimes its hard to be both friends and fishermen at the same wharf, or in the same LFA. We really go after each other. It can get tense. It's so competitive and sometimes even unfriendly, at least when we're fishing. But that's how it is, more lobster means more income.”

Against this near ubiquitous competitiveness, livelihoods in the commercial sector are equally shaped by what might be called the value of honor, or even righteousness. Various alluded to above on the comportment expected of 'professional' fishers, honor manifests in various ways depending on one's station in the industry, but generally shows itself as a commitment to following the regulatory framework, adhering to the informal 'codes' that govern certain practices, and contributing to the overarching purpose of feeding the markets. Hence, as a fisher, one is considered honorable if he or she embraces the 'techno-bureaucratic deference' of the commercial sector and doesn't try to skirt the rules that DFO enforces. One also reflects the value of honor when respecting such informal norms as the 'gentlemen's agreements' on territory and exclusive fishing zones, when adhering to the custom that requires one to keep his traps a good distance from others, and, in a reflection of *positive relationality*, when coming to the aid of his fellow fishers when in need. For the secondary industries, one demonstrates honorable behavior by offering an acceptable and fair price (e.g., whether buying lobster or selling gear), when the terms of contracts are respected, or when the interests of the industry as a whole are represented and defended in the face of a perceived threat (e.g., indigenous harvesting). In other words, honorable livelihood practices are those that recognize the integrity of all those involved in a transaction and that ensure that there is an equal playing field for the parallel value of competitiveness to play out.

Fisher Dan Garvin demonstrates the value of honor, or rather dishonor, in his recognition of having violated his fellow fishers' trust for breaking a key DFO regulation for years. According to the *Fishery (General) Regulations*, and DFO's enforcement thereof, individual harvesters are allowed to be in possession of one commercial license and to fish only the corresponding number of traps. For several years, Garvin possessed two licenses which effectively allowed him to double the number of traps that he was using and dramatically increase his annual haul. Once it was discovered by other fishers around

¹⁴⁵ Personal Communication, 22/04/2021, Meteghan Wharf, Nova Scotia.

Shelburne where he docks, and at the Plymouth Rock Fishermen's Association that he belongs to, Garvin became something of a pariah in the community. According to his own assessment, he was considered "a cheat", "a thief", "unprofessional", and "almost like a native"¹⁴⁶. Garvin lost friends, was nearly kicked out of Plymouth Rock, and even had trouble finding a willing buyer for his catch on a few occasions. Having happened nearly 10 years ago and come clean with DFO, Garvin is once again in the good graces of his fellow fishers. But, having been considered "dishonorable" for many years, Garvin still feels "regret" and "shame" for his past actions. This episode shows that while the value of competition is pervasive, it's only considered legitimate when it's counterbalanced by the value of honor that demands respect for the rules, integrity, and assurances that others can compete on fair footing.

Taken together, the techno-bureaucratic deference and moral framing dimensions constitute the ethical domain within which livelihoods in the dominant capitalist ecology are enacted. While not necessarily sacrosanct, and potentially subject to evolution over time, these livelihood ethics serve as guideposts for acceptable and proper behavior for the commercial industry's resource users. Moreover, they can also serve as an indicator of wrongdoing or unscrupulous behavior when violated and therefore invite reprimand to offenders of the relevant norms. Reflective of the certainties of naturalism's dichotomies and embedded within the relational grid of the fishery's subjects and objects, livelihood ethics are just near the surface of controversy when alternative ecologies offer alternative ways.



¹⁴⁶ Personal Communication, 02/09/2021, Shelburne, Nova Scotia.

CHAPTER SIX

Steps to an Ecology of Yore

Cultural Revival, Indigenous Harvesting, and the Emergence of Ecological Plurality

*If I don't live it, teach it, preach it, set the example, be it, share it, taste it, I'm not playing my
role as a teacher.*

Mi'kmaw natural resource manager on the promotion of *netukulimk*¹⁴⁷

*Two-Eyed Seeing is learning to see from one eye the strengths of indigenous knowledge and
ways of knowing, and from the other eye with the strengths of Western knowledge and ways of
knowing, and to use both of these eyes together, for the benefit of all.*

Elder Albert Marshall (2022)

¹⁴⁷ Clifford Paul, Unama'ki Institute of Natural Resources at <https://www.aptnnews.ca/ourstories/netukulimk>, accessed August 2021.

I. The Ecological Contours of an Indigenous Cultural Revival

Though the hegemoniality in the fisheries sector had by the 20th century resulted in a near ‘total loss’ of the Mi’kmaw ecology of yore, global efforts to “reclaim and regenerate” indigenous cultural practices impacted by colonialism (Corntassel & Bryce 2012, 153) have in recent decades been leveraged to begin to turn the dial back towards the ecological plurality end of the continuum in Nova Scotia’s fisheries. For background, Alfred and Corntassel comment on recent trends among indigenous peoples around the world to push back against “contemporary colonialism”, which manifests in subtle ways that target history and cultural identities, by pursuing “processes of regeneration” and a reconstruction of “original teachings and orienting values” (2005, 611). Others have commented on how the “cultural poverty” of centuries of colonial-settler dispossession in various parts of the world has engendered a certain community empowerment (Dockstator et. al. 2016, 22), and a resulting move towards “daily acts of renewal” (Corntassel 2012, 87-89) and “social and cultural rejuvenation” (Elliot 2017, 61) of the communities and lifeways so impacted therefrom. In Canada specifically, we read of a “cultural resurgence” that has taken root in recent decades as First Nations, Inuit, and Metis peoples seek to revitalize their communities through a reconnection to the past (Favrholdt 2022). One of the most prominent areas that indigenous cultural revival has taken place was highlighted in a speech to the United Nations in early 2021 by the Native American U.S. Secretary of the Interior- Deb Haaland. She remarked that although indigenous peoples had been marginalized for generations, their various forms of ecological knowledge and how best to manage “lands, waters, and resources” had experienced a renewal in recent decades and pointed the way towards a more sustainable future¹⁴⁸.

Prins documented this particular form of indigenous cultural revivalism centered around ecological knowledge to have originated in the 1970s- a phenomenon he referred to as “ecospiritualism”- which has only grown in global significance in the decades since (1996, 206). Hence, in Australia we read of indigenous communities working to “resurrect traditional land and sea management strategies”, which includes a reintegration of “spiritual morals” in how fish, shellfish, and sea mammals are treated and harvested (Ross & Pickering 2002, 188). In New Zealand, the federal Environmental Protection Agency has begun to integrate revived traditional Maori understandings of land and ecosystem management and natural resource

¹⁴⁸ United States Mission to the United Nations- “Remarks by Secretary of the Interior Deb Haaland at the UN Permanent Forum on Indigenous Issues”, 19/04/2021.

use, including the “morals or values” that shape them (Cernansky 2021). In the American state of Oklahoma, a coalition of indigenous groups is working with local government actors to resurrect “symbiotic relationships” with wild buffalo herds in order to restore ecological balance and ecosystem dynamics on the American plains (McHugh 2022). A similar “revitalization of indigenous land and water-based cultural practices” (Corntassel & Bryce 2012, 160) has been increasingly documented in Canada as well, alternatively articulated as a “reclaiming of the past” (Butler 2014, 187), an “ethnic reawakening” (Hornborg 2008, 129), or “cultural revitalization” (McMillan 2011, 194) of traditional ecological knowledge.

Among the Mi’kmaq in particular, anthropologist and scholar of contemporary Mi’kmaw society, Simone Poliandri (2011) has extensively documented a rising interest in “tradition and traditionalism” among various communities in Nova Scotia; the revival and reengagement therewith constituting a fundamental strategy for defining a contemporary indigenous identity. With respect to the ecological contours thereof, Mi’kmaw scholar Sherry Pictou (2019) highlights that not only are traditional hunting and fishing livelihoods gaining in popularity and indigenous participation, but they are increasingly being realized with reference to, and a certain reclaiming of, the pre-contact ecology outlined in *Chapter 1*; a phenomenon that Poliandri (2003) witnessed among Mi’kmaw lobster harvesters as early as 2000. As such, a number of Mi’kmaw activists, organizations, and communities have leveraged this ‘reawakening’ and growing interest in ‘tradition’ to enact harvesting approaches, beliefs, and practices that specifically diverge from those realized within non-indigenous society and associated commercial sectors. One might see in such efforts at ‘regeneration’ and ‘renewal’ by the former as a deliberate construction of an alterity vis-à-vis the dominant capitalist ecologies that constitute the human-environment relations of the latter. As such, not only do we see parallels connecting the Mi’kmaq with a more general revivalist phenomenon, but more specifically in attempts to make practical pre-contact understandings and practices of engaging with the natural world in order to realize livelihoods that are distinct from what economic assimilationist programs would have them be (See *Chapter 3*). The resulting divergences in these specific human-environment relations, especially in the years since the *Marshall Decision*, constitute variable inclinations toward an emergent ecological plurality in the lobster fishery of Nova Scotia.

Ontologies and Relations of Old

When Mi’kmaw elder James Robinson speaks to the staff at the Indigenous Institute for Natural Resources (IINR) on Cape Breton Island, to which he is an advisor on resource

management issues, he always begins his lectures with an outline of what he calls “first principles”¹⁴⁹. For Robinson, while Mi’kmaw communities around Nova Scotia may be experiencing a “process of cultural revitalization”, especially around issues of traditional marine harvesting and conservation measures, the reassertion of the principle of a “unified nature with humanity” was necessarily at the root of all such efforts. Hence, Robinson often speaks of man’s “co-existence with the natural world” and the interconnections and interdependencies between all beings and entities that constitute that whole. Robinson advises the staff to remember that “nature is not an object, but a subject” and that when developing or managing programs aimed at promoting sustainable hunting and fishing, to remember the social obligations required in such endeavors. As simply a conveyor of knowledge, Robinson insists on the recognition that “the land is our teacher and we are students of life”; key principles that, when adhered to, remind the Mi’kmaq what their “responsibility to and relationships with nature are”. Robinson sees in his teachings to a younger generation of environmental stewards a key tool in “warding off centuries of learning that turned us into exploiters of nature”.

The teachings that Robinson delivers are reflective of a general reengagement with and leveraging of certain indigenous assumptions centered around the notions of *interconnection*, *unity*, and *cycles of life* that constituted the ontological foundation of pre-contact Mi’kmaw society (See *Chapter 1*). Elder Kerry Prosper often speaks of a “spiritual revitalization” to capture the phenomenon taking place and sees in the process a reestablishment of the “severed spiritual connection to land and animals and restored respect for relations with the environment” within Mi’kmaw communities (2009, 80-81). For Prosper, this “realigning with the spiritual past” is enabling a “relationship of mutual existence and reciprocity” between the human and non-human worlds, and therefore a foundation for the “continued sustainable existence of all” (2009, 86). Similarly, Mi’kmaw scholar Tuma Young highlights the revived recognition of the variable “life forces” that constitute Mi’kmaqi and how the *L’nu* (Mi’kmaw people) are once again “learning how to live and interact with the other life forces that share the same ecological space” (2018, 10-11). Young notes that as the Mi’kmaq reconnect with an “animistic view of the world”, they increasingly relate to the “plants, animals, fishes, and other life forces, like fungi and bacteria” that share the same *Wikwom* (traditional dwelling or lodge) as the *L’nu*, including the “alliances” that all life forms and forces share therein. In other words, Young sees a unified subject world of beings

¹⁴⁹ Personal Communication, 08/03/2021, Cape Breton Island, Nova Scotia.

that is reemerging and being put to use in how livelihoods are being envisioned; a relational dynamic that scholars of the pre-contact era often described as one of “ontological equality” (Hornborg 2008, 24).

One Elder spokesperson cautions that the inclinations towards a reversion to pre-contact ontological assumptions isn’t “total, or fully subscribed to”¹⁵⁰, but rather a more generalized recognition of humanity’s place in and responsibility to the natural world, especially among those who gain a livelihood through particular human-environment relations. He notes:

“I don’t think that we are talking about a full return to living in the way we used to. That’s not possible anymore and we’ve been in this society for so long now. But many people are becoming more mindful that we have to take care of nature, to not overexploit it. Like the teachings of our ancestors, that we are in and of the natural environment and so we have to put that into practice.”

On this point, it’s worth reiterating that the current discussion isn’t meant to convey a universal phenomenon taking part across the whole of Mi’kmaw society; one in which an “ecological indian” is being reborn (Krech 1999) and fully enveloping in one fell swoop all previous notions of profit making and engagement with market realities. Nevertheless, as in the words of the spokesperson above, many do perceive a rising recognition of man’s place outside of a rigid nature↔culture dichotomy taking root, notably among those pursuing hunting and fishing livelihoods. And this is especially apparent when those livelihoods grate against the naturalism of non-indigenous society. He continues:

“. . . look at the moderate livelihood fishers today and the plans that they are putting into place. They seem to understand the interdependencies and interconnections that they have with the marine resources. They aren’t just trying to fish it till it’s gone. They’re trying to raise awareness, an awareness that we once had but lost. Fishing or hunting without knowing your place in the natural world. . . that’s what DFO wants them to do. They will destroy the fishery That’s what I meant when I wrote about spiritual revitalization a few years ago.”

We see in these ontological leanings not a simplistic revival or mimicry of pre-contact assumptions about what beings and entities exist, but rather a contemporary adaptation of those assumptions put to use in sustainable livelihoods, including as a way to distinguish between indigenous understandings and those of a naturalist variety communicated by the capitalist ecology. In many ways the sustainability of those livelihoods is being pursued through a reemphasis on relationships.

¹⁵⁰ Personal Communication, 30/10/2021, Elder spokesperson, St. Francis Xavier University, Antigonish, Nova Scotia.

In a recent study that looked at ways Mi'kmaw communities were rebuilding and establishing sustainable livelihoods, researchers highlighted the focus on “managing new relationships” that was at the core of many such efforts (McMillan et. al. 2018, 249-250). As such, not only were there community efforts to “re-establish and rebuild cultural connections”, as in the general ‘cultural revitalization’, but a focus on doing so through reestablishing “relationships with natural resources”. The researchers found that in revitalizing natural resource management techniques, “moral and ethical relationships” were presented as critically important for the sustainability of gains, and those relations were conceived of as extending beyond the human communities to “their lands, animals, and other biomaterial as a result of thousands of years of constant interaction”. A spokesperson from the Confederacy of Mainland Mi'kmaq sees a similar expanded relationality built upon the general reassessment of ontological assumptions taking place (Gillis 2019). She notes that as Mi'kmaw communities increasingly pursue marine livelihoods in the 21st century, there is a rising adherence to the Mi'kmaw concept of *Msit-No'kmaw* (“all my relations”)¹⁵¹, which stresses that relationships are to be maintained with all living and non-living beings. Moreover, she notes that *Msit-No'kmaw* communicates that all beings and entities in one's environment are to be treated with respect and recognized as part of a broader interconnection of the life-cycle; a relational dynamic that she increasingly sees in Mi'kmaw communities that are once again harvesting salmon, eel, and lobster.

Beyond marine harvesting, resource managers from the IINR see a flourishing of these forms of expanded relationality among Mi'kmaw moose hunters on Cape Breton Island. According to the organization's moose management coordinator, more and more young people are getting involved in resource management and recognizing “the relationships between every member of an ecosystem, between the insects, the plants, the animals, the bears and berries, the moose, us” (quoted in Johnstone-Laurett 2018, 18-19). He notes that before organizations like IINR had started to promote a return to “Mi'kmaw values” and “traditional ecosystem management”, the communities had “bad relationships with Mother Earth, bad relationships with families, it was dangerous”. However, through such projects as the Moose Management Initiative, there has been a reconnection and re-establishment of relationships between “local communities and local ecosystems”. The coordinator notes¹⁵²:

“We are starting to regain some of what was lost. I see this especially in the hunters who are out here every season. People have started to recognize again that you can't isolate anything,

¹⁵¹ Covered in *Chapter 1* on the pre-contact indigenous ecology.

¹⁵² Personal Communication, Indigenous Institute for Natural Resources, Moose Management Coordinator, 20/12/2020, Cape Breton Island, Nova Scotia.

including us, we are part of the ecosystem in which we live. When you are in a relationship, you start to have obligations and moral connections. I see that coming back now.”

Hence, as in the relationality between fishers and marine ecosystems highlighted above, the IINR’s work builds on the terrestrial version of expanded moral commitments and sociality that have extended beyond the human realm of Mi’kma’ki in recent decades; both of which are rooted in the increased (re)recognition of the Mi’kmaq place in and of the natural world.

While impossible to generalize these revivalist phenomena across all Mi’kmaw communities in Nova Scotia, this “counter-narrative” (Butler 2014, 222) and the practical realization of an indigenous alterity to the forms of economic assimilation presented in *Chapters 2 & 3* is of essential importance in the current fisheries dispute. Hence, the reassessment of humanity’s place in the cosmos, coupled with a certain “healing of relationships” (Kimmerer 2000, 9) lost to centuries of ecological hegemoniality, manifest ubiquitously in the speeches of elders, press conferences held by band fisheries departments, from indigenous-led environmental groups, and in moderate livelihood fisheries management plans. As elder Robinson notes, “. . . there is a reevaluation of who we were and who we are going to be and it’s not just in ideas. It’s also impacting practices, as in the way livelihoods are being pursued around the province¹⁵³.” And one of the most obvious places to see this revival of the pre-contact ecology is precisely in the way hunting and fishing livelihoods are being envisioned and the ethical frameworks that many are advocating for in guiding their implementation.

Livelihood Ethics Reimagined

Though these re-imaginings of ontological and relational leanings have largely operated in the conceptual sphere of what might be termed “traditional ecological knowledge” (Menzies & Butler 2006), the parallel revival of pre-contact livelihood ethics has manifested in more concrete ways. Hence, beginning in the late-1980s, Mi’kmaw communities and leaders began a push to revive and reintegrate various guidelines, standards, and spiritual relations and moral values into how hunting and fishing livelihoods were pursued. The revivalist effort was kicked off in 1987 with the publication of *The Mi’kmaq Treaty Handbook* by the 13 regional Mi’kmaw chiefs throughout Nova Scotia¹⁵⁴, which serves as perhaps the founding effort to officially reimagine indigenous livelihoods with reference to

¹⁵³ Personal Communication, 20/02/2021, telephone interview, Cape Breton Island, Nova Scotia.

¹⁵⁴ Under the auspices of the Grand Council of Micmacs, the Union of Nova Scotia Indians, and the Native Council of Nova Scotia.

the pre-contact ecology. While the *Handbook* is noteworthy for its declaration that Mi'kmaw hunting and fishing livelihoods would from then on be executed “without regard to provincial restrictions relating to seasons, quotas, licenses, etc.” (1987, 14), its most profound significance comes from being the first written definition of *netukulimk* on record. Though the definition is limited to a general statement on “achieving adequate standards of community nutrition and economic well-being without jeopardizing the integrity, diversity or productivity of our native environment”, it lays out in clear terms the “guidelines” that Mi'kmaw hunting and fishing livelihoods should follow henceforth.

From this original impetus, three decades of “revitalization and re-embedding” (Prosper et. al. 2011, 12) of *netukulimk* into the livelihood practices of Mi'kmaw communities was initiated. Hence, in 1993 the Mi'kmaq Grand Council published its comprehensive *Mi'kmaq Fisheries Netukulimk: Towards a Better Understanding* in order to promote the reintegration of “traditional ecological knowledge” into fisheries efforts. The document promotes the Mi'kmaw “worldview that encompasses all living things, both animate and inanimate beings that are alive and embraced with spirit”, reiterates an “all encompassing relationship with the universe and respect for all living things”, and meticulously outlines an indigenous approach to marine species' biology, habitat management, conservation, and harvesting techniques and regulations, all according to *netukulimk*. In the years that followed, the Mi'kma'ki Aboriginal Fishery Service was established, later renamed the Eskasoni Fish and Wildlife Commission, to promote *netukulimk* “principles and values” in not only fishing livelihoods, but also hunting, trapping, and harvesting of forest and mineral resources (Milley & Charles 2001, 3-5). On fisheries in particular, the Commission envisioned a “Mi'kmaq fishery management system” that would operate outside of federal and provincial regulations and according to “traditional values, and present-day aspirations” (ibid).

While these early efforts at realigning livelihoods with an ecology of old resulted in some successes, it was the *Marshall Decision* in 1999 that most significantly “brought to the foreground Indigenous models of resource management and stewardship as exemplified in the concept of *netukulimk*” (McMillan & Prosper 2016, 641). For, not only did the landmark decision give new impetus to demands for self-government and the upholding of Treaty rights, it also showed that the State was unwilling to compromise on its regulatory framework and allow for alternative approaches. In other words, in parallel to the post-Marshall economic assimilationist efforts presented in *Chapter 3*, there was a growing interest realizing indigenous fisheries in a different way, in “fisheries driven by an ethics of sustainability, instead of fishing-as-business” (Seymour & Carlson 2020, 7) that was promoted by those

efforts. One Elder associated with the indigenous led advocacy and official negotiating body, the Mi'kmaq Rights Coalition (MRC), clarifies¹⁵⁵:

“... after the *Marshall Decision*, we became Indian again! There was suddenly a lot of interest in *netukulimk*, in what it meant and how it could be put into practice in our newly won Treaty rights. Even younger people who had never been hunting or fishing were starting to learn about it and became interested. All the post-Marshall programs were trying to steer us in a different direction but that's not where people wanted to go initially.”

Thus, the explosion of interest in *netukulimk* following the *Marshall Decision* was both part and parcel of the general cultural revival outlined above, as well as a way to push back against the perceived “neoliberalism and industrial fishing models” (Pictou 2014, 14) that the dominant capitalist ecology was encouraging. Though not to be understood as a universal phenomenon among all indigenous hunters and fishers in Nova Scotia, the revival of *netukulimk* that has been witnessed among many may be thought of as an example of what Poliandri refers to as an “operational” engagement with tradition in Mi'kmaw society, in which a “blueprint for daily social behavior” is offered and applied to such livelihood pursuits (2011, 110), albeit with reference to the past and to highlight divergences with non-indigenous ways.

Thus, in the two decades since the *Marshall Decision* we see a blossoming of interest in *netukulimk* as a “value based management system” for the harvesting of terrestrial and aquatic species (Prosper 2009, 80), as a tool to “decolonize indigenous resource management” (McMillan & Prosper 2016, 639), as a “means to reconnect with land, language, and culture” (Moffit 2020, 244), or more generally as a “cultural and identity marker” for the Mi'kmaq as a distinct people (AMEC 2013). Perhaps most importantly for the current study, *netukulimk* revivalism has underpinned various efforts to encourage, manage, and structure various livelihood pursuits and conservation initiatives in recent years. For instance, the Assembly of Nova Scotia Mi'kmaq Chiefs has applied the “Law of Netukulimk” to develop a set of guidelines for moose hunting that covers issues related to the required ritualism related to the hunt, the role of the community in regulating the hunt, and the specific approach to protection and stewardship of the moose itself (ANSMC 2009). The IINR has developed an eel harvesting plan that applies the *netukulimk* lens and communicates the “Mi'kmaq consciousness” that guides such livelihood pursuits. This includes the values of sharing and reciprocity towards community, the requisite tobacco offerings to give thanks to the eels and “Mother Earth”, and the importance of habitat protection and non-harvesting during the

¹⁵⁵ Personal Communication, 26/01/2021, telephone interview, Truro, Nova Scotia.

reproductive cycle¹⁵⁶. In early 2021, the Acadia and Bear River Mi'kmaw communities built on the IINR framework and developed their own “*Netukulimk* Eel Fishery Plan” that would work to “sustain Mi'kmaw families, communities, and society” through applying the principle of *netukulimk* (Withers 2021).

In the fisheries sector, the MRC has been at the forefront in leveraging this growing interest in *netukulimk*, including the ontological and relational foundations of it, to establish new fishery efforts in accordance with both Treaty rights and these emergent livelihood ethics, not that of DFO. Thus, the MRC applies its “Standards of a *Netukulimk* Livelihood Fishery”¹⁵⁷ as it advises and guides bands on the development of moderate livelihood fishery plans. The standards cover issues of conservation and marine stewardship, the communal benefits of the harvest, species and season determinations, catch reporting, safety, and the harvesting values and deference to the natural environment that are to guide the fisheries. While there has been some initiative to apply the standards to salmon fishing, in the lead up to the current dispute that was kicked off in St. Mary's Bay in 2020, most efforts had gone towards the newly energized efforts in the Mi'kmaw lobster fishery. And it is in these newly constructed fishery plans and the practices they guide and facilitate in the lobster fishery that the roots of the current dispute are to be identified.

II. Moderate Livelihood Fisheries as Applied Revivalism

The moderate livelihood fisheries that were launched in 2020, as well as the additional iterations that were either being planned or newly launched in 2021, share a number of things in common, including strategy, timing, and objectives. However, for our current purposes, perhaps the most noteworthy aspect is the near unanimous articulation and demonstration of inclinations toward aligning with and adapting to contemporary conditions, various aspects of the pre and early-contact ecology outlined in *Chapter 1*. Hence, some of the involved bands highlight the ontological interconnections and interdependencies between Mi'kmaw fishers and the oceanic environs they are operating within or preying upon. These harvesting efforts engage with and reiterate the expanded moral commitments and relationality a diminished subject-object dichotomy implies. Other bands expound upon and ‘reimagine’ the livelihood ethics that purportedly guide their harvesting efforts, including proclamations on who has the

¹⁵⁶ Mi'kmaq Eel Sustainability *Netukulimk* at <https://www.uinr.ca/library/eel>, accessed November 2021.

¹⁵⁷ Found at https://mi'kmaqrights.com/?_page103, accessed August 2021.

right to manage fisheries and what the key management structures would look like, what the purpose and values of the new efforts are, and how marine stewardship is understood and practiced. This emergence of pre-contact ethical leanings has often been front and center in the current lobster fisheries dispute as the resulting practices are readily apparent on the waters and wharves and diverge from and grate against the official regulatory frameworks enforced by DFO. In this active generation of a fisheries alterity vis-à-vis the capitalist ecology, a number of those involved in the new moderate livelihood fisheries embrace in various ways the aforementioned cultural revivalism and reflect practical steps towards reintegrating a particular adapted version of the indigenous ecology of yore.

Moderate Livelihood Fisheries 2020

One of the most noteworthy aspects of the moderate livelihood fisheries that were launched in 2020, which led to the sometimes-violent pushback from the primary actors of the dominant capitalist ecology, was the degree to which pre-contact livelihood ethics were drawn upon by many involved to guide such efforts. For instance, when the Sipekne'katik band first began to outline an interest in its own fishery operation in St. Mary's Bay, the exclusive right of the band and its fisheries committee to serve as the legitimate governing and regulatory body over such efforts was broadcast loud and clear. In the *Preamble* to its Rights Implementation and Fishery Management Plan, the band states that the "inherent right to manage fisheries belongs to the Band Council and community members", and that the Fisheries Department thereof would guide the "development and implementation of livelihood fishing activities" going forward¹⁵⁸. In other words, the band's moderate livelihood fishery was not to be governed by the official regulatory framework of DFO- that which Chief Mike Sack referred to as the "status quo of a regulatory manner" (cited in Beswick 2020)- but rather by its own internal governing body that would "promote and be guided by traditional values and practices" (ibid). And two of the most prominent regulations that Sipekne'katik demands the right to define are the geographic contours of the lobster fishery and the seasons within which harvesting will take place.

Thus, when discussing the ethical frameworks that guide geographic and seasonal determinations of the lobster fishery, the Sipekne'katik band often refers to "traditional territory" and the "seasonal basis" of pre-contact livelihoods that shape contemporary regulatory determinations (Warwick 2020). Regarding the former, the band references the

¹⁵⁸ See "2019-2020 Rights Implementation and Fishery Management Plan, Sipekne'katik Mi'kmaq", available at <http://sipeknekatik.ca/uploads2021/04sipeknekatikfisherymangementplan>, accessed November 2020.

“traditional districts”¹⁵⁹ within which Sipekne’katik fishers once harvested, which today constitute the whole of Canada’s Atlantic provinces, including all the rivers, streams, brooks, lakes, estuaries, and shore banks and offshore banks included therein (FOPO Committee Report No. 4). Hence, defining the ‘resource system’ for the emergent lobster fishery is understood as a historical reconstruction of livelihood patterns that were once regulated out of being, and which henceforth would be negotiated and coordinated with adjacent bands, not commercial harvesters. On harvesting seasons, the band’s Fisheries Department holds fast to the fluctuating and evolving needs of livelihoods rooted in “migratory and seasonal patterns” (Prins 2002, 24), and that seasonal determinations would be made annually to respond to those needs. It is thus the Sipekne’katik Fisheries Director that would announce the opening and closing dates for each district and whether trap limitations for each had been adjusted from the previous year (Forester 2021). In other words, in determining the governing contours of the fishery, the band would define the dates and location of future harvesting activities, regulate the implementation of those activities, and refer to “the ways that we have fished since time immemorial, the way of our ancestors, of tradition, not DFO”¹⁶⁰ in defining that ethical space.

Similarly, the livelihood ethics guiding the Potlotek band’s moderate livelihood fisheries identifies the Chief, Band Council, and a Community Fishery Committee as the sole legitimate regulatory body governing the fishery. While the band follows Sipekne’katik’s lead in referring to “traditional ways” and “traditional territory” in shaping the Committee’s regulations on seasonality and access issues, it furthers the regulatory mandate to include the identification of rightful ‘resource users’¹⁶¹. The Band Council is thus responsible for registering new fishers, assessing their qualifications, collecting registration fees, issuing permission documents for the transport of lobster, issuing vessel registration certificates, and providing trap tags for those new users. In addition, the band’s fisheries self-government includes harvest level controls, trap limit designations, safety protocols, and authorized fishing gear requirements. Since the time of Potlotek’s fishery launch in October of 2020, band Chief Wilbert Marshall has been adamant about how such a governing alterity will be realized by promoting the band’s rightful role as the sole regulator of its own fishery efforts (Reynolds 2020). According to Marshall, “. . .we won’t be following their rules. DFO only

¹⁵⁹ i.e., Sipekne’katik, Kespukwitk, Eskikewa’kik, Epekiwitk Agg Piktuk, Unama’kik, Siknikt, and Kespek.

¹⁶⁰ Assembly of First Nations Regional Chief Paul Prosper, 09/09/2021, Press Conference at Saulnierville Wharf.

¹⁶¹ See “Potlotek First Nation, Netukulimk Livelihood Fisheries Plan, Version 7”, found at https://mikmaqrights.com/?page_id=103, accessed January 2021.

wants to continue to suppress our people” (cited in Reynolds 2021). As such, Marshall clarified to the Canadian Parliament’s Fisheries and Oceans Committee on his band’s intention to govern its fisheries according to its own historical ways and its own plans. He testified¹⁶²:

“For months we have worked, highly motivated and developed a netukulimk livelihood fishery management plan. . . DFO has continued to maintain its position that we should fish according to their rules, using their licenses and their seasons. We have the right to self-govern, and that includes the right to govern our fisheries and to develop our own sustainable livelihood fisheries, separate from the commercial fisheries.”

In addition to these inclinations towards pre-contact forms of self-government, the livelihood ethics of moderate livelihood fishery efforts launched in 2020 were suffused with the ‘revitalization and re-embedding’ of *netukulimk* outlined above. For example, the Pictou Landing band worked closely with the MRC in the year leading up to their November 2020 launch to incorporate the key principles of the *Standards of a Netukulimk Fishery* into their fishery plans and protocols. According to one coordinator at MRC¹⁶³:

“. . . for the commercial fisheries, economic profit is the top priority. That’s not how Pictou Landing and others wanted to structure their moderate livelihood plans. In particular, there was a significant interest in reestablishing netukulimk as a moral framework. . . or rather as the foundation for how to support community and to harvest the species sustainably at the same time.”

Regarding the communal nature of the fishery, the band has emphasized the key objectives of achieving a “community benefit”, of promoting “social and economic well-being of the community”, and in “meeting nutritional and social needs” of local Band members¹⁶⁴. Hence, the pre-contact values of sharing and reciprocity (See *Chapter 1*) have been highlighted by the band as a guiding moral framework for pursuing lobster harvesting livelihoods- presented as “maximizing community benefit”- and in deliberate opposition to the motivating logic of the capitalist ecology, that the excessive accumulation of wealth by individuals or individual enterprises would be considered a clear violation of *netukulimk*. According to the Pictou Landing Chief, integrating *netukulimk* as a moral framework would not only guide the way to “fish and sell fish to earn a moderate livelihood”, but also to enhance a certain “community spirit” along the way (cited in Malley 2021, 2).

¹⁶² Fisheries Committee, Meeting #5 for Fisheries and Oceans in the 43rd Parliament, 2nd Session, October 29, 2020.

¹⁶³ Personal Communication, 04/02/2021, Truro, Nova Scotia.

¹⁶⁴ See “Pictou Landing First Nation, Netukulimk Livelihood Fisheries, Policy and Protocol”, found at <https://www.google.com/search?q=pictou+landing+netukulimk+livelihood+fisheries+policy+and+protocol&source=hp&ei=R-DrYoDQLu2YkPIPx76IkAw&iflsig=AJiK>, accessed February 2021.

On integrating *netukulimk* as a guide to resource stewardship, Pictou Landing has incorporated a number of harvesting protocols and norms in order to “sustain Mi’kmaki, the species, our communities, and the harvesters’ livelihoods for the next seven generations¹⁶⁵”. Hence, the Fishery Department’s lobster specific Netukulimk Livelihood Fisheries Plan¹⁶⁶ presents a number of “conservation prohibitions”, such as guidelines for how maximum harvest effort will be determined, measures to protect reproduction, trap limits, conditions on fishing areas, and other “responsible management practices” meant to put into effect the “control mechanism” (Martin 1978, 35) function of *netukulimk*. The objective then is not to prioritize the commodification and market potential of the fishery, but rather to harvest sustainably so as to “emphasize the integrity, diversity, and productivity of the natural resource”. The re-embedding of *netukulimk* is therefore not only meant to shape the moderate livelihood fishery so as to reinforce the relations that constitute the community, but also to reinforce the pre-contact “traditional conservation ethic” (Berkes 2018, 101) that will ensure the community’s livelihood base for the long term. The fisheries coordinator at MRC reiterated the point, but also highlighted the desire to differentiate from the capitalist ecology¹⁶⁷:

“Integrating the conservation element of netukulimk was very important for the band. It’s not only the right thing to do, the right way to fish according to our traditions, it’s also a way to push back against DFO and the commercial guys that say we are going to destroy the stock. When we come out with robust plans that incorporate conservation measures that are stricter even than DFO’s, it’s hard to maintain that criticism. But the band genuinely was interested in how netukulimk could be a guide to sustainability”.

In the aforementioned self-regulation of the Potlotek band’s fishery, there is a similar emphasis on the “management values” of *netukulimk* to guide its fishers’ practices. Hence, the band’s Fishery Committee defines the moderate livelihood effort as a “small scale, artisanal fishery with sale, trade and barter attributes” that, as opposed to the “corporate, excessive, and greed filled¹⁶⁸” commercial fishery, is meant to “create limits that could reasonably be expected to produce a moderate livelihood for individual families at present day standards¹⁶⁹”. As with the emphasis on the communal nature of the fishery by Pictou Landing, the purpose

¹⁶⁵ Personal Communication, 28/01/2021, Commercial Fisheries Liaison, Indigenous Institute for Natural Resources, Cape Breton Island, Nova Scotia.

¹⁶⁶ Pictou Landing First Nation, Netukulink Livelihood Fisheries Plan, found at <https://plfn.ca/community-resources/>, accessed October 2021.

¹⁶⁷ See footnote 18.

¹⁶⁸ Personal Communication, 09/09/2021, Anonymous, Mi’kmaw Press Conference at Saulnierville Wharf, Nova Scotia.

¹⁶⁹ Referenced at www.potlotek.ca/fiseries accessed October 2021.

of the fishery is therefore meant to “support communal relations”, provide a resource for “sharing arrangements” with those in need, and, in a nod to the pre-contact *netukulimk* focus on ‘interdependence and community spirit’, to “direct harvesters to contribute the benefits of their harvesting to the community¹⁷⁰”. The communalism of *netukulimk* was on full display at the launch of the fishery on Treaty Day in November of 2020. One Potlotek fisher had rallied his community to the wharf that day in order to benefit collectively from the effort. He noted, “It’s good to bring back food to your community. . . if I’m healthy then I will do it. We will do it like the moose hunt, a lot of the harvest will be divided up for the community” (cited in Baker 2020). That, he exclaimed, “is what this is about, what the moderate livelihood fishery is for.”

Moderate Livelihood Fisheries 2021

Throughout 2021, additional Mi’kmaw communities took note of the successes and failures of the early iterations of the moderate livelihood fisheries and continued to plan, launch, and agitate for opportunities to reestablish some form of the pre-contact ecology through their own fisheries initiatives. Perhaps one of the most ambitious of such efforts was from the Listuguj Mi’kmaw community¹⁷¹ which, since the 2019 drafting of its “Law on the Lobster Fishery and Lobster Fishing”¹⁷², had been negotiating with DFO for increased access to the fishery (Silberman 2021). The foundational sentiment of the Law serves to reinforce a particular pre-contact ontology that stresses the ‘unified nature-humanity’ message communicated by elder Robinson above, including the expanded relationality and recognized interdependencies inherent therein. Hence, we read of the “sacred responsibilities to the land, waters, and all living things” that are to be upheld in harvesting livelihoods, and the “harmonious relationships” to all “that Mother Earth supports within our territory” that enacts those responsibilities. As such, of the “land, waters, and all life forms” in Mi’kma’qi, fishers are to follow the guiding principles of *Ango’tmu’q* (to take care of something or handle in a careful manner) and *Gepmite’tmnej* (respect for the lobster) as they pursue their harvest and

¹⁷⁰ See “Potlotek First Nation Netukulimk Livelihood Fisheries Policy and Protocol”, September 2020. See footnote 160.

¹⁷¹ Note that the Listuguj Mi’kmaw community is located in the Canadian province of Quebec. It has been included in this discussion as its moderate livelihood fishery launch reflects many of the same inclinations towards re-engaging with aspects of the pre-contact ecology and has thus featured prominently in debates from the non-indigenous commercial fishery. From the perspective of the capitalist ecology, its significance is equal to that of the moderate livelihood fisheries in Nova Scotia.

¹⁷² See Listuguj Mi’gmaq First Nation Law on the Lobster Fishery and Lobster Fishing, Date Enacted 17/06/2019, found at <https://listuguj.ca/directorates/listuguj-natural-resources-directorate/updates-from-natural-resource>, accessed November 2021.

adhere to strict stewardship practices. Though these expanded moral and social commitments operate as abstract assumptions to most, they nonetheless shape the communal and reciprocal nature of the fishery dictated by the Law.

For instance, echoing the reimagined livelihood ethics of the Potlotek and Pictou Landing bands, an additional guiding principle for the fishers- “enacted pursuant to custom”¹⁷³ is that of *Apajignmuen*, which promotes “sharing” and “giving back to one’s community”. Though the Listuguj band’s lobster fishery guided by the Law was “operating illegally” before an April 2021 agreement with DFO (MMNN 2021), fishers had nonetheless been pursuing an annual fall harvest for years to uphold the communal obligations- the ‘giving back’- that their pre-contact forebears adhered to. The Listuguj Chief explained¹⁷⁴:

“More than anything, our fishery is about community building. It’s about revitalizing our laws, empowering and employing our community members.”

One such “tradition” identified by the band that meets these obligations is the holding of communal feasts at the time of the marine harvest in order to give thanks and honor the ‘sacred responsibilities’ presented above¹⁷⁵. Of the 2021 fall harvest, the Associate Director of Fisheries for the band explained (cited in Grant 2021):

“We fish 67 traps for the community, and we aim for about 500 pounds a day to bring home to be cooked. . . a portion of each day’s catch goes to a community kitchen where its cooked and handed out every evening communally. We know it’s a limited resource, but we try to share it as equally as possible.”

Said responsibilities and the *Gepmitemnej* due to the lobster are purportedly extended through adherence to a robust conservation strategy, overseen by a “Lobster Oversight Board”, that ensures proper limits on harvesting and acknowledgement of lobster migrations and mating; all of which derive from “our sacred, inherent responsibility for stewardship of the land, waters, and living things”¹⁷⁶. Thus, the emergent livelihood ethics of the fishery establishes its own version of alterity through not only a desire to meet market demand and earn a moderate income, but equally important is the stated desire to regenerate certain social obligations, to give thanks to community and the ‘land, waters, and all life forms’, and to work towards sustaining the ‘harmonious relationships’ that constitute the social whole.

Equally ambitious was the launch in April 2021 of a joint project between the Bear River and Acadia Mi’kmaw communities in Southwest Nova Scotia. The effort not only seeks

¹⁷³ *ibid.* pg. 3.

¹⁷⁴ See <https://listuguj.ca/category/press-release/>, accessed November 2021.

¹⁷⁵ See <https://listuguj.ca/powwow/traditions>, accessed December 2021.

¹⁷⁶ Quoted in Mi’kmaq and Maliseet Nations News, May 2021, Volume 32, No. 05.

to promote the revival of *netukulimk* in their shared fisheries efforts, but to do so through the collaborative rehabilitation of the pre-contact Mi'kmaw district that was known as "Kespukwitk". Though the district hasn't been used as an administrative geographic unit since the earliest of colonial days, the bands plan to draw on "ancient and traditional concepts" to revive the district and use it as an administrative and regulatory space for fisheries governance (Dorey/KMK Media Release 2021). Mirroring Sipekne'katik's drive to pursue moderate livelihood fishing according to 'traditional territories', Bear River and Acadia intend to actively defy DFO and its Lobster Fishing Area (LFA) system that is used to administer the lobster fishery; an emergent set of livelihood ethics that applies "traditional Mi'kmaw laws and customs as the basis for accessing the livelihood fishery"¹⁷⁷, not the "dictates of a settler government" (cited in CBC News, 13/10/2021). As such, the bands see the revival of the "ancient district" not as a way to exclude other Mi'kmaw communities that live beyond its borders, but rather an assertion of territorial delimitations wherein an indigenous ecology shaped by "traditional Mi'kmaw custom and law" can thrive¹⁷⁸.

In their bold effort to resurrect a traditional administrative district, the bands intend to apply the "Kespukwitk District Netukulimk Livelihood Fisheries Policy and Protocol" to govern all harvesting activities therein. Through the Policy and Protocol, the bands will "govern according to custom", exercise "self-determination and self-government" in the harvesting of marine species, and "fulfill ancient responsibilities, to all our relations"¹⁷⁹. On governance, the bands will issue licenses "not dependent on DFO", identify a Kespukwitk Chief and Council that will outline rules and regulations of use "without influence from DFO", and administer an access and allocation system pursuant solely to Band Council policies. Moreover, the District's harvesting activities will adhere to a set of "traditional" management values, including social, economic, cultural, and spiritual sustainability; all of which maintain the envisioned lobster fishery as a small-scale artisanal effort with a focus on "community benefit". According to the Bear River Chief¹⁸⁰:

"For the Kespukwitk District, it was important that we built a collective approach to livelihood fisheries. We are neighbors and Treaty partners here. That is why it was so important for our communities to work together on how we would manage the resources in our district."

¹⁷⁷ Media Release by Acadia Chief Deborah Robinson, 13/04/2021.

¹⁷⁸ *ibid.*

¹⁷⁹ See Kespukwitk District Netukulimk Livelihood Fisheries Policy and Protocol at <https://acadiafirstnation.ca/notices/704>, accessed December 2021.

¹⁸⁰ Press Release, 13/10/2021. Available at <http://www.mikmaqrights.com/?p=3162>, accessed November 2021.

This revival of a Mi'kmaw district to govern fisheries is unique in that not only does it bring to the fore a set of livelihood ethics that delimited resource systems in the pre-contact era, but that it does so through the collaborative efforts of bands equally committed to governing their harvesting activities wholly outside of and in contrast to official frameworks. One aspect of this commitment is the unique approach by each partner in the initiative to adhere to *netukulimk* in the effort.

According to the Chief of the Acadia community, all moderate livelihood fishing under the Kespukwitk District initiative would adhere to “traditional Mi'kmaw laws and customs”, including the “stewardship responsibility” embedded therein and as provided for by *netukulimk*¹⁸¹. In addition to identifying the partnered bands as the sole governing authority over the fishery, Acadia's embedding of *netukulimk* in its “Species Specific Jakej (lobster) Fisheries Management Plan” highlights the foundational “Mi'kmaq relationships with land, water, and wildlife” that allow for the long-term survival and sustainability of all¹⁸². Nurturing these relationships, according to the Fisheries Department, would reinforce the harvesting rules and obligations that further “respectful gathering from the land and water in a manner that discourages resource waste”. In other words, as an “exercise in Mi'kmaw self-government”, this leaning on pre-contact livelihood ethics would bring together regulatory authority, stewardship, and an expanded relational field to shape how lobster harvesting would transpire. While the bands signed an agreement with DFO in April of 2021 to keep their harvesting activities within the established commercial seasons and with limited numbers of traps for the current year (*Atlantic Fisherman* 2021), Acadia insists that these are only “experimental” agreements and that in the future the “principles of *netukulimk*” would govern the fishery and its approach to “resource protection, procurement, and management”¹⁸³.

Bear River has equally committed to applying the “communal law” of *netukulimk* in how it governs and harvests within the Kespukwitk District initiative¹⁸⁴. In the post-Marshall era, Bear River was one of the first Mi'kmaw communities to actively revive *netukulimk* in its harvesting activities, refusing to participate in most of the economic assimilationist programming DFO was pushing at the time (Stiegman 2011), and thus has nearly two decades

¹⁸¹ Letter to Acadia First Nation, 18/11/2021 at <https://acadiafirstnation.ca/netukulimk-fisheries-2>, accessed December 2021.

¹⁸² See “Acadia First Nation, 2019/20 Netukulimk Fish Harvest Plan” and “Species Specific Jakej (lobster) Fisheries Management Plan” at <https://acadiafirstnation.ca/netukulimk-fisheries-2.6>, accessed March 2021.

¹⁸³ *ibid.*

¹⁸⁴ See “Bear River Food and Livelihood Fishery: Fishery and Food Security Program”, 31/05/2019 at <https://bearriverfirstnation.ca/category/community-notice>, accessed March 2021.

of experience ‘revitalizing and re-embedding’ the principles of the pre-contact livelihood ethic (Pictou 2009). For the band’s Fisheries Department, the foundation of such efforts is a recognition of the “relationship and interconnectedness” all Mi’kmaq have with the natural world, including how such relations are to be premised on mutual respect and self-sufficiency¹⁸⁵. As such, all moderate livelihood fishers will adhere to “traditional management practices” and “fulfill ancient responsibilities to all of our relations in the natural world”. This includes pursuing marine stewardship in a manner that emphasizes the integrity, diversity, and productivity of the natural resource, as well as the recognition of the overall communal and spiritual purpose of harvesting efforts. Hence, as in the efforts of the Pictou Landing and Potlotek bands in 2020, Bear River’s integration of *netukulimk* presents initially as practical measures for leveraging pre-contact forms of governance over the lobster sector, which then draws on the values of sharing, reciprocity, and communalism to ensure a collective benefit therefrom; a drawing on ‘tradition’ in order to deliberately construct a divergence from the capitalist ecology that is only too obvious in both relational and governing essences. Or, in the words of an advisor who supported the band’s community engagement efforts in the post-Marshall era¹⁸⁶:

“From very early on, and maybe even before the Marshall Decision, there was an interest from the Bear River fishers and hunters to look at traditional ways and understandings of how best to harvest. They weren’t interested in DFO’s corporate model. I facilitated a lot of community discussions for them and between them and the commercial sector. There was definitely a contradiction in values there. For the Mi’kmaq, I would call it “triple bottom line values”, where there are social, economic, and ecological objectives to their fishery. For the non-indigenous guys, that was lost a long time ago. We lost those connections. . . between economy and society and the environment and so on. For Bear River and others’ moderate livelihood fisheries, I think they are trying something different. . . to pursue it in a way that draws on tradition, those values, and the stewardship practices that come along with that.”

III. Institutional Pluralism and Epistemological Fusion

In addition to the grassroots desires to revive and reimagine elements of the pre-contact ecology, as well as the steps towards putting those elements into practical action in the moderate livelihood fisheries, a set of institutions has arisen in the post-Marshall era to further the return to a state of ecological plurality in Nova Scotia’s lobster fishery. Hence, almost immediately following the *Marshall Decision* in 1999, we see the emergence of an array of

¹⁸⁵ See “Bear River First Nation, Netukulimk” at <https://coastalcura-bearriver>, accessed December 2021.

¹⁸⁶ Personal Communication, 29/01/2021, Bull Stokes, Retired fisher and Coastal CURA advisor and facilitator.

Mi'kmaw-led environmental NGOs, harvester advocacy organizations, and institutions focused on natural resource management that have embraced and promoted fisheries livelihoods rooted in those 'traditional' ways outlined above. Whereas previously the institutional landscape was primarily one dominated by non-indigenous organizations founded upon the very naturalist assumptions of the capitalist ecology¹⁸⁷, the contemporary institutional space allows for a plurality of organizations that embrace various approaches to and understandings of the natural environment. Many of these institutions reflect the "partial connections" (de la Cadena 2010, 347) Mi'kmaw communities have to non-indigenous society- and thus a complex alterity derived therefrom- and further an epistemological fusion in their knowledge of and research on the natural environment and how best to harvest its 'resources'. This merging of "indigenous knowledge and Western science" (Gillis 2020) not only allows for Mi'kmaw band fisheries departments to better insert themselves into the DFO science process, but also to highlight and promote a particular indigenous epistemology at the same time. In short, the resulting diversity of voices in fisheries debates further chips away at the hegemonic knowledge scape of old.

Institutions of Renewal

One of the most noteworthy developments in recent decades among Mi'kmaw communities is the proliferation of organizations dedicated to an array of causes meant to support indigenous well-being and rights recognition throughout the Nova Scotia (Whitman, 2013; Coates 2000). For instance, the 1980s saw the emergence of groups such as the Confederacy of Mainland Mi'kmaq (CMM) and the Assembly of Nova Scotia Mi'kmaq Chiefs (ANSMC) dedicated to such things as community economic development, band governance, health services, infrastructure development, and the promotion of productive relations with the Canadian federal and provincial governments. In the 1990s, groups like the Mi'kmaw Legal Support Network and the Atlantic Policy Congress of First Nations Chiefs Secretariat (APCFNC) came to the fore. The former was established to provide legal services for individuals navigating the courts, while the latter was incorporated to lead research, analysis, and policy advocacy on issues impacting Mi'kmaw communities. While these organizations emerged in the general context of indigenous 'resurgence and revitalization' outlined above, their emphasis has been broadly focused on enhancing service delivery, promoting reconciliation, and the recognition of indigenous rights. However, another group of

¹⁸⁷ e.g., Canadian Wildlife Federation, Oceans North, Coastal Action, Bedford Institute of Oceanography, Ecology Action Center, etc.

institutions has arisen in parallel that is more specifically focused on promoting the ‘ecological contours’ of this cultural revival, and thus facilitating the return of ecological plurality in resource harvesting livelihoods throughout the province.

One of the most prominent of such institutions is the previously discussed Indigenous Institute for Natural Resources (IINR), which was founded in 1999 around the time of the *Marshall Decision*. Focused on supporting the five Mi’kmaw communities across Cape Breton Island¹⁸⁸, the IINR not only seeks to address concerns related to natural resource use, research, and sustainability, but to do so according to what it calls “Mi’kmaw traditions and worldviews”¹⁸⁹. According to one of its Directors¹⁹⁰, the IINR embraces a set of “guiding principles” that it applies in all of the work it does, including in how it liaises with the federal and provincial governments; all of which “promote those traditional ways of caring for the natural environment and harvesting its resources”. The principles include such concepts as *Sespite’tmnej* (let’s take care) and *Wetanqnewsu’ti’k msit kisitaqn* (we are all connected), with the former reinforcing the consciousness necessary in being good stewards of both the natural environment and community, and the latter emphasizing the previously discussed interconnections between humanity and “all of creation”. *Netukulimk* is also promoted by IINR as guiding principle, and, in addition to the definition outlined above, is expanded upon to include “the spiritual element” that, according to the Director, “ties together people, plants, animals, and the environment in close relations”. Hence, in addition to being included in the lectures delivered by elder Robinson to the staff at IINR (see above), these and other “traditional principles” are integrated into a number of practical programs and initiatives led by the organization around Cape Breton.

Thus, IINR implements a sustainable forestry program in which it partners with private sector actors to support ecologically conscious forest planning and harvesting; here IINR acts as a contractor to employ Mi’kmaq in forestry projects on public lands “in accordance with *netukulimk*”¹⁹¹. The institution promotes a solid waste management and clean-up project among the five communities that reinforces the *Sespite’tmnej* principle and integrates a household and industrial waste recycling activity. In addition to the previously mentioned Moose Management Initiative, IINR also carries out an aquatic research and stewardship program that documents the health and stock levels of oyster, lobster, eel, and

¹⁸⁸ Eskasoni, Membertou, Potlotek, Wagmatcook, and We’koqma’q.

¹⁸⁹ See <https://www.uinr.ca/about/>, accessed March 2021.

¹⁹⁰ Personal Communication, 28/01/2021, telephone interview, Eskasoni, Cape Breton Island, Nova Scotia.

¹⁹¹ *ibid.*

gaspereau in accordance with “traditional Mi’kmaw knowledge” of marine ecology¹⁹². Moreover, IINR maintains numerous partnerships with universities, local and federal government bodies (including DFO), and other NGOs to add its voice to environmental clean-up programs, endangered species protection initiatives, and management of protected conservation areas around the province. On fisheries in particular, IINR manages a “fisheries guardian” initiative in which FSC¹⁹³ harvesters are mentored, trained, and coached by more experienced fishers on issues related to sustainable harvesting, environmental protection, and “responsibilities and obligations” to the species being harvested¹⁹⁴. Most relevant to the current study is the work IINR is facilitating related to commercial fisheries, including the moderate livelihood efforts.

According to the Commercial Fisheries Liaison Officer, the organization has been working with fishers holding communal-commercial licenses¹⁹⁵ ever since the *Marshall Decision* to better understand “aboriginal regulations”¹⁹⁶. For him, this means “understanding the communal purpose of commercial harvesting, and the flexibility of who can use the license, who had a need to be on the water.” He continued¹⁹⁷:

“We fish differently than the non-Natives. I’m not saying that we aren’t trying to earn a living. But with the communal -commercial licenses we also supported the fishers to understand and apply netukulimk. It’s in our culture . . . a shared tradition. From a commercial perspective, there is no one that understands conservation better than the Mi’kmaw harvesters. We hold workshops, informational sessions, we go out on the wharves and talk to the fisheries departments. It’s commercial but it’s done according to our ways. And we at IINR are trying to educate people on those ways and understandings.”

In his estimation, in the decades since the *Marshall Decision* there has been a tremendous growth in interest in and knowledge of what he calls “native ways” of fishing and practicing marine stewardship. This is attributable in no small way to organizations like IINR. He noted:

“It’s not just in fishing, but also hunting. Look at our moose management initiative. They are also working with IINR to integrate traditional techniques and concepts. We even get funding from the government to support sustainable harvesting. . . even if sometimes the native ways contradict the official regulations. But in general, the NGOs like ours have been very proactive at promoting concepts like netukulimk, conservation and so on.”

¹⁹² See footnote 44.

¹⁹³ Food, Social, Ceremonial licenses. See *Chapter 3*.

¹⁹⁴ Personal Communication, 02/02/2021, Guardian Program Liaison Coordinator, IINR, Cape Breton, Nova Scotia.

¹⁹⁵ See *Chapter 3*. This refers to those licenses distributed to Mi’kmaw communities following the *Marshall Decision* as part of its economic assimilationist initiative. All communal-commercial fishers were expected to follow DFO regulations.

¹⁹⁶ Personal Communication, 28/06/2021, Cape Breton Island, Nova Scotia.

¹⁹⁷ *ibid.*

Though the moderate livelihood initiative is still relatively new, vis-à-vis the communal-commercial fisheries, the IINR has been supporting the relevant band fisheries departments and coordinators in similar ways. According to a spokesperson¹⁹⁸:

“IINR has a lot of experience now, over 20 years, bringing back into practice traditional harvesting techniques and ways of thinking about the natural environment. It’s not just romanticizing about the past. The moderate livelihood fishery is actually the best place to fish according to tradition, our own self-government, our own regulations, and such. So far, we’ve been consulting with the bands here in Cape Breton, reviewing plans and protocols. And we intend to keep supporting them going forward.”

Hence, as in the communal-commercial fishers on Cape Breton Island, those who plan to pursue the moderate livelihood fishery are likely to be engaged in some way with the advocacy, trainings, and marine stewardship initiatives supported by IINR, because, according to the Liaison Officer, “we are one big community here, and institutions like ours have wide access to the communities and we’re looked at positively by most”¹⁹⁹. In other words, the traditional non-governmental institutional scape in Cape Breton, once dominated by such groups as the Eastern N.S. Conservation Society in Louisbourg or the Oceans Coastal Action Program in Sydney, has been broadened and diversified and has thus inserted itself into the emergent indigenous livelihood initiatives unfolding.

In 2012, the Mi’kmaw Environmental Association (MEA) was established and pursues a similar mandate among communities along the northwest coast of mainland Nova Scotia. According to its Mission, the MEA seeks to address environmental problems around the Bay of Fundy related to overfishing, pollution, and commercial exploitation by resurrecting the “spiritual connection to the natural environment” that the Mi’kmaq had “prior to European contact”²⁰⁰. According to one Fisheries Program Manager, the primary way this is pursued by MEA is through the “promotion and restoration of *netukulimk*” among Mi’kmaw resource users and the communities to which they belong²⁰¹. He remarked:

“. . . at MEA, netukulimk is defined and thought of broadly and so it applies to all of our programs that we do. In a general sense, its about reinforcing the idea that we are one with nature, the interconnections we have, the spiritual connections we have. That’s I guess, the worldview part. . . something like a Mi’kmaw knowledge system. Then there are the practical actions that it calls for, like taking from the environment only what is needed, sharing what you take, and also the offerings as thanks that some have started doing again as well.”

¹⁹⁸ Personal Communication, 06/09/2021, Indigenous Institute of Natural Resources, Cape Breton, Nova Scotia.

¹⁹⁹ Ibid.

²⁰⁰ See <http://www.mikmawconservation.ca/mission-netukulimk>, accessed May 2021.

²⁰¹ Personal Communication, 15/05/2021, Mi’kmaw Environmental Association, Truro, Nova Scotia.

For the MEA, this understanding of *netukulimk* and the practical livelihood patterns that it shapes were largely lost following European contact, and, according to the Communications Director, “this is why our work is so important, it’s why we are implementing the path our elders laid out, to bring our ways back into practice”²⁰². As such, the MEA works with the Mi’kmaw communities of Annapolis Valley, Acadia, Bear River, Pictou Landing, and Sipekne’katik on environmental education initiatives, awareness raising campaigns, habitat restoration, and practical skills training on ecosystem health assessments.

On fisheries, the MEA works with youth groups on habitat restoration and sustainable harvesting initiatives around polluted waterways in the Bay of Fundy. It also holds community outreach sessions to discuss species at risk and necessary adjustments to fisheries planning and harvesting. On lobster specifically, the MEA coordinates with harvesters from the relevant communities to manage its own lobster tagging and tracking initiative. This effort is meant to better understand lobster movements and reproduction in the region, “. . .from a Mi’kmaw ecological knowledge perspective, where we consider the broader interconnections with other species, us, the environment and so on²⁰³”, and is supported financially by DFO science. The MEA also manages a lobster gear tagging project that is meant to help prevent accidental overfishing, support ghost gear²⁰⁴ retrieval, and to better coordinate the bands’ fishing effort in the various LFAs. Perhaps most prominently, the organization is planning to conduct its own 3-year study on lobster stock health, ecology, and migration using a newly acquired research vessel. While the MEA did receive funding from DFO to support the study, the Fisheries Program Manager is adamant that “DFO will not be dictating the terms of the study or how we proceed. . .this is a Mi’kmaw led effort that will be collaborative, but not dictated by the partners²⁰⁵.” The outcomes of the study are meant to guide band fisheries departments in setting upcoming fishing effort controls and season determinations, including for planned moderate livelihood fisheries.

In 2008, a few years previous to MEA’s founding, the previously mentioned and highly influential advocacy organization Mi’kmaq Rights Coalition (MRC) was established with a broad mandate. Continuing and expanding the work of a previous organization referred to as the “Made in Nova Scotia Process” that was initiated in 1999, the MRC institutionalized processes related to Treaty rights negotiations, research, continued advocacy vis-à-vis the

²⁰² Personal Communication, 28/05/2021, Mi’kmaw Environmental Association, Truro, Nova Scotia.

²⁰³ Personal Communication, 28/05/2021, Communications Director, Mi’kmaw Environmental Association, Truro, Nova Scotia.

²⁰⁴ Defined as fishing gear that is lost at sea and becomes an environmental hazard.

²⁰⁵ See footnote 55.

Federal and Provincial governments, and consultations with communities on how best to build livelihoods in the context of expanded rights recognition in the courts (See *Chapter 3*). Perhaps most relevant here, in its founding year the MRC issued a “Nationhood Proclamation” signed by all of the Chiefs of the Nova Scotia Mi’kmaw communities that spelled out its determination to support the development of a “Mi’kmaw governance structure” that would “unite and empower our Nation to enhance the quality of life and well-being of our people”²⁰⁶. In pursuing this goal, the MRC seeks to “revive, promote, and protect a healthy Mi’kmaq identity” and to therefore realize self-governance according to “tradition and the ways of our ancestors”²⁰⁷. Though the institution works in fields as varied as child benefits promotion, forestry and wildlife protection, and cultural tourism, the most prominent place where its promotion of the pre-contact ecology is on display is in its work with Mi’kmaw lobster fisheries.

Though the MRC has worked for years with indigenous FSC and Communal-Commercial license holders, in the last decade it has targeted most of its energy towards promoting the realization of moderate livelihood fisheries. According to the Fisheries Coordinator, one of the most prominent tasks the MRC set itself was the development of a set of guidelines to ensure the integration of *netukulimk* and “traditional harvesting practices” into the relevant bands’ moderate livelihood plans. He noted²⁰⁸:

“For several years leading up to the 2020 launch, we were facilitating discussions with communities, fishers, band Councils and Chiefs and even DFO to develop a set of standards for moderate livelihood fisheries. The main goal was to have netukulimk and its teachings integrated across the standards. So not only are we consulting with communities on the standards, but at the same time educating people on netukulimk and how it would apply to a moderate livelihood fishery.”

The resulting document is called the “Standards of a Netukulimk Livelihood Fishery”, and not only does it define *netukulimk* and clarify how it shall be integrated in plans, but it also reinforces the communal nature of the fishery, the interconnections and interdependencies of the fishers and the oceanic environs, and the grid of relations “the ancestors maintained in order to protect the unity of the natural world”²⁰⁹. For the Fisheries Coordinator, the Standards are a way to “make practical” the ecological understandings of the past and to demonstrate

²⁰⁶ Found at http://www.mikmaqrights.com/?page_id=7, accessed December 2020.

²⁰⁷ Personal Communication, 26/01/2021, telephone interview, Negotiator, Mi’kmaq Rights Coalition, Truro, Nova Scotia.

²⁰⁸ Personal Communication, 04/02/2021, telephone interview, Negotiator, Mi’kmaq Rights Coalition, Truro, Nova Scotia.

²⁰⁹ See “Standards of a Netukulimk Livelihood Fishery” at http://www.mikmaqrights.com/?page_id=103, accessed July 2021.

that Mi'kmaw harvesting, "even when it doesn't follow the official DFO regulations", is responsible, conservation focused and "done within limits that the commercial sector would never understand"²¹⁰.

For one negotiator at the organization, working with the communities interested in moderate livelihood fisheries to practically apply the Standards was one of the key tasks of the MRC in recent years. She noted that while many Elders and others involved in the MRC process are aware of pre-contact concepts such as "the Mi'kmaq place in the natural world and *netukulimk*", most of the younger generation was only recently becoming aware of "the past, tradition, and how we used to fish"²¹¹. She elaborated:

"We saw the Standards process as an excellent opportunity to educate the youth, especially the youth getting involved in the moderate livelihood lobster fishery. There seems to be a good understanding of our rights, Treaty rights, but we felt there was a lot of work to do on educating people about our traditions and what netukulimk means, how it is relevant in fishing. So preparing for the moderate livelihood launch was also a good opportunity."

The MRC therefore spent a lot of time consulting with the bands on the development of their fisheries plans and protocols, held outreach sessions and community workshops, and continued to try to build consensus on the Standards going forward. Following the events of late-2020, the MRC became even more determined to educate not only the Mi'kmaw fishers, but also the DFO on how *netukulimk* was a valid conservation ethic and that concerns around stock impacts were misplaced. She expanded:

"Promoting our traditions and making sure that people have a good understanding of these concepts is not only good for us internally, it's also something that we need to do with others and DFO. When they better understand what netukulimk means, what our Standards are, and exactly what kind of harvesting we do, then I think this problem can be solved. There is a lot of misunderstanding right now. But that is part of our job at MRC, to help educate, negotiate, and consult with whomever will help us realize our Treaty based harvesting rights."

As 'institutions of renewal', the IINR, MEA, and MRC are thus at the forefront of promoting indigenous self-government and Treaty rights, enhancing the viability and professionalism of Mi'kmaw harvesters, and, perhaps most importantly, encouraging the realization of indigenous fisheries through the revival of various forms of the pre-contact ecology vis-à-vis the moderate livelihood lobster fisheries. Other smaller institutions are working in parallel to pluralize the institutional landscape as well. For instance, the Mi'kmaq Cultural Revival Coalition is working around Bay St. George to "revive, enhance, preserve, and energize" Mi'kmaw tradition, including natural resource management and marine

²¹⁰ *ibid.*

²¹¹ See footnote 62.

harvesting techniques²¹². The Centre for Indigenous Fisheries is working with indigenous communities across Canada, including the Mi'kmaq, to “uphold and respect Indigenous rights, values, practices, and knowledge systems” in relation to fisheries harvesting and management in “traditional territories”²¹³. Dalhousie University’s Fish-WIKS initiative is studying ways that indigenous knowledge can enhance fisheries governance and management around Canada, including on Cape Breton Island in Nova Scotia, to be more communal, place-based, and holistic in practice²¹⁴. Hence, by adding voice and an institutional presence, these and other initiatives have contributed momentum to the cultural revivalism at hand and constitute one more step towards re-introducing ecological plurality to the fisheries of Nova Scotia.

And 2-Eyed Seeing To Boot

Much has been said about the purported “intractable incompatibilities” (White 2006, 401) between the epistemologies of Western science rooted in a naturalist ethic on the one hand, and that of ‘indigenous’, ‘traditional’, or ‘traditional ecological’ knowledge on the other. For instance, we read of how indigenous epistemologies are “high context”- place based, built over generations, and culturally distinct- versus the “low context” leanings of Western science that “reduce context to a minimum” (Johnson et. al. 2016, 4-5). We think of the “Western tradition of science” as being one that sees the natural environment as a “wilderness” that must be “conserved, managed, and tamed”, whereas traditional ways of knowing conceive of “lifeways”, or “relationships to the natural world” (Pompa & Kaus 1992, 273). Others have outlined how when the natural sciences are applied to resource harvesting concerns, there is an exclusive focus on “biophysical factors” and the conservation of “physically defined ecosystems” so as to maintain productive economies (Nuna et. al. 2021, 53-54). By contrast, an indigenous knowledge system is more likely to focus on the “social factors” of those biophysical realities and how to conserve the web of relationships implied therein. In the former, the impetus for leveraging the regime of natural sciences is sometimes referred to as an “extrinsic motivation” driven by formal regulations and economic calculations, whereas the latter are driven by an “intrinsic motivation” to adhere to distinct

²¹² Personal Communication via Facebook, 15/12/2021, Bay St. George Mi'kmaq Cultural Revival Coalition.

²¹³ Personal Communication, 08/22/2021, Director, Centre for Indigenous Fisheries, University of British Columbia.

²¹⁴ Personal Communication, 02/07/2021, Dr. Lucia Smithens, Marine Affairs Program, Dalhousie University, Halifax, Nova Scotia.

sets of values, ethical norms, and belief systems (Sowman et. al. 2021, 20). For some, the differences are fundamental and irreversible (e.g., White 2006).

However, one key manifestation of how Mi'kmaw communities are defining this fisheries alterity themselves and thus taking further steps to revive the ecological plurality of old is through a certain fusion of those supposedly contrasting epistemologies in their marine harvesting and conservation initiatives. Whereas some have perceived previous efforts by the Canadian government to integrate or incorporate traditional knowledge into regulatory frameworks as nothing more than “euphemisms for assimilation” (Reid et. al. 2020, 243), a number of Mi'kmaw fisheries departments, including the institutions of renewal presented above, are pushing for a more collaborative effort that merges the two ways of knowing. According to the thinking, when official institutions are left to engage with indigenous knowledge systems as they see fit, the outcome is often a “muting” of the latter and an “inculcating” of the superiority of “western scientific knowledge” in governing resource harvesting and conservation initiatives (Stevenson 2006, 175). As such, a multifaceted initiative is underway to proactively pair the Mi'kmaw “indigenous knowledge system” with those ways of knowing and understanding embraced by the federal government and commercial lobster sector (i.e., key actors in the capitalist ecology) in order to improve fisheries governance and management throughout the province²¹⁵. This layering of pre-contact ways of knowing the fishery onto official epistemologies is therefore often referred to as a “collaboration” between the two (Gillis 2020), and something of a “pathway to plural coexistence” as opposed to a cooptation by “Western scientific insights” (Eckert et. al. 2020, 243).

The most prominent manifestation of the epistemological fusion is the burgeoning of an adherence to what's called “Two Eyed Seeing”, which has been referred to as a “conceptual framework” for the “decolonization” of knowledge production and mobilization (McMillan & Prosper 2016, 640). Originally articulated by elders associated with the IINR, Two-Eyed Seeing seeks to “take the best from Western and indigenous worldviews” and facilitates a knowledge scape that can sustainably and collaboratively inform fisheries science and harvesting management plans. Elder Albert Meuse refers to the concept as “both an ethos and a pedagogical approach”²¹⁶. On the former, he highlights how Two-Eyed Seeing “reminds

²¹⁵ See “Exploring distinct indigenous knowledge systems to inform fisheries governance and management on Canada's coasts (FISH-WIKS)”, Dalhousie University at https://cdn.dal.ca/fishwiks_summary , accessed December 2021.

²¹⁶ Personal Communication, 20/12/2020, Antigonish, Nova Scotia.

us of our relationships to the natural world and our obligations that come with those relations” as “individuals and communities go out to harvest to sustain themselves”. On the latter, he clarifies, “. . .but we have to remain open to learning, about seeing new ways, of engaging all knowledge that might help us to be good stewards, and that includes Western science and what it can bring to the table”. Others have highlighted the “action imperative” of Two Eyed Seeing, which encourages adherents to not simply accumulate knowledge for the sake of understanding or increasing returns on harvesting, but to “recognize the responsibility to act” from the two sources of knowing to preserve the very place that knowledge base comes from (Reid et. al. 2020, 249). Less of a formalized curriculum or rigid “techno-centric way of knowing” (Johnson et. al. 2016, 7), Two-Eyed Seeing is an evolving and organic phenomenon, part and parcel of the overarching cultural revivalism noted above.

Elder Robinson makes sure to include Two-Eyed Seeing in the discussions that he facilitates at the IINR (see above) and stresses the themes of “coexistence” and “co-learning” in his advocacy of the concept²¹⁷. He elaborates:

“. . . Two-Eyed Seeing has emerged in many ways alongside the revival of netukulimk as a way of knowing and approaching the natural world. With co-existence. . . with another society. . . we have a responsibility to look at things through another lens. It gives us the opportunity to challenge ourselves to look at and detect value in other ways. We can call it co-learning, because we both have something to offer the other.”

In other words, Two-Eyed Seeing doesn’t intend to suppress or supplant the natural science epistemology of the dominant capitalist ecology, but rather to see it as one way of knowing among others, a complement to the place-based and holistic themes that emanate from the general revivalism of other aspects of the Mi’kmaw ecology. This is on full display in the structure and focuses of the moderate livelihood fishing plans noted above, in their inclusion of fisheries indicators, biophysical measurements, and lobster ecology metrics. But for Robinson, the co-learning should go both ways. He expands:

“. . . more and more we are participating in DFO’s peer review meetings, in their advisory committee meetings on the fisheries. We bring our ways of understanding to the meetings and hope that we can help to educate others that the standards of Western biology and ecology are only part of the story. We have a lot to offer on this. Two-Eyed Seeing can show others that we don’t just need science, we need human consciousness.”

As Two-Eyed Seeing has taken hold and emerged as a prevalent discourse over the last decade, the institutions of renewal have taken note and supported its uptake and inclusion in education, fisheries management, and planning. Hence, alongside the IINR’s inclusion of it

²¹⁷ Personal Communication, 17/02/2021, Halifax, Nova Scotia.

as one of its guiding principles- the “way that both indigenous knowledge and science can work together harmoniously” (Marshall 2020)- Cape Breton University has developed an Integrative Science curriculum dedicated to the epistemological fusion in its education of indigenous youth (Bartlett 2012). The MEA embraces Two-Eyed Seeing as a way to “ensure that indigenous knowledge has a place and is heard in fisheries debates” as it educates band fisheries managers and moderate livelihood advocates²¹⁸. Similarly, the MRC and its parent Assembly of Nova Scotia Mi’kmaw Chiefs see Two-Eyed Seeing as integral to the promotion of and support to the development of moderate livelihood fisheries protocols, as well as in how they mentor and train Mi’kmaw fisheries managers in how to insert themselves in the DFO science process²¹⁹. These objectives are pursued by “coupling” the scientific metrics and methods of the DFO science process with more holistic understandings and conceptions of ecosystem dynamics, including how those dynamics are inseparable from the society of human harvesters that the indigenous ecology once communicated²²⁰. And the band fisheries departments themselves have embraced Two-Eyed Seeing not only as a way to further the “renewal and revival of tradition and our relationships to the natural world”, but also as foundation for “education, holistic understanding, and engagement with science according to Native ways”²²¹.

Perhaps most noteworthy, advocacy around the paradigm has reached the federal government and has led to the increasingly ubiquitous inclusion of references to the value of indigenous knowledge in official strategies, action plans, and scientific assessments governing oceanic harvesting. As early as 2002, DFO’s “Canada’s Oceans Strategy” recognized the “special relationships and connections” of indigenous people to the ocean and how DFO was committed to learning from “Aboriginal traditional ecological knowledge” in its governance systems; a commitment that would purportedly be realized in the associated “Ocean’s Action Plan” a few years later²²². Similarly, in its “Aboriginal Fisheries Strategy” of 2003 DFO not only recognized its past failures to “take into account traditional knowledge” in its decision-making processes, but that hereafter it would “facilitate the use of Aboriginal traditional knowledge” in structuring its scientific assessments and regulations²²³. In the years since,

²¹⁸ Personal Communication, 28/05/2021, spokesperson, Mi’kmaw Environmental Association, Halifax, Nova Scotia.

²¹⁹ Personal Communication, 26/01/2021, spokesperson, Mi’kmaq Rights Coalition, Truro, Nova Scotia.

²²⁰ See footnote 71.

²²¹ *ibid.*

²²² See “Canada’s Oceans Strategy: Our Oceans, Our Future” (2002) and “Canada’s Oceans Action Plan: For Present and Future Generations” (2005), at https://waves-vagues.dfo-mpo.gc.ca_library, accessed January 2022.

²²³ See “Strengthening our Relationship- The Aboriginal Fisheries Strategy and Beyond” (2003), at <https://www.dfo-mpo.gc.ca/fisheries-peches/aboriginal-autochtones/afs>, accessed January 2022.

advocates of Two-Eyed Seeing have successfully lobbied DFO and the Coast Guard to meaningfully include “traditional knowledge” in Integrated Fisheries Management Plans, to hold workshops for related staff on how to engage with and learn from “indigenous knowledge systems and their relationship to science”²²⁴, and most recently to commit to the “adoption of Indigenous Knowledge in planning and decision-making” in the “Blue Economy Strategy”²²⁵. While potentially little more than versions of the ‘euphemisms for assimilation’ mentioned above, these considerations for such epistemological fusions at official levels of the capitalist ecology are noteworthy nonetheless.

In short, Mi’kmaq communities throughout Nova Scotia, and especially those engaged in oceanic harvesting, are taking a number of steps towards reestablishing some version of the pre-contact ecology outlined in *Chapter 1*. Thought leaders and Elders are harnessing a generalized cultural revivalism to emphasize the ontological, relational, and ethical contours that shape the understanding, place in the cosmos, and human use of the natural environment. Moderate livelihood fishers and fisheries planners are putting into practical action pre-contact ways of governing harvesting, communal conceptualizations of the benefits of the harvest, and how best to conserve the species for the next seven generations. All the while, institutional activists and advocates are promoting, educating, lobbying, and engaging with all those involved to further the ecological contours of the revivalist phenomenon, including by relating to the ‘partial connections’ with non-indigenous society to fuse knowledge systems in a way that strengthens indigenous voices in official fora. The outcome of these plural processes and forms of indigenous agency is an increasingly visible shifting of the dial back towards the ecological plurality axis of the hegemony↔plurality continuum in Nova Scotia’s lobster sector. And the dominant capitalist ecology has taken note and is responding in kind.



²²⁴ See “DFO-Coast Guard Reconciliation Strategy: The Federation of Independent Inshore Harvesters” (2020) at <https://www.dfo-mpo.gc.ca/fisheries-peches/aboriginal-autochtones/reconciliation-eng.html>, accessed October 2021.

²²⁵ See “Blue Economy Strategy: Your oceans, Your voice, Your future, Engagement Paper” (2021) at <https://www.dfo-mpo.gc.ca/about-notre-sujet/blue-economy-economie-bleue/engagement-paper-document-mobilisation/part1-eng.html>, accessed January 2022.

CHAPTER SEVEN

Objects as Subjects, Friends as Foes

The Reordering of the Dominant Capitalist Ecology's Relational Grid

When everything is human, the human is an entirely different thing.
Eduardo Viveiros de Castro (2014)

The industry has rules that all men are expected to obey, its own standards of conduct, and its own mythology. To succeed in lobstering a man not only must have certain technical skills and work hard, but also must be able to operate in a particular social milieu.
James Acheson on the lobster gangs of Maine (1988, 48)

I. Objects in Moral Proximity and Subjects in Social Timidity

As Mi'kmaw fishers, fisheries departments, and their allied institutions and cultural advocates take steps to reintroduce a degree of ecological plurality to the lobster industry, the key actors of the dominant capitalist ecology perceive a threat to the socio-relational ordering of the sector. Hence, while the latter still adhere to the 'certainties of naturalism' discussed in *Chapter 5*, they sense a creeping diminishment of the rigid subject-object dichotomy implied therein and new forms of intentional sociality therefore on the horizon. Whereas previously the fishery's objects were confidently conceived of as noncommunicative and amoral biophysical objectivities (i.e., belonging to a singular 'nature' and exclusively understood through the rubric of the natural sciences), the emergent indigenous revivalism of the pre-contact ecology suggests a widening social role for the harvested lobsters and the oceanic environs within which they thrive, and thus moral requisites due thereto. The result is not necessarily a rising assumption of personhood ascribed to those objects, but a capitalist ecology that is being forced to reassess dogmatic processes of commodification, to relocate marine species within wider social matrices, and to consider previously neglected moral obligations vis-à-vis certain 'natural' processes and 'forces' prevalent in the oceanic environs. In short, as the fishery's objects take on the qualities of subjects, new forms of sociality are required, and reconfigurations of the capitalist ecology's relational grid get underway.

Crustaceans with Community, Predators with Rights

When retired fisher Percy Boyne's father was harvesting lobster in the 1950s and 60s along the Northumberland Strait, ". . . the sea insects were barely worth more than the bait used to catch them²²⁶!" In those years, fishers would often hold licenses for multiple species, fish year-round, and put their time and energy into whatever species was generating the most income on the markets. Lobster wasn't one of them. At the time, international commerce for lobster was only nascent and the high-end luxury dining status of the crustacean had not yet emerged. Boyne remembers as a child being forced to take lobster to school and being laughed at for bringing "a poor man's lunch", given that that was all his family could afford and nothing else his dad caught "was going to be handed over to a poor kid like me for free". For his and other fishing communities around Pictou County, lobster was considered a secondary species in the fisheries that was barely worth the effort required to harvest it given

²²⁶ Personal Communication, 26/02/2021, Merigomish, Nova Scotia.

the low returns. When it *was* harvested, many fishers would often give it away to the needy, donate it to community social functions, or bring it home for the family to consume. Despite its low status, lobster was frequently exchanged between friends, given as gifts, or shared between fishers. According to Boyne:

“ . . . lobster back then was definitely thought of differently. . . given that it wasn't worth much. Fishermen would sell it, sometimes locally, but it was also shared more. My dad would sometimes give some to the church and they would have meals and give it away. I can also remember summer BBQs at the wharf, where members of the community could come and it was all free. It was more of a social commodity, something that touched everyone directly, brought us together and benefitted so many.”

However, starting around the 1980s, international markets were being further consolidated, demand began to soar, and the price of lobster increased dramatically from the previous era. For the next generation of fishers from those communities in Pictou County, the status of lobster would be forever changed. Henceforth, lobster was no longer given away at communal events, its status in school lunch boxes was elevated, and fishers' fortunes significantly improved if they were lucky enough to be in possession of the now highly coveted lobster license. In turn, many in those communities, including in fishing communities all around Nova Scotia, could no longer afford lobster and saw its consumption as a privilege reserved for the better-off in distant metropolises. Now, lobster- as in the other previously lucrative groundfish species- was to be definitively commodified, its biophysical properties studied and mastered, its flesh trapped and hauled, and its financial returns to benefit the community only secondarily through taxes paid and fishers' paychecks spent. In other words, not only were the lobsters being rigidly assigned an object status in the fishery, as they had been for centuries, their role in facilitating social relations, benefitting the needy, and building community cohesion was also all but eliminated once market demand was secured. Lobster was thus denied both social intercourse (as an object) and any social function (as a strict commodity with rising demand) beyond satiating markets.

Today, commercial fishers and their industry allies throughout the province continue a dogmatic adherence to the market ethic and envision the commodified objects of the sea as none other than personal assets to be competed over and exploited for a profit. For instance, fishers around Little River Wharf in Yarmouth County often refer to their catch as “my retirement”, “my kid's college fund”, or even “the down payment for my next house”. Similarly, those harvesting around Shag Harbour in Shelburne County simply refer to the lobsters yet to be caught as “my next paycheck” and conversely, if too evasive and noncooperative, “my ticket to welfare and poverty”. Others working around the wharves at

Ingonish and Glace Bay in Cape Breton even lay personal or familial claims to future generations of lobsters. For example, they note the importance of conservation or maintaining and respecting territorial claims on the sea so that “my kids can harvest what is rightfully theirs”, or “so that a steady flow to the markets can be maintained and sustain this business²²⁷”. In a reference to the previous era of church donations mentioned above, one harvester based at Arisaig Wharf summarized the contemporary status of lobster as a personal object-asset. He noted²²⁸:

“It was different in those days before the industry was so successful. I can’t make donations to the church, at least not in lobster. I sometimes make cash donations, but the lobsters are all contracts, quotas, deadlines. I don’t have a minimum that I have to supply to my buyer, but he does expect to get what I catch. He does have strict quotas to meet. The church and these other community groups, they’re doing okay. How could I sacrifice my livelihood by giving away lobsters? You don’t see the mechanic giving away free tools or oil changes do you?”

To summarize, the lobsters’ status on the relational grid of today’s capitalist ecology is one of an amoral and noncommunicative object that can be (mis)handled and commodified at will, and thus *denied sociality* of any form by its human handlers. Moreover, the crustaceans present themselves to the fishery’s primary human actors through a form of *negative relationality* in which only one actor stands to benefit (e.g., fisher enhances his catch) while the other suffers a loss (e.g., lobster is caught and commodified) in the transaction. Though the lobsters’ object status is part and parcel of modernity’s centuries-long “work of purification” (Latour 1993), the market supremacy of recent decades has, in addition, further removed the species from the web of social relations to which its harvesters belong. Hence, no longer do the boiled tails and claws pass through the hands of civic associations, local parishioners, or the wharf-side needy, cementing social ties and communal obligations on their way to being consumed. And gone are the days when this fruit of the sea was considered a community asset, something to be traded and consumed locally, and brought to the town market by the hearty, yet benevolent, fisher neighbor furthering the community spirit. Today’s cutthroat mechanical relationality posits the lobsters as spiritless enemies, asocial and evasive animal escapees in need of capture, banding, boxing, and live shipping on the next flight to Shenzhen, lest the fisher and his industry allies suffer a bottom-line loss. In short, while the capitalist ecology’s human actors deny the lobsters sociality, the latter in turn

²²⁷ Personal Communication, 06/07/2021, Anonymous fisher, Glace Bay, Cape Breton Island, Nova Scotia.

²²⁸ Personal Communication, 23/03/2021, Jared Stanford, Arisaig, Nova Scotia.

increasingly deny the human community a ‘social commodity’ of old as their market commodity status reaches ever greater heights.

However, with indigenous agitation for self-governed fisheries organized according to pre-contact ecological norms, the capitalist ecology perceives this particular lobster positionality on the relational grid as being under threat. As highlighted in *Chapter 6*, not only are Elders and the indigenous institutions of renewal articulating and promoting a certain revival of the subject status of the species, drawing on the notions of *interconnection* and *unity* of the pre-contact ontology, but also the moderate livelihood fishery efforts themselves are promoting a social functionality from the harvesting thereof. For instance, references to and practices supporting the ‘community benefit’, ‘communal nature’, and ‘sharing arrangements’ of the harvest, alongside the desire to ‘give back’, ‘build community’, and ‘sustain Mi’kma’ki’ by the Pictou Landing, Potlotek, and Listuguj bands stand in stark contrast to the community dis-embedding commodification-at-all-cost ethic of the capitalist ecology. Thus, while the moderate livelihood fisheries do include a “commercial” drive, hence the *Marshall Decision*’s recognition of commercial harvesting rights (See *Chapter 3*), there is a widespread commitment to ensuring that the fishery is “collaboratively oriented” (Poliandri 2003, 304), that the resource is viewed communally and its local exchange strengthens internal band ties, and that the values of sharing and reciprocity equally dictate the ultimate fate of the catch alongside profit motives. In other words, the realization of moderate livelihood fisheries intend to loosen the metaphorical straight jacket of market relationality and further the notion of exchange to include social solidarity- a mutualism of shared benefits and community sustainability.

For the primary actors of the capitalist ecology, this “indigenous communism”²²⁹ has no place in the industry. For example, when fishers from the Northumberland Strait Fishermen’s Association, or alternatively the Cape Breton Lobster Association (CBLA), participate in DFO advisory committee meetings, they are fully exposed to the arguments made by Mi’kmaq representatives about how a portion of the harvest should be “communal”, “not for the markets”, and “set aside for community benefit, not profit hoarding”²³⁰. In addition, other commercial Associations have participated directly in negotiations between DFO and Mi’kmaq fisheries departments on how moderate livelihood fisheries should be governed. As such, they too are exposed to the indigenous demands that the harvest, at least

²²⁹ Personal Communication, 26/02/2021, Lester Downs, Gulf Nova Scotia Association, Antigonish, Nova Scotia.

²³⁰ Personal Communication, Quotes from Association meetings attended throughout 2021.

partially, be re-embedded in communal social relations, “solve local problems of poverty”, and “not succumb to the export mania that drives the commercial harvesters²³¹”. Moreover, local media and radio have given a near constant voice to particularly outspoken Mi’kmaw bands, including Sipekne’katik and Pictou Landing, which has further communicated to the capitalist ecology’s primary actors that a certain grassroots agitation is threatening lobster’s previous status as absolute commodity, with asocial exportability; a commodity status that economic anthropologist Katherine Browne would refer to as existing in a “nonencompassing moral sphere” (2009, 18). One lobster pound worker at Bayport Wharf in Lunenburg County summarized the point²³²:

“. . . it’s clear what they want, just listen to them on the CBC²³³. They are constantly on there talking about their traditions and how they share everything. . . how they want to share the lobsters with their communities. How the fish are theirs or part of their community. They don’t see it the same way as the white guys, for them it’s for the community. They’re trying to make us look greedy and they’re on the radio talking about it every day.”

As such, many equally deride both the promotion of a subject status identification of the lobsters, as well as the associated communalism set to guide their human use. One fisherman from Indian Point Wharf on St. Margaret’s Bay explained²³⁴:

“They don’t operate in the modern world. They talk about the fish like people, even though they go out and destroy the stocks, but that’s another story. What do they want to do with the lobster, hoard them, take them back to their communities? Do they have buyers lined up at all? They fish out of season, they talk about sharing everything, I don’t see how that works in today’s economy.”

Others have expressed a fear that the indigenous community spirit on display in the fisheries might spread to their own communities, and thus revive the previously mentioned sharing and reciprocity-based exchange witnessed in the early 20th century. Jack Potter from the lobster export company Potter’s Ocean Products lamented the potentiality of such a development²³⁵:

“. . . imagine if the native way became the norm! That’s what these activists would want. What if our communities started expecting some kind of additional benefit from the harvest. . . whatever that might look like, maybe higher taxes on us, or more licenses to spread the wealth? It sounds ridiculous but just think about some kind of expectation of sharing. Companies like ours couldn’t survive, the fishermen couldn’t pay off their debts.”

Another fisher from Ingomar, near Shelburne, saw the indigenous “socialist” threat as somehow manifesting in the work and ideas of NGOs throughout the province. For him, these

²³¹ Personal Communication, 09/02/2021, Susie Muller, High Seas, Halifax, Nova Scotia.

²³² Personal Communication, 16/09/2021, Anonymous, Bayport, Nova Scotia.

²³³ Canadian Broadcasting Corporation

²³⁴ Personal Communication, 15/09/2021, Anonymous, St. Margaret’s Bay, Lunenburg, Nova Scotia.

²³⁵ Personal Communication, 02/09/2021, Lockeport, Nova Scotia.

“activist” organizations were working too closely with the Mi’kmaw fisheries departments and were likely to result in government regulations that were counter to the market orientation that governs the industry. He noted:

“Some of these groups have been against the industry forever. And now they are working with the natives on their fisheries. And imagine what comes next! They’re going to start telling us we need to share more. . . not just with the natives. But that we are greedy and just out to make a buck. They’ll convince the public that we should put lobster back on the school menus! And then we will be regulated more and probably have our trap numbers reduced.”

For others, the indigenous communalism on display was simply for show, and being used as a tool to sway public opinion against the “greed” and “selfishness” that have come to dominate the industry. The result, according to the reasoning, would be a resentful public that would perceive the enormous sums generated by the fishers as somehow illegitimate. A participant at the CBLA annual general meeting in early 2021 made the point²³⁶:

“Don’t believe any of it. They are out to make as much money as possible from this new fishery. They pretend to be giving it to community and to putting it towards poverty relief and helping out the youth. Bullshit! They want us to look bad and so they say that we are greedy, that we just want to sell lobsters, that we don’t give back. They want to create tensions in our communities and then they will have more support.”

In other words, by making the commercial industry look bad among the general public, Mi’kmaw fishers would gain more support and the government would be pressured to allow the moderate livelihood fishery to proceed. This would purportedly be achieved by reminding that public of how lobster used to be treated differently in non-indigenous society, of how it was more local, and more of a community asset that more broadly benefited others. He continued:

“What they talk about is lobster without a market. That is basically how it was when my grandfather was fishing. You could earn something from it but generally it was a hobby fishery. . .at least for some. And so everything was more local. That’s what they say the moderate livelihood fishery is for. And here we are exporting to China!”

Throughout 2021 and early 2022, this sentiment was common in many affluent areas of the province. Hence, from the prosperous wharves scattered along the Highlands on Cape Breton, to those on the South Shore around Halifax and Lunenburg, and around the southwest coast to the Bay of Fundy, the subject status and social functionality of the indigenous fishery is scoffed at as “unrealistic”, “communist”, and “against our interests”.

²³⁶ Personal Communication, 07/03/2021, Anonymous, Annual General Meeting, Cape Breton Lobster Association, North Sydney, Cape Breton, Nova Scotia.

To put the argument in this study's terms, the sentiments outlined above from the capitalist ecology demonstrate the perception that the rise of self-governed indigenous fisheries are threatening to disrupt the rigid object status identification of lobster. This is not to say that there is an increased recognition among non-indigenous actors of certain personhood qualities among the crustaceans. Nor is there any measure of acceptance of emergent moral or communicative qualities thereof that need to be drawn into non-indigenous social matrices. The point is that with the rise of a communal or 'social commodity' ethic governing harvesting on the indigenous side, the *denied sociality* typically directed at lobsters as strict fishery objects presents as less and less tenable to many among the ranks of the capitalist ecology. For a concrete example of how these alternative indigenous framings of the lobster harvest are generating reconsiderations of the moral and social standing of lobster (and hence the pushback from commercial fishers outlined above), consider the nostalgic sentimentality for an early 20th century fisheries cooperative movement that has been recently rekindled around the coastal communities of Lismore and Arisaig in Antigonish County.

Starting in the early 1930s, a group of Catholic priests based around Nova Scotia and New Brunswick began to educate and organize fishermen into unions and self-help organizations in order to reduce widespread social inequalities that were being generated by a heavily monopolized and corporate fishery sector (Calhoun 1991). Within a few years the efforts had led to the establishment of nearly 100 fisher owned and managed cooperative businesses throughout the region, including fish buyers, canneries, storage facilities, and processing stations; all of which are said to have dramatically improved the fortunes of the fishers cum business managers and to have helped to retain wealth and affluence in and around the communities to which they belonged (Dinsmore 2012). Though by the 1970s a combination of factors such as corporate mergers, inter-coop disagreements, and declining fish stocks had led to the demise of the cooperative movement, the social legacy and positive contributions that the movement made to local communities is very much alive and remembered today. For many who remember or were a part of the movement, the cooperatives were seen to ensure a certain 'social function' of the harvest by keeping the wealth generated local, by ensuring that the fisheries workers were well-compensated and able to provide for their families, and that local businesses were rooted in a community ethic, and therefore not likely to avoid taxes owed or to pollute the waterways and coasts that had become commonplace among the corporate titans of the early 20th century.

In the summer of 2021, many locals residing in close proximity to the wharf at Lismore reminisced about the era and drew parallels to the contemporary indigenous

fisheries' communal nature. One retired fisher whose father had been one of those cooperative business owners in the 1950s, remarked on the irony of what the commercial fishery once was, what the moderate livelihood fishers are trying to build today, and how much the cooperative ethic is prevalent in both. He noted²³⁷:

“The guys back in that era, they knew how to negotiate, how to ensure the fishermen had a say, and how to manage their own businesses. All of that meant stronger communities, more jobs, better paychecks. The cooperatives were very effective and now most are gone. The natives are trying to do something similar. I don't support their new moderate livelihood fishery, but they do know how to support community with their fishing. That's what the cooperative movement was about. But we've lost that and it has impacted a lot of communities.”

In other words, the communal spirit of the harvest, including the moral obligations to ensure a widespread and community benefit therefrom articulated by contemporary Mi'kmaw communities, was similar to what initiated the cooperative movement to begin with and what to many is its lasting legacy. Another Lismore woman shared the same view but was even more explicit in articulating how the cooperative model could once again solve social problems and regenerate the coastal communities so long neglected by corporate consolidation and cost cutting. She highlighted²³⁸:

“These communities used to be so much more. . .also in Pictou County. I'm old enough to remember how it was before the companies came in and bought up everything. We used to have fishermen running businesses or at least managing them, and they would hire locally and pay very well. That was the cooperative movement and it was pretty much gone by the 1980s. When you ask about comparisons with the natives, that's what they say they will do with their lobster harvest. . .whether or not it's legal I don't know. But there is definitely less of the corporate stuff with them. We should be able to restructure the fishery so that it's more like it used to be and I think more people are thinking about that. It would be a way to give back a little.”

To 'give back a little' was meant to reflect not just ensuring good paychecks for fishers and fish processors, but also to re-imagine what the fishery is for and what its status in the wider community should be; something akin to the indigenous 'communism' so reviled by the fishers quoted above. Thus, the lobsters, according to the sentiment, should once again have more of a social function and generate the types of moral motivations that lead to economic institutions that enhance social solidarity (i.e., like in the cooperative movement), promote social outcomes, and “prevent the kinds of decay that we see all around²³⁹”. Katherine Browne refers to this phenomenon as the “expansion of the moral sphere of capitalism”,

²³⁷ Personal Communication, 08/07/2021, Anonymous retired fisher, Lismore, Nova Scotia.

²³⁸ Personal Communication, 10/07/2021, Anonymous, Lismore, Nova Scotia.

²³⁹ *ibid.*

whereby, as a result of sociopolitical change, economic action is expected to accommodate and address ever widening social concerns beyond mere profit motives (2009, 18-20). A caretaker at the church in Arisaig summarized both the historical lament *and* optimism for the future of the fishery should such a moral expansion of the trade take root. Mirabelle Ostella noted²⁴⁰:

“We never seem to learn. Look around at the trends in the fishery and you can see a very limited future. We used to have more business activity all around this part of Antigonish and Pictou counties . . .and the union movement too. The communal-commercial system that the natives run is similar, their bands are basically like the cooperatives were. They aren’t getting rich but there are a lot of benefits that they all get from those licenses. If the younger fishers and local entrepreneurs learn these lessons then some of these small communities could be saved.”

Hence, as noted above many of the capitalist ecology’s primary actors who benefit from a certain status quo of lobster identifications- understood as ‘absolute commodity’ and unalterable and commodifiable amoral object- perceive indigenous agitations and alternative conceptions of the lobster harvest generating social and moral requisites that are widely popular in their communities. This is not to say that the lobsters are understood to be shifting to full subject status and therefore forcing the capitalist ecology’s actors into social intercourse therewith. Rather, the perception is that as the ‘communal benefit’ and ‘sharing arrangement’ renderings of the lobster harvest communicated and pursued by indigenous communities, including the resulting nostalgic re-imagining of what the commercial fishery used to be among non-indigenous communities, is threatening to generate a form of *intentional sociality* due to the lobsters themselves. This emergent sociality is less of personhood-like obligations expected to be extended thereto, but rather a perception that once rigid objects are being pulled into moral proximity with the social needs, problems, and expectations of non-indigenous society. Along with such an expanded ‘moral sphere’, lobsters are increasingly understood by many to be on the precipice of (re)gaining a social function, and their exchange, consumption, and harvesting patterns will be expected in the future to align with wider communal needs, not simply those of middlemen on the way to Shenzhen. As understood, though the lobsters are likely to remain in a position of *negative relationality* with the capitalist ecology, some form of social intentionality due to them will be all but inevitable in the context of expanded moral obligations. Put simply, the assumption is that the crustaceans- re-imagined in a context of emergent ecological plurality- are gaining a

²⁴⁰ Personal Communication, 10/08/2021, Arisaig, Nova Scotia.

community, not as equals among humans, but as beings that will be expected to operate in, work their way through, and reinforce the sociality across the ontological divide.

A similar perception pervades the capitalist ecology with regards to the relational status of the aforementioned ‘predators’ and ‘pampered mammals’ that ubiquitously feature in the both the myths and daily routines of industry actors (See *Chapter 5*). As prominent fishery objects, the predatory seals and various groundfish species (e.g., cod, haddock, pollock) have historically been understood as “voracious and blood thirsty”²⁴¹, amoral- perhaps even immoral- configurations of matter with teeth and a cunning agency that threaten the precious lobster stock. These mechanical agents of the seas are conceived of as anti-social, in that they defy the norms of capital by destroying the most lucrative species, operate according to instinct, bio-chemical drives, and “the ways of nature”²⁴², and are thus *denied sociality* by their human antagonists. The purportedly ‘pampered’ right whales are equally scorned as biophysical non-persons, something akin to valueless “floating blubber”²⁴³ that serves no purpose in the oceanic community of beings other than to frustrate the routines of the lobster trade. Equally denied a place at the fishery’s communicative commons, the sociality directed thereto is indirect and manifests primarily at fishermen’s association meetings and DFO roundtables as those same human antagonists curse and bemoan their protected status. These omnipresent objects therefore stand in a position of *negative relationality* with the capitalist ecology’s primary subjects in that their protected status results in costs and lost revenue on the opposite side of the dichotomy.

However, as the steps toward reestablishing an indigenous ecology proceed, the pampered and predatory are being drawn into a certain moral realm of responsibility hitherto unknown. For instance, as various of the ‘institutions of renewal’ covered in *Chapter 6* have embraced the ontological notions of ‘co-existence’ and ‘unity’ to the natural whole, as well as the relational notions of ‘alliances’ and ‘healing of relations’ to all of the beings and entities of that whole, a coalition has formed to further the protections afforded these despised despoilers of industry profits. On the indigenous side, the Mi’kmaw Environmental Association (MEA) advocates for various commercial fishery restrictions on bycatch retentions, gear modifications, and the periodic closing of fisheries in order to protect “those gifts from mother earth” and the “spiritual connections” with the Mi’kmaq they embody²⁴⁴.

²⁴¹ Personal Communication, 23/07/2021, Anonymous fisher, Yarmouth Bar Wharf, Yarmouth, Nova Scotia.

²⁴² *ibid.*

²⁴³ Personal Communication, 18/06/2021, Jason Starr, President Cape Breton Lobster Association, Ingonish, Nova Scotia.

²⁴⁴ See <https://www.mikmawconservation.ca/species-database/>, accessed January 2021.

These policy measures are meant to protect the multitude of marine and terrestrial species throughout Mi'kma'ki; the status of which is meticulously documented in a species database maintained by the group. Similarly, the Indigenous Institute for Natural Resources (IINR) holds workshops for harvesters, educates youth around Cape Breton, and lobbies the federal and provincial governments to pursue various aquatic research and stewardship initiatives targeted at protecting the province's marine biodiversity and regenerating depleted species. These efforts are typically referred to by both organizations as protecting "species at risk", and, most bothersome to the capitalist ecology, includes the despised seals, right whales, and groundfish species.

On the non-indigenous side, a group of environmental NGOs, sometimes referred to by industry opponents as "activists" or "tree huggers", has been energized by the Mi'kmaw interest in species at risk and formed various partnerships with them. Perhaps the most well-known is the Halifax-based Ecology Resource Coalition (ERC) which partners with indigenous groups around the Maritimes on promoting low impact fishing gear and the protection of marine habitats from unscrupulous fishing practices. Partnering with Mi'kmaw representatives, the ERC participates in DFO organized "species at risk advisory committees" and presents its own research and advocacy focused on promoting marine biodiversity, most notably of the groundfish. Jordy Shears from the ERC noted²⁴⁵:

"We've had a lot of success in working with indigenous groups. There isn't a lot of trust between us and industry, especially lobster. But we see eye-to-eye with a lot of Mi'kmaw communities. The species at risk issue is one of them. They have a holistic view of ecosystems. . . so they know that the collapse of the groundfish would be a disaster, they understand why the right whales need to be protected from industry."

The NGO High Seas pursues a similar mandate to that of ERC and has in recent years increasingly partnered with Mi'kmaw communities around Nova Scotia. One area has been the critique of what it calls "industrial fishing" and "high impact fishing gear" that is having detrimental impacts on stock levels of both groundfish and various mammalian species (including the right whales)²⁴⁶. Susie Muller from High Seas further explained²⁴⁷:

". . . a lot of fishing practices, including in the lobster industry, are detrimental to biodiversity. The commercial industry doesn't want to hear it though. We have a number of initiatives that we partner with indigenous groups on and this issue around fishing gear modifications and trying to bring fishing back to within sustainable levels. . . those are great examples. There are other things as well, like habitat protection, but it's all geared towards protecting these

²⁴⁵ Personal Communication, 13/08/2021, Halifax, Nova Scotia.

²⁴⁶ See <https://www.oceansnorth.org/en/where-we-work/atlantic-canada/>, accessed January 2021.

²⁴⁷ Personal Communication, 11/08/2021, Halifax, Nova Scotia.

species that certainly stand to lose if the fishery is unregulated. We also take a stance on the seal hunt as well. . and the industry obviously hates that.”

Like the ERC, Muller and her team advocate their positions and present their independent research at fishery advisory committees and, when welcome, attempt to advocate directly with fishermen’s associations. The latter typically being “less than successful on the best of days²⁴⁸.”

For the primary actors of the capitalist ecology, this coalition’s actions around protected species amounts to something of a displacement of the industry’s “rights” to exploit the resources of the marine environment without hinderance. Or, perhaps more accurately, the perception is one of a transference of “rights” from harvesting livelihoods to the very ‘predatory and pampered’ that seek to undermine those livelihoods in the first instance. Consider the views of the members of the Eastern Fishermen’s Association (EFA), Local 6 on Cape Breton. For the older members that harvested around the wharves of Port Morien, Glace Bay, and Louisbourg in the 1970s and 80s, there was something of a “deferral to the fishers” on all matters related to lobster fishing at the time²⁴⁹. That meant that not only were the lobster regulations rarely enforced, if they even existed, but that DFO, the surrounding community, and even the environmental NGOs of the era trusted the fishers’ opinions and assessments of the fishery above all others. That’s not to say that DFO’s regulations weren’t getting stricter and more cumbersome, but that the commercial fishers of the era felt empowered to defy what they viewed as unjust enforcement and to badger and berate the regulators as they saw fit. In the words of one retired fisher watching the comings and goings at the Port Morien wharf in the summer of 2021²⁵⁰:

“ . . . back then the regulations weren’t enforced so much because DFO and everyone else trusted us. We were the ones on the water and seeing the fishery firsthand, so we knew what was going on. Nobody else understood as well as we did. So we had the right to fight back when regulations were unnecessary or too cumbersome. The damn fish certainly didn’t get to dictate to us how to harvest!”

However, with the rise of indigenous engagement on protected species, in partnership with the ‘activist’ NGOs, the sense is that those “rights” have shifted, or are at least now shared, by the groundfish and seals consuming their catch and the right whales demanding safer passage through their waters. Fisher James Wood expanded²⁵¹:

²⁴⁸ *ibid.*

²⁴⁹ Personal Communication, 15/06/2021, Justin Frederic, Port Morien, Cape Breton Island, Nova Scotia.

²⁵⁰ Personal Communication, 17/06/2021, Anonymous, Port Morien, Cape Breton Island, Nova Scotia.

²⁵¹ Personal Communication, 30/07/2021, North Sydney, Cape Breton Island, Nova Scotia.

“Ever since the Marshall Decision we have all these activists now telling us how to manage the lobster fishery, how we can do this and that. That we have to take care of the whales and seals like the natives used to. This was never the case before, back when my father was fishing. It’s like the predators of the lobster now have rights, that we are supposed to take care of them, even though they are the problem for us.”

This sentiment of “taking care” of the other species was one that was shared by many and included the assumption that their responsibilities on the water were increasing and becoming more complex to manage. One fisher from the CBLA clarified²⁵²:

“And now we have to take care of the groundfish as well! They are the biggest predators for lobster that have recently hatched. They just sit there and wait for them to drop to the ocean floor. But now I’m supposed to take all these measures to bring them back, to bring back the haddock and pollock like they used to be. Protect their habitats and so on. For the activists, they now have rights, the right to repopulate the waters. And I have the responsibility to take measures to ensure that. It’s a lot to manage when just trying to make a living.”

The discourse around rights being expanded to protected species was also prevalent around Lunenburg County on the south coast, as well as in southwest Nova Scotia where the recent dispute was initiated in late 2020. Thus, the ‘predatory and pampered’ were now to be protected and cherished throughout the province, and to therefore have rights similar to the human protagonists of the fishery.

Much like the expanded sociality due to the lobsters that is expected to transpire, the extension of some notion of ‘rights’ to the protected species threatens the previously settled object status thereof. For, if the capitalist ecology’s subjects- both indigenous and non-indigenous- are now expected to treat with care, express sympathy towards, and to go out of one’s way to ensure the safety of even one’s oceanic enemies, the *denied sociality* of the other of the fishery’s objects will no longer stand. Though the ‘blood thirsty’ and ‘pampered’ will be afforded no more of a personhood status than the buoys, ropes, and bows that used to threaten their lives, the protective measures now expected to be taken for their benefit are certain to pull the species into moral proximity with the fishery’s standard subjects. In other words, if these noncommunicative objects are increasingly deserving of ‘rights’, they become more subject-like and a certain *intentional sociality* directed towards them comes due. The capitalist ecology’s primary actors don’t necessarily perceive this shifting of the relational grid to demand human-like social intercourse vis-à-vis the groundfish, whales, and seals, but that their well-being, population numbers, and health status will now enter a discourse that was previously reserved for the ecology’s human protagonists. With the rise of these moral

²⁵² Personal Communication, 07/03/2021, Anonymous member, Annual General Meeting, North Sydney, Cape Breton Island, Nova Scotia.

obligations- whether organically developed *or* forced down the throat by ‘hippy activists’ and their indigenous allies- a modified form of sociality will now be required where previously it was denied.

From Acts of God to Social Burden

When fisher Michel Commeau is kept off the waters during peak season around Meteghan wharf because of bad weather or dangerous ocean swells, his frustration and anger is nearly unmatched. He and his fellow fishers in the area frequently curse the fluctuating weather patterns as “unpredictable bastards”, “nuisances” that are despised, and, in a joking manner, refer to them as “punishment from God” for some vague moral transgression. The weather and its effects on the oceanic currents, swells and temperature, and therefore diminished profits and damaged boats, are loathed as much as the ‘predatory and pampered’ and considered as inevitable forces that, while beyond the control of man, can at least be minimally understood through various forms of techno-gadgetry directed thereto²⁵³. These vicious and unforgiving object forces of the fishery are therefore understood as “just a part of nature”²⁵⁴ and something to be tolerated, expected, and coped with through reduced fishing days and, in bad years, diminished expectations of seasonal hauls. These sarcastically labelled “acts of God” are thus fundamentally understood as part and parcel of the natural world within which the lobster fishery takes place and hence beyond the reach of human agency. The key point is that as objective amoral forces, the weather and its waves and currents are conceptually confined to the offshore environs and beyond the reach of any *intentional sociality* that would inevitably be directed at subjects should they cause such harvesting mayhem.

The ecological pluralization currently underway in the fishery threatens to disrupt these dominant assumptions. To understand how, it is useful to consider where understandings of and activism around climate change fit into the broader indigenous revivalism taking place. In the last couple of decades, as Mi’kmaw communities have taken steps to reconstitute an ‘ecology of yore’ throughout Mi’kma’ki, considerations of man’s role in causing such climatic disruptions and action on addressing the impacts thereof have taken center stage. Elder James Robinson commented²⁵⁵:

²⁵³ E.g., barometric pressure monitors, wind speed gauges, digital psychometers, seismometers, etc. See *Chapter 5*.

²⁵⁴ Personal Communication, 22/04/2021, Anonymous, Group interview Eastern Fishermen’s Association Local 9, Meteghan Wharf, Nova Scotia.

²⁵⁵ Personal Communication, 20/02/2021, Halifax, Nova Scotia.

“As part of the reintegration of our traditional ways of engaging the natural world, many communities have enhanced their understandings of climate change, of how man is pushing nature to unsustainable levels of stress. There have also been a lot of practical programs to address the impacts, adaptations and awareness raising. Including among fishers and hunters.”

As such, in recent years multiple Mi’kmaw communities have prepared “emergency management and adaptation” plans to cope with the inevitable impacts of climate change on their communities²⁵⁶. Mi’kmaw artisans have raised awareness of climate change and sought ways to adapt their craftsmanship to cope with the diminished or degraded natural products they use as supplies (e.g., Guye 2021). The *Mi’kmaq Maliseet Nations News* publication regularly runs articles raising awareness of climate change and advertises ways to get involved in prevention and mitigation projects (e.g., Hartlen 2021; Crowell 2021). The MEA and IINR hold educational outreach programs, work on adaptation measures in forestry and land management, all the while partnering with the provincial Department of Land and Forestry on policy change. There has also been a significant uptick in indigenous activism and civil disobedience meant to halt environmentally destructive practices, such as clear-cut logging blockades in Nova Scotia²⁵⁷.

On harvesting livelihoods specifically, the Atlantic Policy Congress of First Nations (APC) conducted a recent study on the impacts, causes, and recommendations for addressing climate change²⁵⁸. The report documented a number of ways that Mi’kmaw fishers are already adapting to the disruptions and sought to raise awareness with the federal and provincial governments of how fishers’ excessive burning of fossil fuels and overfishing were contributing to ocean acidification and unpredictable weather patterns. Closely associated with the revival of *netukulimk*, an activist coalition has formed to promote sustainable harvesting techniques and raise awareness of the causes of climate change. For instance, Mi’kmaq in collaboration with the ERC hold workshops to leverage Treaty rights to force change on “industrial harvesters” that they see as damaging the environment (Wark 2017). Others are working with universities in Halifax to hold public outreach campaigns on climate policy advocacy and “workers’ transition” to sustainable natural resources use²⁵⁹. Staff from the Confederacy of Mainland Mi’kmaq are promoting “community-based climate

²⁵⁶ See <https://www.climatetelling.info/annapolis-valley.html>, accessed March 2021.

²⁵⁷ See <https://www.incasummer.ca/2021/12/14/logging-blockade-in-mikmaki-for-climate-justice-and-conservation>, accessed February 2021.

²⁵⁸ See <https://www.apcfn.ca/fisheries/energy-climate-change/>, accessed March 2021.

²⁵⁹ See <https://ecologyaction.ca/event/imagining-2030-what-could-climate-justice-look-Mikmaki>, accessed March 2021.

monitoring” to identify harmful harvesting practices and to educate the non-indigenous community on how to be more climate aware²⁶⁰. And in the Mi’kmaq Rights Coalition’s work to support the moderate livelihood fisheries, there are efforts to raise awareness and promote environmentally friendly harvesting techniques. A collection of efforts that, according to one Elder involved, “. . . are a part of the Mi’kmaq rediscovering their traditional ways, the ways that we once knew and practiced. . . to take care of the environment that we are a part of²⁶¹.”

While not exclusive to indigenous communities, this activism and awareness raising around climate change has contributed to the perception that additional fishery objects are being drawn into a broader social matrix hitherto reserved to those with a definitive subjectivity. Take the views of fishers from the CBLA as example. For some, climate change rhetoric has historically been considered something of a farce, an “elite conspiracy”, or even a “plot” to generate regulations that would squeeze out small-scale fishers. For others, the notion of climate change wasn’t necessarily considered false or part of a deeper scheme, but rather a not-so-immediate concern that rarely impacted their lives and was little more than an academic interest in distant universities. Fishers from the Gulf Nova Scotia Association (GNSA) in Antigonish County have traditionally held similar views. While some members have been believers in the science and thought that impacts were being felt in the fishery (e.g., temperature changes), they felt little responsibility for it and less of a need to change their own behavior or livelihood techniques in order to address it. A certain blind faith in science to solve the problem has generally held and absolved most of any responsibility for addressing it themselves. After all, its impact on the fishery in increasingly unpredictable weather, temperature increases, and violent ocean swells falls definitively on the object side of the capitalist ecology’s ontological dichotomy, and therefore better left to the natural sciences to resolve.

However, with the rise of a Mi’kmaq voice on the matter, and in increasingly prevalent coalitions between the Mi’kmaq and non-indigenous groups, many perceive a reconfiguration of those ‘unstoppable forces’ on the relational grid of the capitalist ecology. Returning to the CBLA, consider the thoughts of one fisher from Glace Bay taking a break from unloading his haul one Friday in the summer of 2021, he noted²⁶²:

“. . . we keep hearing about climate change. It used to be just the elites in Halifax and those types. Now it’s even the natives, they have all these initiatives and they’re working with the

²⁶⁰ See www.carbonfreecolchester.ca, accessed March 2021.

²⁶¹ Personal Communication, 22/01/2021, St. Francis Xavier University, Antigonish, Nova Scotia.

²⁶² Personal Communication, 20/06/2021, Anonymous fisher, Glace Bay, Cape Breton Island, Nova Scotia.

provincial government on climate issues. There are even reports in the media now about how our boats are polluting and that's contributing to the problem."

Another fellow fisher had similar views and began to link the rising activism to his own thoughts on how the weather and water had both started to seem more unpredictable in recent decades. He clarified²⁶³:

"...it's getting harder to ignore. Even the natives now are talking about it and saying how they are using more sustainable practices to protect the environment. I'm not saying I don't believe in it. I think we should recognize the differences in the climate, in how many more bad storms we've had recently. . .but also in how it's gotten warmer and that's affecting the lobster behavior. The natives saying that they are going to address it and we ignore it. That doesn't seem realistic anymore."

Another fisher from the GNSA stuck by his "lifelong" stance that climate change was "made up" but expressed a revelatory sentiment on how Mi'kmaw activism was forcing a relational change vis-à-vis the weather and waves. For him²⁶⁴:

"... I never really believed in climate change or that it was responsible for the weather shifts, the water temperature changes and all that. But the natives are bringing it to the DFO advisory meetings, they're bringing it to the media, and working with the university elites on it. They are putting it front and center and making it impossible to ignore. . . otherwise they're gonna make us look bad."

A fellow GNSA member echoed the 'impossible to ignore' message and clearly linked the rising consciousness around climate change to his views on the environment. Lester Downs expanded²⁶⁵:

"A lot of this movement around climate change and its relationship to the fisheries is quite new. And ever since the Mi'kmaq won the Marshall Decision, they have been including it in their rhetoric to make DFO and the commercial sector look bad. But anyway, it's a reality now and with so much attention the commercial actors have to show that they are doing something. We can't just keep complaining. . . or ignoring the environment like we have in the past."

Another of Downs' colleagues who fishes from Arisaig Wharf along the Northumberland Strait most clearly linked the rising Mi'kmaw activism on climate change to shifts in the way those 'unstoppable forces' are being considered by the capitalist ecology. Jonathan McWright noted²⁶⁶:

"... the natives, they understand climate change and they've actually done quite a lot to raise awareness here in the province. I don't agree with the fisheries thing but they deserve credit for bringing a greater awareness of how our industry impacts the environment and the water. There is going to have to be more focus on this from DFO, the Associations, everyone. We

²⁶³ Personal Communication, 25/06/2021, Anonymous fisher, Ingonish, Cape Breton Island, Nova Scotia.

²⁶⁴ Personal Communication, 23/03/2021, Jared Stanford, Antigonish, Nova Scotia.

²⁶⁵ Personal Communication, 27/02/2021, Antigonish, Nova Scotia.

²⁶⁶ Personal Communication, 24/03/2021, Arisaig, Nova Scotia.

know the weather is changing and we know we can't fish when there's bad weather. We know the water is changing and we know that the lobsters will migrate if it gets too warm. What more are we going to do about it?"

Thus, from the angle of the capitalist ecology, the general sense is that Mi'kmaw activism, partnerships with NGOs and universities, and awareness raising has further elevated the topic of climate change as a key area of concern in fisheries debates, whether one believes the science or not. In addition, it has also served to reinforce the links between the impacts thereof on the one hand, and the fate of the lobster fishery on the other. Many have taken note and feel a certain timidity for what may be to come in the future.

Hence, this dynamic of the indigenous revivalism has forced the primary actors of the capitalist ecology to contemplate a future in which the weather, waves, and currents are no longer simply object forces that can be held offshore and disassociated from social life. For, with a growing awareness of climate change's effects, alongside an increased recognition of its causes in the very industrial and extractive livelihoods the fishery supports, the phenomenon is rendering the *denied sociality* of old obsolete. As in the other of the fishery's objects that are undergoing a transference along the relational grid, this is not to say that the weather, waves, and currents are becoming communicative actors with will and intentionality. But rather that as their behavior and fate are increasingly understood as intertwined with those of the fishery's subjects, they become less a 'part of nature' and more of a moral obligation that works its way through the capitalist ecology's subjectivities. Whereas previously it was only with other of the fishery's subjects that a certain intentional sociality could shape behavior, shift attitudes, and change ways of thinking about the ways of the fishery. Now, as meteorological and oceanic forces are pulled into moral proximity with those subjects, a modified *intentional sociality* is necessarily directed thereto in the form of socioeconomic adjustments (e.g., less intensive fossil fuel use), sociopolitical campaigns (e.g., policy advocacy on climate protections), and social intercourse more generally (e.g., awareness raising of climate change's impact). In other words, much like with other subjects, the weather, waves, and currents generate moral obligations, shape subjectivities, and harness human agency. They shift from 'acts of God' (i.e., 'nature') to social burdens shared by all.

To summarize, as a certain ecological plurality re-emerges in the lobster fishery of Nova Scotia, the dominant capitalist ecology perceives a diminishment of the subject-object dichotomy that has historically dictated whether a being or entity is denied *or* in receipt of intentional sociality. Thus, as lobsters regain a 'social function', as seals, groundfish, and right whales assume 'rights', and as the forces of weather, waves, and currents are linked to

manmade climate change, new forms of *intentional sociality* directed thereto are foreseen on the horizon. It's not that the capitalist ecology's primary subjects perceive the emergence of full personhood among these biophysical beings and forces, but that their previously rigid object status identifications are being disrupted and that they are being pulled into moral proximity therewith. As such, they become agents with subject-like qualities, and thus considerations of their role in strengthening communal ties, their well-being and population numbers, as well as their altered states due to extractive human-environment relations variously enter the fishery's social matrix; a potentiality that will require a level of intention and effort previously unknown to the actors on the subject side of naturalism's partition. While these examples demonstrate a *reconfiguration of sociality* among certain of the capitalist ecology's objects, there exists in parallel a similar *reconfiguration of relations* underway among the fishery's subjects.

II. Shifting to and Emerging Anew in Negative Relationality

While rising ecological plurality has in various ways disrupted the rigidities of certain object status identifications, and is thus expanding the recipient pool of *intentional sociality*, it has in parallel threatened to reconfigure those afforded *positive* versus *negative relationality*. For instance, previously a number of the fishery's subjects interrelated from various standpoints in the industry in a manner that extended mutual benefits to all those involved (See *Figure 1, Chapter 5*). These subject actors have been referred to throughout this study as the primary actors of the capitalist ecology and manifest a *positive relationality* with one another as the resulting profits, exports, community support, and upheld regulations are both expected and reciprocal in their gains. However, as self-regulated Mi'kmaw fisheries advance, certain pressures, opportunities, and new relationships threaten to shift some of these primary actors to a position of *negative relationality* vis-à-vis their former allies. In other words, as friends become foes, a social chasm opens up in a relational space that was hitherto tightly integrated. Moreover, as new actors insert themselves into the social dynamics of the lobster fishery, the added phenomenon of subjects emerging anew in a position of *negative relationality* begins to manifest as well. As decidedly in support of the moderate livelihood fisheries, these novel subjects invite the ire of the capitalist ecology's primary actors and engender additional forms of win-lose relationality with parasitic attributes. Taken together,

this reconfiguration of relations stands to further disrupt the expected workings of the capitalist ecology.

Subjects in Decline

When fisher Justin Frederic prepares for the LFA 27 fishing season from May to July that applies to his wharf at Port Morien, he not only goes through the maintenance checklist to upgrade his boat, he also consults with one of the only institutions in the region that he trusts- the Eastern Nova Scotia Oceanic Conservation Consortium (ENSCC). As an environmental and marine stewardship focused NGO, the ENSCC has historically worked closely with fishers and others in the industry to be up to date on the latest scientific findings on things like lobster ecology, stock fluctuations, water temperature shifts, fauna and flora conditions, and how best to negotiate with DFO to promote “market driven” environmental policy²⁶⁷. Closely aligned with industry, the organization claims that it is “riding the environmentalist streak *and* promoting capitalist advantages”, which essentially means that it advocates on behalf of industry for moderate regulations on the lobster sector in order to achieve what it sees as “sustainable and sufficient” stewardship objectives. In light of this allied status, the ENSCC has had close relations with many fishers and their associations on Cape Breton- primarily the Eastern Fishermen’s Association (EFA) and the previously mentioned CBLA- and has regularly held outreach sessions therewith, invited association heads to speak at its Oceans Lab, and even served as a liaison with DFO on behalf of the region’s harvesters, exporters, and processors. Though not seeing eye-to-eye on everything, “a true environmental friend to the industry²⁶⁸”.

As such, Frederic’s typical pre-fishing season routine includes several engagements with the ENSCC. While having his boat inspected and minor repairs done in April, and mending his traps, ropes, and buoys in early May, he would simultaneously take the lead for the EFA Local 9 in organizing informational sessions with the ENSCC. He would invite the head of the organization, Andy Martin, down to the wharf at Port Morien to conduct voluntary inspections of fishers’ traps and rope to make sure they were in compliance with latest DFO safety and right whale protection regulations. The ENSCC would be invited to MFU quarterly meetings to inform fishers on new environmental compliance regulations, relevant sea mammal protections coming into force in the United States, and the latest

²⁶⁷ Personal Communication, 28/07/2021, Andy Martin, director of Eastern N.S. Conservation Consortium, Louisbourg, Cape Breton, Nova Scotia.

²⁶⁸ *ibid.*

findings from in-house studies conducted on stock health and sustainability. Frederic describes the relationship between his fellow Port Morien fishers and the ENSCC as “collegial and professional” and sometimes even “mutual”, in that when the fishers follow the rules and take marine stewardship seriously “it’s the industry that is the primary beneficiary”²⁶⁹. Conversely, when the fishers around Port Morien, Louisbourg, and Glace Bay are perceived by DFO to be fishing according to the regulations, NGOs like the ENSCC are viewed favorably and more likely to get federal grants in the future. The relationship, according to Martin²⁷⁰:

“ . . . was one based on trust, because we haven’t pushed them hard on certain things that are hard to accept. We try to maintain a middle ground on the more controversial issues.”

However, with the controversy around the moderate livelihood fisheries of late, that relational dynamic has begun to shift.

In preparing for the 2021 season, Frederic and his colleagues at the EFA Local 9 had distanced themselves from the ENSCC and were no longer including them in their preparatory routines and rituals. In April and May, the EFA had shifted to “consulting internally”, engaging more directly with DFO, and even reaching out to their association competitors in the CBLA for guidance on the upcoming season. According to one EFA fisher at Port Morien, “the native issue has infected almost everyone, even ones that we once trusted”²⁷¹. A few days before the season started in May, another expressed²⁷²:

“the NGOs are all the same now. . .we don’t have any allies as everyone wants to promote the moderate livelihood fisheries, no questions asked. They claim to be good stewards but really they are just acting like the elites in Halifax.”

These comments reflect the sentiment that the ENSCC had sided with the Mi’kmaw fishers and was coming down on the side of supporting moderate livelihood fisheries in Cape Breton. Although the organization had never come out publicly in support thereof, a number of industry actors around the island perceived a shifting of allegiance. According to Frederic, during the peak of the dispute in the fall of 2020, ENSCC staff had stated that the EFA fishers shouldn’t worry about the moderate livelihood fisheries as it was small scale, localized, and not likely to impact stock levels around LFA 27. Moreover, the ENSCC was rumored to be planning a joint research project with the IINR related to gear entanglement avoidance for

²⁶⁹ Personal Communication, 15/06/2021, Port Morien, Nova Scotia.

²⁷⁰ Personal Communication, 30/07/2021, Andy Martin, director of Eastern N.S. Conservation Consortium, Louisbourg, Cape Breton, Nova Scotia.

²⁷¹ Personal Communication, 16/04/2021, Anonymous fisher, Port Morien, Nova Scotia.

²⁷² Personal Communication, 12/05/2021, Anonymous fisher, Port Morien, Nova Scotia.

lobster fishers. For Frederic and his EFA colleagues, there was a metaphorical social line in the sand and “. . .for many of us you’re either with us or against us on this issue and we aren’t sure where some of our old partners stand anymore”. A certain rock-solid social solidarity between industry and NGO had stumbled in the lead up to the 2021 season.

A similar relational dynamic has been unfolding with the conservation focused NGO National Wildlife Association, which advocates “sustainable hunting and fishing” and “reasonable regulations that protect at-risk species” in Nova Scotia’s fisheries and forests²⁷³. Consider the routines of lobster harvesters around Cape Sable Island, who mostly belong to the Plymouth Rock Fishermen’s Association. Similar to the relationality directed at the ENSCC, most fishers around the Clark’s Harbour wharf long considered the National Wildlife Association as an industry ally, “not like the tree huggers at the other NGOs”²⁷⁴. The organization was considered especially friendly to lobster fishermen, as its founders were hunters and fishers, and regularly promoted the kinds of regulations that fishers found reasonable (e.g., season and trap limitations). Many members of Plymouth Rock have been financial contributors to the Federation, considered it a “sister organization”, and kept abreast of its Marine Action Plan for recommendations on how to “fish responsibly and without encouraging a new DFO regulation²⁷⁵”. Members have sometimes participated in the organization’s research projects on marine protection issues, voluntarily skippered boats for their members, and invited them to industry events for “a supportive and industry friendly”²⁷⁶ NGO perspective.

In like manner, the environmental NGO Coastal Cleanup, based in Mahone Bay, was in many ways integrated in a position of *positive relationality* with the capitalist ecology’s primary actors. In the past, many fishers from both Plymouth Rock and the Professional Lobster Association, which represent fishers from LFAs 33, 34, and 35, would willingly participate in their “ghost gear” clean-up efforts, offer up their boats and electronic gear for marine-waste surveillance studies, and have even donated money to an effort to prevent and clean up microplastics threatening molting lobsters. Fisher Oliver Cotton from Lunenburg commented on the relationship²⁷⁷:

“Coastal Cleanup was an organization that had a lot of trust. A few of us at Plymouth Rock were offended when they published an article pointing a finger at us for ghost gear problems.

²⁷³ Personal Communication, 10/11/2021, Liz Bakina, Fisheries Engagement Specialist, National Wildlife Association, Halifax, Nova Scotia.

²⁷⁴ Personal Communication, 30/07/2021, Anonymous fisher, Clark’s Harbour wharf, Cape Sable, Nova Scotia.

²⁷⁵ See 42.

²⁷⁶ Personal Communication, Jason Donati, 27/07/2021, fisher Clark’s Harbour, Cape Sable, Nova Scotia.

²⁷⁷ Personal Communication, 15/12/2021, Lunenburg, Nova Scotia.

But normally they are seen as friends and allies. In fact, it's a little socially intermingled. Some of our fishers have gone to work with them and vice versa. Most of us younger fishermen understand that the stewardship projects they promote will in the long-term support the industry. So, we supported and worked with them closely."

Similar to the previous role of the ENSCC noted above, Coastal Cleanup would occasionally participate in the associations' annual meetings to present their research, offer suggestions on spent gear disposal, and what impacts habitat degradation could have on lobster stocks.

Amber Creek from Coastal Cleanup explained²⁷⁸:

"We have always tried not to be top down. We collaborate closely with the industry, we've tried to ally ourselves with the associations, and secondary industries. We have understood the importance of relationships in garnering support for the work we do."

However, much like the fate of the ENSCC, the National Wildlife Association and Coastal Cleanup have fallen from grace in the eyes of the capitalist ecology. Hence, for fishers, secondary industry actors, and DFO alike, many see in the words and deeds of these NGOs since the fall of 2020 something akin to a betrayal of their social trust. Whether in coming out publicly with vague words of support for "Treaty rights", or alternatively through active partnerships with Dalhousie University on stewardship initiatives, these organizations have purportedly revealed their true allies in the Mi'kmaw fishers and have crossed that line in the sand to advocate an alternative vision of the fishery. Regarding the former, rhetorical support for "rights" or "self-government" on the part of indigenous fisheries, whether from institutional allies or not, is understood by the primary actors of the capitalist ecology to undermine their dogmatic support for the 'techno-bureaucratic deference' covered in *Chapter 5*. As such, self-governed Mi'kmaw fisheries are understood as opening up a pandoras box of anarchic free-for-all fishing practices, which would undermine their livelihoods and carefully balanced partnerships with the regulatory bodies. Thus, when the National Wildlife Association is perceived to align rhetorically, if not in actual practice, with these commitments, it begins to dis-embed itself from the complex tapestry of relations and expectations that comes along with being a primary actor in the capitalist ecology. In the words of one fisher, "words matter, and they have to be careful to not encourage more native fisheries!"²⁷⁹

Expanding on the reference to Dalhousie University above, Coastal Cleanup's many partnerships with academics therefrom has similarly upended its once positive relationality

²⁷⁸ Personal Communication, 10/09/2021, Coastal and Marine Project Coordinator, Coastal Cleanup, Mahone Bay, Nova Scotia.

²⁷⁹ Personal Communication, Adam Stoney, 01/10/2021, Clark's Harbour, Cape Sable, Nova Scotia.

with industry. For example, as an early and public supporter of the moderate livelihood fisheries (e.g., Smith 2020; Edwards 2020), including through the secondment of Professor Greg Bates to facilitate the Sipekne'katik research project on out-of-season harvesting (See *Chapter 4*), the university has assumed the role of public enemy number one in the eyes of the capitalist ecology. Hence, any association, partnership, or cooperation with it or its researchers is viewed as a hostile act and invites widespread scorn. Whereas previously Coastal Cleanup's joint projects with Dalhousie University researchers went unnoticed, they are now a mark of treason, something akin to a treacherous stab in the back of a once allied primary actor. Creek further explained²⁸⁰:

“. . .the indigenous fisheries issue has really disrupted a lot of social ties for us. We haven't come out too vocal on the issue, but we do still partner with Dalhousie and other researchers that have come out publicly. The fishermen don't trust them anymore and now we are being alienated from those social circles, they don't want to partner with us on stewardship projects and so on. They think that we are all classist and knee jerk Mi'kmaw supporters and they despise that now.”

In other words, organizations like Coastal Cleanup are not only expected to come out as clearly opposed to the moderate livelihood fisheries, they are also expected to disassociate themselves from previous social ties that may not be fully in line with the industry's perspective. A failure to do so is perceived as generating future zero sum relationality, with the commercial sector certain to be on the losing end.

The relational standing of academics and NGO types is undergoing a further reconfiguration with regards to their perceived sympathies toward traditional Mi'kmaw knowledge of the marine environment and approaches to conservation, what we might term “traditional ecological knowledge” (TEK) (Berkes 2018). According to the primary actors of the capitalist ecology, the various iterations of revived Mi'kmaw TEK on display in the fisheries and elsewhere are, as noted in *Chapter 4*, ‘romantic hippy bullshit’ and nothing more than an attempt to make the industry look unsustainable and environmentally destructive. Thus, when universities such as St. Francis Xavier give public debate space for raising awareness of a revitalized Mi'kmaw TEK²⁸¹, or when Dalhousie University creates a platform for the merging of indigenous and Western knowledge of the marine environment²⁸², those institutions further entrench themselves in an antagonistic stance. Likewise, when NGOs like

²⁸⁰ See footnote 47.

²⁸¹ See Mi'kmaw Learning Lodge: Mi'kmaw Livelihoods at https://www.youtube.com/watch?v=8EQiFr2dP_k, accessed November 2021.

²⁸² See FishWIKS initiative discussed in *Chapter 6*, or at <https://www.dal.ca/sites/fishwiks.html>, accessed December 2021.

Coastal Cleanup and the National Wildlife Association “merely recognize the benefits of indigenous knowledge for things like conservation”²⁸³ in public, they enter the much-vilified realm of ‘activist’ or ‘hippy’ NGOs more traditionally occupied by groups like the Ecology Resource Coalition and High Seas²⁸⁴. Hence, alongside words and deeds, the sympathetic intellectual engagement with alternative ways of knowing, understanding, and engaging the natural environment, including the lobster fishery, is viewed as a shifting of allegiances, an invitation to anarchy, or, in the words of a retired fisher at St. Mary’s wharf in Digby County²⁸⁵, “a capitulation to the elites and a clear indication of where you stand in this fishery!”

In this study’s terms, these once favorably considered NGOs and academics are not only being demoted on the hierarchy of actors, they are also being viewed as shifting from a stance of *positive* to *negative relationality*. Though still the recipients of *intentional sociality* as unavoidable actors among the fishery’s subjects, their perceived support for the moderate livelihood fisheries and indigenous knowledge to boot renders future relationality with them a risk and likely loss to the capitalist ecology. For example, further partnerships with groups like ENSCC or the National Wildlife Association confer legitimacy and status and raises their perceived pro-moderate livelihood messaging among the public. Similarly, future joint projects with groups like High Seas or Coastal Cleanup, as well as the myriad university academics associated with them, risks elevating the “egalitarian and radical voices” from the academic and NGO scene²⁸⁶. Such relationality could potentially force on the commercial sector more stringent regulations on conservation (i.e., integration of TEK), more “lax rules on who is a bonafide fisher” (i.e., allowing Mi’kmaq bands to issue their own licenses), or even result in the Mi’kmaq defining for themselves what a moderate livelihood is and how their commercial fishery will look (i.e., realization of Treaty rights). In all such instances, the primary actors of the capitalist ecology stand to lose- or rather will be forced to share- some aspect of the fishery; an inevitable outcome of the rising *negative relationality* vis-à-vis the province’s NGOs and academics should the indigenous fisheries proceed.

A similar shifting to *negative relationality* is at risk of transpiring among certain of the lobster industry’s buyers and exporters. For example, one of the most remarked upon and cherished relationships for lobster fishers is that with his or her buyer. Though shot through

²⁸³ Personal Communication, Liz Bakina, National Wildlife Association, 10/11/2021, Halifax, Nova Scotia.

²⁸⁴ Personal Communication, Group Interview, Ecology Resource Coalition, 20/12/2021, Halifax, Nova Scotia.

²⁸⁵ Personal Communication, Anonymous, 30/09/2021, Cape St. Mary’s, Digby County, Nova Scotia.

²⁸⁶ Personal Communication, Joan Jennings, journalist Halifax Examiner, 25/02/2021, Tatamagouche, Nova Scotia.

with competition and occasional accusations of dishonesty on prices being offered, strong relations between fisher and buyer are considered necessary, honorable, and “gentlemanly like” in most instances. Consider the head of the Yarmouth-based Mobley Lobster Company, William Erns, and his long-standing relations with fishers from the area. For Erns, there is a certain “code”, or “right way”, of doing business, which includes fishers honoring their promises to sell to a certain buyer, buyers honoring their promises to offer fair prices at the wharf, and both agreeing that the buying or selling of lobster out-of-season constitute moral transgressions unbecoming of a professional²⁸⁷. Erns has long-standing informal agreements with 25-30 fishers around Yarmouth Bar and describes the relations that come out of such engagements as “family like”, “trusted”, and “mutual”. Nick Johnson from Clark’s Harbour Fisheries describes similar relationships that transpire between fishers and buyers on the one hand, and his exporting company on the other. Though he variously purchases directly from fishers, lobster pounds, or buyers, Johnson recalls the “faith” and “commitment” to fair play that transpires all such relations²⁸⁸. For him:

“When there is a commitment to doing things the right way, to honoring your word, working well with your clients, then everyone stands to benefit. We have historically had good relations with the whole industry. . . .so we get guaranteed supply, the fishers and pounds get high prices.”

However, with the moderate livelihood fisheries progressing with out-of-season harvesting, and the potential for the Nova Scotia provincial government to legalize the commercial sale thereof, an additional relational rift has begun to emerge among these primary actors. Though not yet legal to buy lobsters from fishers with non-DFO issued licenses, continued agitation for the moderate livelihood fisheries has opened up the possibility that limited out-of-season harvesting will eventually be allowed, and thus the commercial sale of those lobsters as well. Various buyers and exporters have taken note. Paul Declerk from the East Bay Fishermen’s Cooperative explained²⁸⁹:

“In the past, before this native issue came up, there was both the law and the expectation, that you wouldn’t buy from harvesters out of season or without a license. The law was the law, it was illegal. But then there was the dishonor that would come from it. The fear from fishers is that too much product on the market would depress prices. And so there was an expectation that nobody would break those rules and buy from an LFA that was out-of-season, or lobsters from those without a proper license. It was about maintaining the livelihood, the profits at a certain level.”

²⁸⁷ Personal Communication, 21/04/2021, Mobley Lobster Company, Yarmouth, Nova Scotia.

²⁸⁸ Personal Communication, 25/04/2021, Yarmouth, Nova Scotia.

²⁸⁹ Personal Communication, 14/04/2021, Ballantyne’s Cove, Nova Scotia.

With the potential for legalization of moderate livelihood sales, a number of buyers and exporters have purportedly considered violating those previous norms. For them, there is no shortage of international market demand year-round, and therefore additional product on the market means additional profits. Yet, at the same time, additional product from an out-of-season LFA, means lower prices for those harvesting in an in-season LFA. Irving Jeffries from the Lobster Association of Canada elaborated²⁹⁰:

“ . . . this potential for additional sales from the moderate livelihood fisheries could seriously depress prices for others. Remember, that’s one of the reasons the LFA system was put in place. . . to drip feed markets and keep demand and prices high. But some of the smaller buyers and exporters don’t care. For them, depressed prices in a month that they typically didn’t sell anything is better than nothing.”

Buyers and exporters are thus put in a socio-relational bind. Do they honor the norms, codes, and expectations of old that limited their lobster purchases and dealings in certain months in order to pass on an economic benefit to the harvesters? Or do they take advantage of the emergent opportunities opened up by the moderate livelihood fisheries to generate additional profits from those previously off-limits sellers and lobsters from closed LFAs? For traditional commercial harvesters, the risks are many, including the potential shifting to *negative relationality* of a number of their previous industry allies.

Lastly, a measure of apprehension pervades certain fisheries associations that even within their own ranks there exists sympathies towards the moderate livelihood fishers. The recent plight of fisher Adam Stoney from Clark’s Harbour is a case in point. For several years, Stoney and a handful of others from the Bay of Fundy Fishermen’s Association have volunteered with Coastal Cleanup on various marine stewardship projects. As noted above, many have disassociated themselves from such NGOs in the wake of the current dispute, but Stoney has continued to volunteer with the group as he sees their work “essential to maintaining the environment and keeping the industry involved in solving pressing problems of sustainability”²⁹¹. As such, going into the 2021 season he noticed a rising hostility being directed at him around the wharf and association offices, with off-the-cuff comments such as “native lover” and “sell-out” levelled his way. Other fishers from the Fundy Fishermen’s Association and the GNSA who continue to work with NGOs reported similar misgivings and a rising mistrust directed their way. Similar happenings were on display among CBLA members in Cape Breton in early 2021. Whereas historically older fishers around Ingonish would take newcomers ‘under the wing’ to learn the ins and outs of the fishery, the dynamic

²⁹⁰ Personal Communication, 26/05/2021, Halifax, Nova Scotia.

²⁹¹ Personal Communication, 01/10/2021, Clark’s Harbour, Nova Scotia.

has shifted of late as perceptions of “native sympathies”²⁹² divide generations. Older members think of younger generations as “more liberal”, “more tolerant”, and therefore likely to be sympathetic to arguments supporting indigenous fisheries. As a result, associations split into camps, generations divide over assumed loyalties, and previous allies are viewed suspiciously.

Hence, these fallen NGO and academic drifters, dishonorable industry actors, and misguided sympathetic harvesters set themselves on a path from friend to foe in the remaining subject eyes of the capitalist ecology. Whereas previously the sum total of the primary actors conceived of their collective lot as tightly integrated and fused in a certain socioeconomic rooted solidarity, the iterative steps toward a return of ecological plurality has created social fissures previously unknown to the industry. As such, NGOs previously aligned with industry come to be viewed as antagonistic ‘activists’, formerly benign academic researchers take on the despised role of ‘social justice warriors’, allied lobster buyers and exporters of old become opportunistic backstabbers, and even fellow fishers start to be viewed suspiciously for their less than full commitment to opposing the indigenous fishery. Put differently, future relationships with these subjects are no longer guaranteed to produce the win-win outcomes of mutualism (i.e., *positive relationality*) as previously envisaged. The perception now is one of relational risk, a loss of some sort, or even a further hiving off into oppositional camps of the fishery’s subjects. In short, these actors are perceived as shifting to *negative relationality* vis-à-vis the capitalist ecology’s remaining primary actors.

Partisans on the Horizon

When members of the EFA from Pictou County attend conferences or conventions dedicated to supporting the commercial lobster industry, their chief concerns relate to future market access, shifting consumer tastes, and what new regulations the participating DFO staff are likely to introduce. The events were historically viewed as enjoyable social occasions, opportunities to share tips, boast of last season’s hauls, and even moments to sell or donate unwanted gear to new entrants. Most attendees know each other from their associations, from participating in DFO advisory committee meetings, and even from encounters on the water and wharves around the province. The most relevant of which is the Canadian Seafood Show, which was last held in 2020 and was mostly considered a success by the EFA attendees.

²⁹² Personal Communication, 05/05/2021, Anonymous fisher, Ingonish, Nova Scotia.

However, for some the increasingly common presence of representatives from Mi'kmaw fisheries departments presented a risk hitherto unknown to such industry events.

EFA member Percy Boyne was there in 2020 and recalls how a certain tension was present that he had never experienced before at a fishery convention. Whereas previously most participants were primary actors of the capitalist ecology, and therefore embodied the 'techno-bureaucratic deference' and moral outlines of the fishery's commercial purpose presented in *Chapter 5*, fishery representatives from the Mi'kmaw-led IINR had changed that dynamic. According to Boyne²⁹³:

"I don't remember ever seeing someone from the IINR show up at one of these events. There have been native commercial harvesters before but there aren't so many of them and they follow the rules. But groups like this are pushing that religious stuff on the industry. They don't really believe in lobster being commercial and for us to access markets and that sort of thing. Everyone was walking on eggshells. . .especially because of what had just happened in St. Mary's Bay."

Other EFA members expressed a similar sentiment that with the presence of the IINR fishery liaison coordinator, there was a hesitance to be open and to talk about the most pressing challenges and opportunities for the industry. Regarding the reference to 'religious stuff', many attendees perceived a certain shaming of their ways and approaches to the fishery, and, as mentioned above, see in the mention of Mi'kmaw concepts like *netukulimk* a way to undermine the commercial standing thereof. Whereas previously the existence of Mi'kmaw-led NGOs was barely noticed by commercial harvesters, their presence at fisheries conventions and conferences of late has brought them to the fore and introduced what is perceived as an antagonistic voice to the fisheries commons.

A similar dynamic is unfolding in DFO-hosted advisory committee meetings, where industry actors, civil society, and harvesters themselves are invited to participate in discussions on recent stock assessments and proposed regulatory changes. Historically, when CBLA President Jason Starr attended these meetings, he and other harvesters would engage a certain jovial tongue-in-cheek banter with DFO representatives about the regulatory burdens they impose. Starr would jokingly beg for higher trap allowances, "ban" DFO enforcement officers from his wharf at Ingonish and promise a 'gut bucket' attack (See *Chapter 5*) should they show up on the docks to check his safety gear. The atmosphere was cooperative and light-hearted. However, since the lead up to the moderate livelihood launch in 2020 and throughout the 2021 season, such committee meetings have become more tense, serious, and conflicted with the rising presence of Mi'kmaw band fisheries officers and NGO advocates in

²⁹³ Personal Communication, 26/02/2021, Merigomish, Nova Scotia.

attendance. In the past, indigenous groups played very little role in DFO-led fisheries discussions and, when they did, were generally commercial harvesters that aligned their practices with the official regulatory system. Now, the rhetoric of the moderate livelihoods has entered the fray, and contributed notions of indigenous “self-government”, reconceived fishing territories, and communal moral commitments related to the harvest (i.e., presented in *Chapter 6* as ‘livelihood ethics reimaged’). Items for discussion that were previously nowhere near the agenda.

For Starr and others from the CBLA, the discussions have gone from seeking consensus on scientific interpretations and regulations, to fora for “. . . reconciliation, native demands, and other burdensome issues that the government is pushing off onto the lobster industry to deal with²⁹⁴”. Historically, these CBLA members had very little engagement with Mi’kmaw fishers or their bands’ fisheries departments as there are no FSC harvesters around the wharves at Ingonish and Indian Brook and the closest indigenous commercial harvesters that they were aware of were in Glace Bay on the opposite side of Cape Breton. They were of course aware of accusations of “illegal” harvesting in other parts of the province, including the pervasive exceeding of FSC trap limits, but with such little direct contact the issues seemed abstract and distant. However, with the presence of indigenous fisheries advocates at DFO committee meetings, the issues around Treaty rights and the contours of the moderate livelihood fishery were suddenly more present and immediate. Starr expanded on the issue²⁹⁵:

“I personally never had any issues with the native fishers, that is before the moderate livelihood launch. It’s not that they’ve tried to do it here around Ingonish yet. . . I don’t think that they will. But they are now more present, and it seems like their demands are never ending. When they are at the DFO meetings it seems like they feel entitled. . . well I guess they do as they bring up Treaty rights. This has definitely changed a lot, at least how those meetings are held.”

Hence, as in the recent developments at the fishery conventions and conferences, the rise of a determined and committed indigenous voice at committee meetings has created the impression of new actors on the scene and a shifting relational dynamic in another corner of the fishery.

And even within the communities themselves, to which the primary actors of the capitalist ecology belong, are emergent actors- at odds with and challenging the industry’s stance on indigenous fisheries- to be found. Thus, we now see Halifax restaurateurs banning

²⁹⁴ Personal Communication, 07/03/2021, Anonymous participant at Cape Breton Lobster Association Annual General Meeting, North Sydney, Cape Breton, Nova Scotia.

²⁹⁵ Personal Communication, 18/06/2021, Ingonish wharf, Nova Scotia.

Nova Scotian lobster from its kitchens (See Chisholm 2020), breweries around Cape Breton purportedly serving “only those who support indigenous rights”²⁹⁶, supportive protest movements originating among student bodies and urban activist groups (See Julian 2021), and the ubiquitous flying of indigenous flags and hanging of pro-indigenous fisheries posters; many of which coming from non-indigenous Nova Scotians compelled to support the realization of moderate livelihood fisheries. For the primary actors of the capitalist ecology, this budding social movement, which sometimes implicates their neighbors and favored establishments, presents as something of a siege, an unwarranted social assault on the hard-working fishers and industry actors who follow the rules and contribute enormously to the province’s finances. Moe Jennings, who runs the lobster live-well company Aqua Marine Systems in Halifax, captures the sentiment of many in the industry that an uninformed and knee-jerk public support for the Mi’kmaq is damaging to the industry. He noted²⁹⁷:

“...it was never like this before. There are activists all around now. Can you believe that restaurants are coming out and taking a stand on this issue! Those of us in the lobster industry now feel like we have to be careful what we say. . .you never know who you are talking to and what their position will be. Before, our biggest critics were the environmental NGOs and the media. But now, it’s like there are critics from every corner of society and it’s making the industry look even worse. Mostly because they don’t know what they’re talking about anyway.”

While many still perceive widespread support from their communities for the lobster industry in general, there is a common concern that a growing activist streak threatens to position more voices against the capitalist ecology’s norms and the positions it takes. The risk, it seems, is “a social movement that ends up allowing the fishery to be looted and changed forever²⁹⁸”.

As *Figure 2* demonstrates, alongside the shifting to *negative relationality* of certain of the capitalist ecology’s primary actors, there exists the parallel phenomenon of indigenous partisans manifesting on the horizon of fisheries debates and social movements that were hitherto silent or non-existent. If previously certain metaphorical corners of the fishery were devoid of subjects that threatened the status quo of the commercial sector, such as in DFO committee meetings or one’s wider community, such spaces appear to some to be closing in with both critics and cranks emerging from the cracks dead set on destroying the fishery. This particular reconfiguration of the capitalist ecology’s relational grid impacts not the object status identifications that constitute the out there ‘nature’ side the fishery’s dichotomy. Nor is it further impacting the status of subjects that have ‘fallen’ from the industry’s good graces.

²⁹⁶ Personal Communication, 09/09/2021, Anonymous fisher, Port Morien, Cape Breton, Nova Scotia.

²⁹⁷ Personal Communication, 23/11/2021, Halifax, Nova Scotia.

²⁹⁸ *ibid.*

Rather, we see in these fishery convention, committee meeting, and community examples a new positionality of subjects that threaten a further loss or diminished status when related to. But, as moral and communicative subjects demanding *intentional sociality*, they must be. The result is a committed and novel cadre of fishery subjects emerging anew in *negative relationality* with the primacy actors of the capitalist ecology; a much-loathed reality that only a return to ecological plurality in the lobster sector could have engendered.

	Intentional Sociality (fishery's subjects)	Denied Sociality (fishery's objects)
Positive Relationality	<ul style="list-style-type: none"> -Lobster harvesters -Industry trade associations -Fishermen's associations -Community -Conservation researchers/technicians -Fisheries and Scientists Research Society -Department of Fisheries and Oceans (DFO) -Wharf managers -Buyers and exporters ↓ -Environmental NGOs ↓ -Academics ↓ -Community (sympathetic few) ↓ -Harvesters (sympathetic few) ↓ 	<ul style="list-style-type: none"> -Gear -Traps -Buoys -Technology -Boats -Docks -Wharves -Pounds -Lobster license
Negative Relationality	<ul style="list-style-type: none"> -Mi'kmaw harvesters -Media -Activist NGOs and academics -Social justice activists ☼ -Indigenous NGOs ☼ -Indigenous fishery advocates ☼ 	<ul style="list-style-type: none"> ← Lobsters ← Grey seals ← Ground fish (haddock, cod, pollock) ← Right whales ← Weather ← Ocean currents ← Marine flora

FIGURE 2. Reconfigurations of the relational grid of the capitalist ecology: ← from object to subject status; ↓ from positive to negative relationality; ☼ emerging anew



CHAPTER EIGHT

Of Fisheries and Fools

Alternative Bureaucratism, Moral Muddles, and Livelihoods in Postmodern Decay

But these grievances operated within a popular consensus as to what were legitimate and what were illegitimate practices in marketing, milling, baking, etc. This in its turn was grounded upon a consistent traditional view of social norms and obligations of the proper economic functions of several parties within the community, which, taken together, can be said to constitute the moral economy of the poor.

E.P. Thompson in *The Moral Economy of the Crowd* (1993: 188)

In cultural economics, the key to understanding how people behave in relation to work, trade, and consumption is to see things from their own subjective and culturally determined point of view. What are their ideas about the good life, about the proper way to cooperate, about the morality of consumption and the value of money? Understanding economic behavior depends on mapping the symbolic and social order that underlies it, gives people the values they pursue, and constrains the strategies they follow.

Richard Wilk and Lisa Cliggett on the particularities of economic action (2007, 143)

I. Bureaucratic Transference and State Divestiture

Of equal significance to the reconfigurations of the capitalist ecology's relational grid outlined in *Chapter 7* is the shapeshifting of ethical sensibilities that govern how and for what ends the lobsters of the northwest Atlantic can be put to human use. Hence, while object status disruptions and the slippage of relational positionality are rendered ubiquitous phenomena by the return of ecological plurality, so too is the undermining of the livelihood ethics that have traditionally shaped the industry's commercial harvesting. In one sense, a bureaucratic transference is underway that is perceived by some as robbing the State of its rightful and moral duty to exercise its governing mandate over the fishery and its exploiters. As such, authorities get questioned, regulatory frameworks are viewed as suspect, and indigenous calls for 'self-government' sound the alarms of an oceanic anarchy sure to pass. Moreover, competing visions and meanings of 'stewardship' and 'conservation' lead to interrogations of the claim to total knowledge offered by the State's adherence to the natural sciences, which in turn invites impressions of indigenous anti-science or anti-empirical reasoning. The results of which, according to the logic, would lead to none other than an environmental disaster. Taken together, these outcomes of ecological pluralization are viewed as undermining the *techno-bureaucratic deference*²⁹⁹ of the capitalist ecology's primary actors, including the modernist certainties it represents- a fool's errand destined for economic collapse.

Systems, Users, Units

When Eric Hotten and fellow lobster fishers from the Plymouth Rock Fishermen's Association in Shelburne make their biannual trip to the DFO-regional office in Yarmouth, they turn it into a social occasion with "not just a few drinks along the way"³⁰⁰! Though most of the harvesters are from the nearby fishing villages of Sandy Point, Jordan Bay, or Lockeport, when the season is out, they rarely see other fishers or have much social interaction beyond their families. Hence, the trip to Yarmouth is an opportunity for casual banter, to discuss the upcoming season, boast of new gear purchases, and of course to update one another on the latest risks posed by the Mi'kmaw fisheries. While the social opportunity is appreciated and purportedly well-deserved, the trips serve another purpose in collectively reconfirming the governing mandate of DFO and its rightful role in regulating the lobster

²⁹⁹ Presented in *Chapter 5* as a key feature of the capitalist ecology's livelihood ethics.

³⁰⁰ Personal Communication, 02/09/2021, Shelburne, Nova Scotia.

fishery. Whether participating to pay registration fees, updating or renewing licenses, submitting mandatory commercial logbooks, or settling outstanding fines due to regulatory transgressions, the Plymouth Rock members dutifully make their appointments and navigate the necessary bureaucracy to maintain their good standing with the State. For many commercial harvesters, the much-lauded status as an ‘honorable’ fisher depends on this deference to the bureaucracy and the mundane routines and the ritual sojourns to Yarmouth it entails.

According to Hotten, the industry’s relationship to DFO is not perfect, but rather viewed as a kind of necessary evil to prevent tragedy to the stock and in the markets. He noted³⁰¹:

“The relationship between us and DFO is not, and will never be, some perfect situation. We both need each other, and we know it. They prevent overfishing, they keep the seasons, they make sure the fishers are properly licensed. And, more recently, they are trying to prevent the native situation from getting out of control. We follow the rules and they get paid.”

As in other fishers’ associations around the province, the Plymouth Rock members therefore feel that in their trips to Yarmouth they’re not only fulfilling vague bureaucratic duties, but also reinforcing a relationship of somewhat inegalitarian mutualism (i.e., a form of *positive relationality*). Hence, fishers and industry allies alike bow down in regulatory acquiescence to their superintending overlords in the realization of marine harvesting livelihoods. In return, the State and its functionaries police the fishery, ensure its ‘sustainable’ use, keep markets open and fed, and promise to regulate the users and their ways according to “official science”³⁰². The traditional outcome is one in which the industry consistently trapped the lobsters and netted the profits, while the bureaucracy dutifully discharged its governing mandate and satisfied its statute setting superiors. The mutualism on display is not necessarily one of choice, but rather necessity in that the complexity of the oceanic environs and its enmeshment in international market linkages could scarcely be managed by a singular collectivity of the fishery’s subjects. In short, in this particular version of late-capitalist modernity, the opposing forces of free market fundamentalism and techno-bureaucratic restraint reinforce one another and disperse the fishery’s benefits widely.

However, with iterations of an alternative set of livelihood ethics on display in the Mi’kmaw fisheries, the capitalist ecology’s primary actors view with trepidation a

³⁰¹ *ibid.*

³⁰² Personal Communication, 24/06/2021, Stan Franks, Research Scientist, Department of Fisheries and Oceans. Dartmouth, Nova Scotia.

transference of bureaucratic duties purportedly manifesting therefrom. For example, as in the examples given in *Chapter 5* of the Northumberland Strait Fishermen’s Association and the export companies from Yarmouth, the Plymouth Rock members around Shelburne and Cape Sable Island similarly defer to the State in defining and delimiting the lobster fishery’s ‘system’, ‘users’, and ‘units’³⁰³. As such, the fishery’s *system* status is realized through a geographic breakdown by lobster fishing areas (LFA) and associated licenses and trap allowances for each. These ‘effort controls’ are viewed by Hotten and his colleagues as “essential” and “proper”; the administration of which they expect and demand from DFO’s enforcement officers. Similarly, they see in DFO’s lobster licensing scheme not only a pitfall of complicated paperwork and exorbitant sums exiting bank accounts, but also a necessary exclusionary filter to keep out those unworthy of the fishery’s lucrative potential. Hence, in identifying, sanctioning, and licensing the fishery’s *users*, “DFO takes its responsibility seriously to check the bonafides of those who want to get in and most fishers trust that the system in place is the right one to maintain the fishery³⁰⁴”. DFO’s role in singling out lobster for species-specific regulations, targeted scientific studies, and marketing to international consumers ranks equally important around the wharves of Shelburne. Thus, in regulating the *units* harvested, including the how, when, and where, Hotten sees in DFO a bureaucratic patriarch of sorts- a “trusted and generally respected authority figure” to protect both species and profits.

Against these expectations and norms, the expanding moderate livelihood fisheries are viewed as threatening Nova Scotia’s lobster fishery as a *system* and stripping DFO of the ability to regulate its interrelated parts in a systematic manner. Consider the views of Plymouth Rock member Jim Bauer, who fishes out of Jordan Bay wharf. For Bauer, DFO’s apparent willingness to allow Mi’kmaw fisheries departments to delimit the regulatory boundaries of fishing districts in defiance of official boundaries is nothing short of a capitulation and a sure sign of the commercial sector’s demise. He noted³⁰⁵:

“ . . . the LFAs are there for a reason. And now we have the natives trying to draw their own boundaries and issue licenses for them. The seasons for the LFAs are staggered and that helps keep the fishery lucrative and sustainable. We can’t have every band coming up with boundaries. . . what if the associations started making their own boundaries. Then it’s just chaos and there would be no way to regulate anything.”

³⁰³ Conceptual categories borrowed from social-ecological systems analysis (Charles 2021; Ostrom 2007). See *Chapter 1, Part III*.

³⁰⁴ Personal Communication, 15/01/2021, Anonymous fisher/ Plymouth Rock Fisheries Association member, Shag Harbour, Nova Scotia.

³⁰⁵ Personal Communication, 01/09/2021, Jordan Bay, Nova Scotia.

As the Sipekne'katik band was one of the first to mention 'traditional districts' for fishing back in 2020, including their desire to superimpose those districts over the official LFA system, the Plymouth Rock members closer to St. Mary's Bay where the band harvests were particularly incensed. One fisher based in Metaghan echoed Bauer³⁰⁶:

"You cannot have two competing systems for regulating lobster. Chief Sack keeps talking about traditional districts and such and that just means that he wants to fish wherever he wants with no limits. DFO cannot allow that to happen. There are license and trap limitations for each LFA which are specific. If there are competing boundaries, then they will overlap and end up with overfishing. It doesn't matter what it was like in the past, there are rules now and that's how it works. DFO has to enforce the rules."

For many, the problem wasn't simply the complexity of competing boundaries or risks to the stock, but the very notion that DFO would allow an alternative geographic system to be devised in the first place. In other words, the rise of indigenous bureaucracies seeking to shape the contours of the lobster fishery is viewed as an abandonment of both the integrity of the system *and* the mutualism expected from relationality with DFO.

Eastern Fishermen's Association (EFA) members around Saulnierville exemplify the point. For them, when the nearby Bear River and Acadia Mi'kmaw communities announced the launch of their traditional 'Kespukwitk District' for the future management of fisheries (See *Chapter 6*), DFO's acquiescence was near criminal. For, not only was DFO potentially going to allow an additional set of licenses that would correspond to the new Mi'kmaw District, and thus overfishing and "stolen catch", it was also surrendering its official duty to superintend the fishery and to maintain its coherence, structure, form, and norms. EFA President Luke Pines complained³⁰⁷:

"One question! Where is DFO in this? Maybe it's because it's an election year and they don't want to come down to hard on the natives. But the redrawing of the fishery is a step too far. It's almost like they were out enforcing the rules more before the moderate livelihoods thing. And now they are going to allow the bands to determine how the fishery looks, the seasons and such? DFO isn't living up to its commitments to us, the fishermen!"

For many EFA members, DFO's responsibility was to maintain the integrity of the fishery, to enforce the rules equally, and to reward the good behavior of the rule followers by non-interference. As taxpayers and 'honorable' lobster fishers, DFO was obliged to fulfill its mandate and to maintain its regulatory authority over the whole of the system. However, the perception now is that DFO is shirking its responsibility and allowing for a transference of what it sees as a minor bureaucratic exercise. For the capitalist ecology, the LFA boundaries

³⁰⁶ Personal Communication, 15/09/2021, Anonymous, Metaghan, Nova Scotia.

³⁰⁷ Personal Communication, 22/04/2021, Metaghan, Nova Scotia.

and the relevant regulations for each are sacrosanct features of the system; the reinforcement and defense of which was now slipping from the hands of the previously trusted ‘bureaucratic patriarch’.

A similar transference away from official techno-bureaucratic enforcement is underway with regards to the gatekeeping function of DFO for access to the fishery- that is, the regulation of its *users*. Whereas previously DFO was expected to exercise its sole authority to vet new applicants for licenses, maintain the one in-one out system for new licenses, and to ensure that all the conditions of licensure were being upheld in proper fashion, indigenous activism in the fisheries seems to be dissolving its commitment to such official functions. Fishers from the Cape Breton Lobster Association (CBLA) have taken note and perceive a similar anarchic regulatory environment on the horizon. CBLA President Jason Starr clarified³⁰⁸:

“For years, the way to get licensed was pretty straightforward. You just went to DFO and you submitted the paperwork. Then they stopped issuing new licenses, but you could still buy one on the open market and register it with DFO. The point is, DFO had the authority to license. And that was it. I’m not sure what the policy is now, but these native fishers are getting licenses from their bands? Are those legal? Are they valid? How can we have more bodies issuing licenses and things still get regulated properly?”

Despite the legality of the band issued licenses, throughout 2020 as the Sipekne’katik, Potlotek, and Pictou Landing fisheries departments were taking the liberty to devise their own licensing systems, the retreat of DFO into bureaucratic non-presence was front and center for the commercial sector. One of Starr’s colleagues saw in the refusal of DFO to crack down on the “illegal” band licensing as a dereliction of duty and a certain call to vigilante enforcement in order to save the commercial sector. Mac Calvert exhorted³⁰⁹:

“If DFO doesn’t step up and stop this then there will be consequence on the water. How can we be expected to follow the rules when DFO doesn’t even enforce them equally? There can be no native licenses for the commercial sector. If DFO won’t enforce its rules then we will have to. I know several fishermen who are ready to police the waters. . .we’ll make sure the licenses are real, that the trap limits are correct, that the natives are following the rules.”

Not only was DFO’s supposed transference of authority to issue licenses at stake, but so too was its mandate to regularly audit the good regulatory standing of the fishery’s *users* and to confirm the right to maintain their licenses.

Retired fisher Bull Stokes from Digby Neck, near St. Mary’s Bay, considered the unwillingness, or perhaps inability, of DFO to verify the credentials of fishers from

³⁰⁸ Personal Communication, 18/06/2021, Ingonish, Cape Breton Island, Nova Scotia.

³⁰⁹ Personal Communication, 15/10/2021, North Sydney, Cape Breton Island, Nova Scotia.

alternative licensing systems a major risk. According to him and others around the nearby New Edinburgh wharf, fishers often violate the rules, such as in not maintaining their traps or selling lobsters that are too small, and it was therefore essential to have an overarching regulatory body that could correct such transgressions. Stokes commented³¹⁰:

“You have to have a body that enforces the rules equally. At times there are reasons to suspend a license. Sometimes there is fishing out of season. Sometimes there are too many traps and so on. Those fishers have to be punished in some way. Suspending the license for a few weeks is how it’s done. But it takes DFO to do that. If the natives have their own system of licensing, then who’s going to punish them when they break the rules? And we know that they do and will again. Just look at the FSC harvesters!”

If the traditional functions of regulating and vetting the resource users were to be dispersed, there could be no uniformity and some, according to the logic, would certainly get away with transgressions. In other words, ultimate authority invested in DFO was the only way to ensure the harvesters on the water were both legitimately licensed *and* demonstrating the comportment befitting a responsible commercial harvester. A retired fisher at New Edinburgh further elaborated³¹¹:

“Rules are for breaking. At least for some fishermen. So when we have a lobster fishery with rules on seasons, with rules on gear, with rules on retention size and so on, then you have to enforce those rules. It’s not clear to me that the bands’ fisheries departments will properly enforce them. Even their own rules. How can we know? In some ways, I think that too many regulators would be worse than none at all.”

For him, the bands’ fishery plans weren’t necessarily the problem, as they reflected in many ways the official regulations on conservation, gear, and harvesting practices. Rather, the risk was that transferring any regulatory authority over *users* away from DFO would enable the inevitable ‘bad apples’ to commit violations and not suffer any repercussions- a “bureaucratic jumble”³¹² of epic proportions.

If the *system* and its *users* are now therefore subject to the supposed pluralistic bureaucratic chaos unfolding, so too are the harvestable *units* being denied the overarching regulatory envelopment that DFO once offered. For the capitalist ecology’s primary subjects, the treatment of individual species in the fishery is therefore particularistic and requires a uniform regulatory approach to ensure both stock sustainability and sustained profit margins. Thus, for members of the Gulf Nova Scotia Association (GNSA) around Pictou County, the emergence of parallel bureaucratic structures from band fishery departments was a risk to the

³¹⁰ Personal Communication, 12/01/2021, Digby Neck, Nova Scotia.

³¹¹ Personal Communication, 15/01/2021, Anonymous, New Edinburgh, Nova Scotia.

³¹² *ibid.*

species that no well-regulated fishery could tolerate. Fisher David Stanford demonstrates the concern with regards to the periodic updates that take place on lobster retention size policies. He noted³¹³:

“Over the years we developed an agreement with DFO on how to come up with lobster size requirements. . . which ones we could keep and which ones to throw back. This took a lot of negotiation but now we have agreed upon indicators, there is a discussion, and new size requirements are set if necessary. It’s important for everyone to agree on this because there are implications for what you can sell, the escape hatches on traps, what returns you’re likely to make.”

This particular regulatory parameter was therefore the outcome of negotiation and required a consensus from all the resource users and the regulatory overlord. Otherwise, according to the argument, stock sustainability was at risk from those potentially taking advantage of bureaucratic non-conformity. For Stanford and other GNSA members, there was purportedly no way of knowing how band fishery departments would make retention size determinations, what metrics they would use, or even what objectives they would have in mind when doing so. According to Stanford, “this is why we can’t have another set of rules, another enforcer, there is no justification for making the management of this fishery so complex.”

In addition, there was a perception of fairness involved as well. If certain harvesters utilized smaller retention sizes, they would have an advantage in bringing in larger hauls vis-à-vis those honoring larger retention sizes. GNSA member Lester Downs elaborated³¹⁴:

“There is already a lot of complexity given how many fishermen’s associations there are. But at least they all argue with DFO to get the policies they want. If there are different sets of rules that the bands set for themselves, on things like carapace size, and if they aren’t exactly the same as those set by DFO for a particular LFA, then there will be problems. I imagine everyone would ignore the rule so as to not be at a disadvantage. And then it’s over for the stock.”

Similar concerns were raised related to how indigenous regulations on the retention of berried females, the keeping of logbooks, the treatment of bycatch, and how to handle diseased or limbless lobsters would be set and enforced. For these GNSA members, adherence to one set of rules with one regulatory body was the only way to ensure uniformity, and thus equity across harvesters. One fisher based out of Pictou wharf noted³¹⁵:

“If we have to deal with DFO on how to fish, how to treat the right whales, which ones we can keep, then everyone has to. If the Pictou Landing natives start setting their own regulations, then there will be even more pushback from us.”

³¹³ Personal Communication, 23/03/2021, Antigonish, Nova Scotia.

³¹⁴ *ibid.*

³¹⁵ Personal Communication, 13/04/2021, Anonymous, Pictou, Nova Scotia.

The resource *units* are therefore understood as complex features of the fishery, biophysical beings that require scientific scrutiny and rational management in order to be sustainably commodified and exported. As such, DFO is expected to play that commanding role and to reign supreme over any and all harvesting. Hence, the capitalist ecology perceives in the absence of such a unifying regulatory force, or even in a measure of transference of bureaucratic responsibility away from DFO, not only inevitable poor practices in the fishery, but something of a free for all, a certain tragedy of the commons, and guaranteed inequities to boot.

Stewardship Empirics vs. Stewardship Ethics

While the bureaucratic transference of managing the fishery's *system, users, and units* is perceived as inviting a certain anarchic sociality and regulatory morass to the industry, the rise and allowance of indigenous voices on and approaches to marine stewardship is no less reviled as a threat to the industry's future. For the capitalist ecology, the biophysical beings and processes that emerge and interrelate in the oceanic environs are none other than objective phenomena that respond to and metamorphose in relation to physical causation in the 'natural' environment (i.e., as fishery's objects). As such, the understanding of and setting regulations around marine stewardship, including conservation of the lobster stock, is understood as an apolitical exercise in the natural sciences. Hence, the *techno-bureaucratic deference* of the primary actors is realized in the DFO-led science process, which draws on the professional insights of actors across the institutionalized scientific establishment (e.g., Canadian Science Advisory Secretariat, Fishermen and Scientists Research Society, etc.) for regulatory advice on fisheries and ecosystem management (See *Chapter 4*). In this particular modern iteration of "science in action" (Latour 1987), the outcomes are understood as empirical truths, unalterable objectivities, or even a "singular way of knowing the fishery that is uncontested"³¹⁶. Alternatives to which find no space in the fishery's rhetorical commons.

However, in recent years, as pressure on DFO has grown to include indigenous knowledge and participation in its research planning and strategizing, so too has the impression that a parallel bureaucratic transference away from the official science process is underway. Returning to Cape Breton, consider how the routines of some CBLA members have shifted in the last couple of years as a result. Though fisher Mac Calvert still dutifully submits his commercial logbooks to DFO and participates in the annual at-sea-sampling

³¹⁶ Personal Communication, 09/02/2021, Susie Muller, High Seas, Halifax, Nova Scotia.

projects that support DFO science³¹⁷, he sees shifts in the ways his colleagues around North Sydney consider those routines. He noted³¹⁸:

“A lot of members don’t trust the DFO science process anymore. There are two opinions. One is that the data we collect is being shared with the natives and that it will attract them here to fish. The other is that they think the science has become political. That with so much pressure to support the moderate livelihood fishers, that certain risks to the fishery are being ignored or buried.”

The first concern- that the data was being improperly shared- not only comes from anxieties that the indigenous fisheries are spreading to ever more locations around the province, but also from the increasingly close relations between DFO and the Mi’kmaw NGOs discussed in *Chapter 6*. Hence, as organizations like the Mi’kmaw Environmental Association (MEA) and the Indigenous Institute for Natural Resources (IINR) increasingly participate in advisory committee meetings and make their voices heard publicly on marine stewardship issues, DFO appears to some to be retreating into the scientific background. One of Calvert’s colleagues elaborated³¹⁹:

“DFO used to be more present on the water. Not just for enforcement but also for their own research. Now they mostly just do the trawl surveys. . .only a couple times a year. They used to do much more. We hear more from the native groups now than DFO. I don’t think that we should share the at-sea-sampling data anymore until we know exactly how it’s being used.”

For this individual and others, the problem wasn’t simply the purported act of bureaucratic transference, but that the ways the data would be used were somehow contrary to the technical and institutionalized ways of the official bureaucracy. Another member commented³²⁰:

“They don’t do the same kind of science. .those groups. They are a bit more religious about conservation, they talk about ethical issues and don’t always pay attention to the science that we do. Look at the issues around out-of-season fishing. If you followed the science, you wouldn’t do that.”

On the issue of the science becoming “political” quoted above, a certain consensus has emerged that the DFO science process has been corrupted by institutions allying themselves to the Mi’kmaw fishery cause, and therefore that too many alternative voices are making the science and policy responses to it less than objective. For instance, while the ‘institutional orthodoxies’ that undergird the lobster fishery’s effort controls are still adhered to (See

³¹⁷ Outlined in detail in *Chapter 5, Section III*.

³¹⁸ Personal Communication, 07/03/2021, CBLA Annual General Meeting, North Sydney, Cape Breton Island, Nova Scotia.

³¹⁹ Personal Communication, 08/03/2021, Anonymous, CBLA Annual General Meeting, North Sydney, Cape Breton Island, Nova Scotia.

³²⁰ Personal Communication, 08/03/2021, Anonymous, North Sydney Wharf, Cape Breton Island, Nova Scotia.

Chapter 4), some see DFO's previous dogmatic support thereof starting to fade. CBLA member Jason Starr made the point³²¹:

"I'm willing to bet that in the future they will start allowing out-of-season harvesting and more traps. Look at how much influence groups like Ecology Resource Coalition and Dalhousie have over DFO now, not to mention the native groups. They say its more ethical to give them a say. DFO has held firm so far but I'm not sure it will last. They seem to be giving in to these groups and accepting their science, their arguments."

In other words, in an effort to be "ethical", NGOs and academics are understood to be pushing an alternative, or less-than-exact, science in order to give voice to indigenous groups where it was once denied. And DFO is understood to be increasingly receptive of those voices and possibly even failing in its duty to generate the same kinds of data. Fisher Adam Stoney from Cape Sable Island had a similar impression³²²:

". . . and look at the study that Dalhousie is conducting on out-of-season harvesting down in St. Mary's Bay. It is actually a good idea, and a good study that needs to be done. But why hasn't DFO done it already? Where are they? As DFO pulls back, others step in, and then the industry is just in reactive mode. DFO should lead on this kind of research."

Stoney doesn't necessarily communicate that DFO is making a political statement in allowing for the study to go forward, but that certain political pressures *and* DFO's apparent absence is empowering those outside of the institutionalized scientific establishment. And the expected results are derided by some as none other than "anti-science"³²³.

A similar shifting of routines and expectations of DFO has unfolded of late among members of the EFA in southwest Nova Scotia. In a more direct manner than their counterparts in Cape Breton, many fishers around the wharves of Meteghan, Bear Cove, and Salmon River openly discredit Mi'kmaw initiatives on fisheries science and DFO's supposed acquiescence. One retired fisher recalled the good relations of old that he had with Mi'kmaw fishers from the Bear River community, which had changed as a result of recent tensions and their pushing of "other ways" on the fishery. He noted³²⁴:

"This fishery issue and the alternatives that they are advocating for has really ruined a lot of relationships. I used to have a lot of friends at Bear River. I even skippered a few of their boats for a couple of years. But now it's like they've stabbed us in the back. They claim to have evidence that out-of-season harvesting won't hurt the stock. That's bullshit! What research have they done? Who are they getting it from? I don't want to call them liars but then what should I say."

³²¹ Personal Communication, 20/06/2021, Ingonish, Cape Breton Island, Nova Scotia.

³²² Personal Communication, 01/10/2021, Cape Sable Island, Nova Scotia.

³²³ Personal Communication, 12/07/2021, Rich Garvin, Harvesters and Scientists Research Society, Halifax, Nova Scotia.

³²⁴ Personal Communication, 23/04/2021, Anonymous, Bear Cove, Nova Scotia.

Hence, not only was this individual openly critical of the position on lobster ecology that Bear River members had taken to advocate out-of-season harvesting, he was equally flabbergasted at the absence of DFO to correct such scientific misinterpretations. He continued³²⁵:

“This whole issue could be cleared up with an official project, a research study by DFO and their scientists. Are the seasons important or not? It seems simple. They do the trawl surveys but this needs something else. But where are they? They are letting others do the science and then they don’t have a good response when the regulations are under fire.”

In other words, the issue wasn’t simply one of “bad science” gaining ground and corrupting legitimate discourse, but also an official failure to leverage the unbiased and objective scientific tools available in order to justify now controversial policy positions.

As in the sentiment expressed in Cape Breton, others saw in DFO’s “absence” on the issue more of a direct transference of its scientific duties to groups hostile to the industry. During a lazy day off fishing due to bad weather in April of 2021, EFA members at their Meteghan wharf headquarters were frustrated that the official science process couldn’t clear up the misunderstandings around seasons and effort controls. Luke Pines saw the issue as related to DFO science’s declining budgets over the years and the opportunities for others that the pullback has created. He elaborated³²⁶:

“What do we expect when the DFO budget keeps getting cut. They say that it’s to allow the fishermen’s associations more of a say in the science. . .and it does in some ways. But it’s gone too far. They used to do much more research, tailored studies, than they do now. And so what happens? The hippy NGOs fill the void, the natives claim they understand the lobster fishery better than anyone else. They no longer have the capacity or funds to do the science that they need to, that they used to.”

Pines’ colleague Michel Comeau more directly linked the reality to the growing presence of Mi’kmaw voices on fisheries science and saw the budget cuts as perhaps a byproduct of that. He clarified³²⁷:

“The natives claim to be protecting the fishery, studying the fishery or whatever like they used to. They think that their ways are better. It’s all bullshit. They are liars. But that doesn’t mean they aren’t making progress. And now they have fisheries departments that do their own studies, and there are also the NGOs that work with them. It’s like DFO just said ‘okay somebody else is doing the science now, so we don’t have to.’ But now where has it gotten us?”

Whether incidental or deliberate, the recognition of a bureaucratic transference on scientific matters was therefore shaking the faith of the capitalist ecology’s primary subjects in the institutionalized process. The result, according to others, was the possibility that the fishery

³²⁵ *ibid.*

³²⁶ Personal Communication, 22/04/2021, Meteghan, Nova Scotia.

³²⁷ *ibid.*

would forever be altered and the policies that had historically made it such a lucrative asset irreversibly modified.

At the top of that policy list is the previously discussed adherence to fishing seasons for each LFA. As highlighted in *Chapter 4*, one way of interpreting DFO's unwillingness to invest its own scientific energies into researching the importance of seasonality is that it's simply doubling down on a policy that continues to prevent indigenous fisheries from operating outside of official frameworks (i.e., an expression of ecological hegemoniality). Even so, many fishers see in the lack of action from DFO on the issue a missed opportunity to dictate the terms of a scientific study that would confirm the validity of the policy. Fisher Hubert Smith from Meteghan made the point³²⁸:

"If DFO doesn't do the research that confirms its position on the seasons for LFA 34, where we had so many problems last year, then somebody else will. Who do we want to do this study? The natives are already trying a study with Dalhousie and the industry and DFO have no part. Do you think that's going to turn out well for us?"

In other words, it's better to take your chances and have a primary subject actor of the capitalist ecology invest its institutional scientific process to "find the data"³²⁹. The alternative, according to the concern, is that newly empowered Mi'kmaw voices around issues of marine stewardship would take the lead and somehow undermine the scientific case for such key policies. Smith continued:

"It's like they've just decided to outsource the science. We used to be fine with it when it was the fishermen's associations leading studies, they do that all the time. But that's real science, not political, not talk about rights, not some native agenda leading the way. If DFO doesn't get its act together there will be consequences. There will be data that undermines the regulation, probably many of their regulations. It won't be valid, but they won't be able to ignore it either. They don't want to touch the moderate livelihood issue."

As such, DFO's *de facto* transference of bureaucratic responsibility to conduct the science necessary to defend its own policies was laziness at best, or a deliberate abandonment of its industry allies at worst. One researcher from the Canadian Association of Fish Harvesters referred to the situation as "state divestiture", in which stewardship policies rooted in "empirics" led by official processes was being replaced by stewardship policies rooted in "what seems to be the ethical thing to do"³³⁰.

In summary, as a return to ecological plurality in Nova Scotia's lobster fishery increasingly manifests in various forms and norms, the primary actors of the capitalist

³²⁸ Personal Communication, 05/01/2021, Meteghan, Nova Scotia.

³²⁹ *ibid.*

³³⁰ Personal Communication, 15/12/2021, Will Smith, Canadian Association of Fish Harvesters, Halifax, Nova Scotia.

ecology begin to question their deference to techno-bureaucratic officialdom, which they see as being both challenged and undermined. If previously said actors entrusted in DFO the rational and uniform management of the fishery's *system, users, and units*, now indigenous activism in the fishery is threatening a certain bureaucratic transference away from the only "modernist bureaucracy" (Weber 2019) capable of the task. Similarly, as alternative- some would say 'hostile'- indigenous and allied voices enter debates on marine stewardship and conservation of the lobster stock, the traditional bureaucratized scientific process is seen as being both displaced and corrupted by politics. Taken together, these key features of the capitalist ecology's livelihood ethics are therefore being transformed from modernist and objective institutions and associated practices that support the realization of a market economy, to something of a 'regulatory morass' and 'bureaucratic jumble' signaling the dying days of the commercial sector. Or, as one fisher put it³³¹:

"A decay is setting in for the industry, where everything that has been built over the decades, the best regulations and the markets, will be washed away in one grand act of reconciliation with the native fishermen. Only a bunch of fools could go along with this."

II. Moral Slippage and Market Retreat

If a slow-moving bureaucratic transference and emergent regulatory pluralism serve to forewarn of the deconstruction of the lobster sector's previously uniform techno-bureaucratic regime, then budding reflections on the commercial industry's *raison d'etre* and core ethical tenets similarly threaten to undo the moral framing that allow it legitimacy in the first instance. In other words, as the capitalist ecology's livelihood ethics come up against indigenous moral conceptualizations of the harvesting of lobster in the context of emergent ecological plurality, not only do alternative bureaucratisms increasingly come into the social fold. For one, a centuries in the making and exclusive economic *purpose* in feeding market demand gets challenged and generates perceptions of greed and shame even among certain of the fishery's primary subject actors. Moreover, the capitalist ecology's principal *values* of competition and honor start to seem untenable and begin to lose the counterbalancing features that they have acquired through the long temporal and spatial haul of the colonial-settler experience. As such, the harvest, exchange, and consumption of lobster become enveloped by a moral slippage that threatens to undo the 'popular consensus' of its very place in the wider human community that claims proprietorship over its object status.

³³¹ Personal Communication, 17/06/2021, Jason Starr, Ingonish, Cape Breton Island, Nova Scotia.

From Market Purpose to Community Survival

When Arisaig based fisher James Leefer travels north up the coastal highway to Ballantyne's Cove to buy gear and bait at the beginning of every fishing season, he makes one stop along the way that's unrelated to his economic pursuits. Near the town of Malignant Cove sits the small church and cemetery where his Scottish great grandfather is buried. Leefer dutifully pays his respects, says a small prayer, and reflects on the hard work immigrants like his deceased relative did to develop a sense of community and spirit of place in this small corner of Antigonish County. Leefer recalls stories his grandfather told him as a kid about the difficulties in eking out a living in those days and the importance of the fishery in bringing people together and creating a local identity. As multiple species harvesters, those late-19th century fishers were on the water nearly year-round and contributed enormously to developing the local economy and the civic associations that were emerging at a rapid clip. Hence, from schools, to churches, to community centers, and local sports and leisure organizations, the local revenue and donations made by those turn of the century fishers was instrumental in building those coastal communities that have produced generations of proud fishers since. Leefer sees himself as a fisher firmly within that lineage and considers the marine assets of this short stretch of the Northumberland Strait as the "glue that holds this town, this sense of community together"³³².

However, in recent decades Leefer and others around the area and into the northeast stretches of Pictou County have bemoaned the decline of small towns and fishing villages once so proud and integrated. Hence, as industries have relocated or consolidated, as younger fishers have given up on the industry and moved away for more economic opportunity, as the previously discussed cooperative movement has dissipated, and as churches and schools have closed due to low attendance, a sense of communal decline has taken hold. According to Leefer³³³:

"If you're not directly involved in the lobster sector, it's kind of a hard place to make a living. There are very few options around these towns nowadays. There used to be much more economic activity, more fish processors, more gear suppliers, and other industries that flourished as well. But now it's very limited. There isn't much hope for the area outside of fishing. . .and lobster is all that's left of that."

³³² Personal Communication, 24/03/2021, Arisaig, Nova Scotia.

³³³ *ibid.*

Other members of the GNSA that fish around the area similarly described the region as “depressing”, “on the decline”, and even “not worth the effort to live at anymore”³³⁴. This is not to say that lobster harvesters from the area are not doing well, or that there is some sort of decline taking place in the fortunes thereof. Much like the rest of Nova Scotia, the 2021 season was one of the most successful in recent decades with record prices and hauls for most. Yet, beyond the lobster sector there is little else that sustains the community, which generates a noteworthy anxiety among those who do remain that if anything were to happen to the stock the communities would all but disappear. According to one community member at Lismore, “. . .we’re hanging on by a string, the community is not what it used to be”³³⁵.

For Leefer, and a number of others involved in this study, a major source of the problems in the community is to be found in the lobster fishery itself, or “in what it has become”³³⁶. According to the argument, in the past the lobster fishery was more of a local institution, something of a civic duty that created opportunities for socializing on the water and wharves, and that generated a bit of wealth that largely got reinvested in the community and its civic associations; described previously as an “expanded moral sphere” of capitalist economic action (Browne 2009, 18). As presented in *Chapter 7*, the lobster itself was considered something like a ‘social commodity’, the harvesting and exchange of which served to strengthen social ties and alleviate certain forms of suffering in the community. However, once the commodity price and export potential of lobster reached unheard of heights in the 1980s and 1990s, that all changed. Leefer describes the “corporatization” and the “pushing out of the little guys” tendencies that all of the fisheries, not just lobster, started to adhere to in that era³³⁷. Retired Arisaig fisher Jared Stanford echoed the analysis and noted how nowadays “greed”, “money lust”, and “nothing but the bottom line” were the forces motivating fishers³³⁸. For many, the previous notion that the riches of the sea were local assets that should benefit local communities had been totally lost. Stanford continued:

“If greed is the only motivating factor for an industry, then the lobster doesn’t belong to anybody now. . .only to the highest bidder. And that’s the reality now. We have poverty and drug addiction all around these small towns and yet we ship the lobsters to Asia and somebody else gets rich on it. The fishers do well, but that’s about it.”

³³⁴ Personal Communication, 25/03- 27/03/2021, Anonymous fishers at Lismore, Arisaig, and Livingston Cove wharves, Nova Scotia.

³³⁵ Personal Communication 27/03/2021, Anonymous, Lismore, Nova Scotia.

³³⁶ See footnote 36.

³³⁷ See footnote 34.

³³⁸ Personal Communication, 23/03/2021, Antigonish, Nova Scotia.

For others, it wasn't just that the lobster as a commodity that had been dis-embedded from any communal obligations³³⁹, but the industry as a whole had become a corporate behemoth unresponsive to local needs and priorities.

Thus, while the corporate consolidation of Nova Scotia's fishing fleets and processing facilities in recent decades has been well-documented in the literature (e.g., MacDonald & Connelly 1990), including the rising proletarianization of the fishery's workers (Fairley et. al. 1990), the 'corporatization' phenomenon around Arisaig, Lismore, and Ballantyne's Cove is felt viscerally. One of the major frustrations is the way the lobster processing and storage facilities had been downsized, closed, or consolidated over the years, which unfolded in parallel to the demise of the cooperative movement. Where once major industrial yards sat wharf side buzzing with activity, the comings and goings of local workers, and the roar of truck engines moving processed lobster and other products between facilities, there is now at many wharves hollowed out shells of former plants, idle and abandon, slowly succumbing to the conditions. Paul Declerk from East Bay Fishermen's Cooperative highlighted³⁴⁰:

“There used to be so much more activity in the fishery. There were processing facilities all along this coast, at almost every wharf village. There were more jobs and more opportunities. There were more buyers, more sellers. But it's all changed. It's much more consolidated and corporate now. We are a cooperative . . . one of the few remaining. . . and so we've been able to withstand some of the pressures. But most of the plants that existed 20-30 years ago just got bought up or put out of business. It's quite sad for the community.”

Others bemoan the secondary effects such corporate consolidation has had on the region's working class. Hence, as plants closed, merged, and were bought up by absentee investors, including Chinese corporations (e.g., Withers 2014), workers' benefits were cut, many were let go in downsizing efforts, and others were replaced by temporary migrant workers from Mexico and Jamaica. Leefer's wife commented³⁴¹:

“There is very little left if you don't hold a lobster license. Imagine what this place used to look like. There were plants that hired locally. Everyone had a job. . . right out of high school. And a lot of the buyers were even cooperatives in those days, owned by the fishers but they hired locally. Normally their kids. Now they bring in workers from all over the world and pay them nothing. It's very frustrating what's happened to the fisheries. Lobster is the last thing left, but it doesn't benefit as many as it used to.”

The fisheries, in other words, had succumbed to the same “neoliberalization” (Harvey 2005) that menaces many traditional livelihoods in the industrial West, and had increasingly rendered its *purpose* in feeding markets a sacrosanct and dogmatic ideal.

³³⁹ Discussed in *Chapter 7*.

³⁴⁰ Personal Communication, 14/04/2021, Ballantyne's Cove, Nova Scotia.

³⁴¹ Personal Communication, 25/03/2021, Arisaig, Nova Scotia.

Though contradicting many of the Cape Breton and Lunenburg based fishers quoted in *Chapter 7* who scoffed at the ‘communist’ or ‘unrealistic’ communalism of indigenous fisheries, many around Arisaig and other economically depressed regions saw in the Mi’kmaw efforts to stand up a fishery that operated according to alternative economic objectives a potential vision for addressing their own community challenges. While dogmatically opposed to the moderate livelihood fisheries operating outside of official frameworks, Leefer was more favorably inclined to the Mi’kmaw vision of their fishery benefiting community. He noted³⁴²:

“I’m quite familiar with the Paqtnkek band here in Antigonish County and I’ve even taught some of their kids back when I was a high school teacher. Their fishing outside of the seasons is a major problem and it has to be dealt with. But the way that they view the fishery as being a community asset and something that could help alleviate local poverty. . .that’s something that we should work towards. There is little sense to me in exporting all the wealth and only allowing a few fishers with licenses and their buyers to benefit.”

Leefer saw in the Mi’kmaw plans for the fishery something similar to the way his great grandfather and his fisher friends viewed the fishery, as a means to develop and support community. While he doesn’t advocate “communalization” or a “total sharing of all the profits” from the fishery, he does think that there are some lessons to be learned on how to ensure the benefits of lobster are more widespread and locally experienced. He continued:

“I don’t know what the perfect model for the fishery is but what we have now is not it. And I’m saying that as someone who holds one of these lucrative licenses. One example maybe is how the natives have band-owned processing companies and they hire from within. We had something similar in the 1950s and 60s cooperative movement, but it didn’t last. And even just in the way that they talk about the lobster as for the community, the licenses being for the community. There is probably something that we could learn that would benefit our struggling communities.”

Fellow GNSA member from just down the road at Lismore, Tony Scranton, had similar misgivings about the “illegal” moderate livelihood fisheries, but considered the way that the Mi’kmaq conceived of the fishery as a social asset a model for sustaining the fishery in the future. Scranton commented³⁴³:

“The idea that they aren’t out to make money is ridiculous. Of course they are, just like we are. But I do think that there is more sharing that happens with the natives, that there is a lot less greed that motivates their fishery. Others wouldn’t agree with me, but the greed and money chasing that we now have in lobster is depressing. We used to socialize with each other more, we would sometimes dock our boats next to each other at the end of the day and pass around a bottle of tequila to share. That’s all gone. It was like a community back then.”

³⁴² Personal Communication, 25/03/2021, Arisaig, Nova Scotia.

³⁴³ Personal Communication, 15/04/2021, Lismore, Nova Scotia.

This notion that the lobster fishery used to be more “social” is a common theme around Nova Scotia. Fishers and industry actors variously described how as the commercial sector has become more lucrative, and thus competitive, there is much less informal socializing that takes place. While still in a relationship of *positive relationality* with one another, the playful and jovial spirit among industry actors had largely given way to more mechanical and work-related routine relations. For one of Scranton’s wharf-side companions, this was also something that the indigenous fishers did differently, almost admirably. He noted³⁴⁴:

“This all-business shit has made fishing less fun. There is too much competition to make the most money now. I’m not saying I’m not like that, but it’s probably going to destroy the fishery. The natives fish like they are on holiday! Ha! But they make enough and they seem to have a good time. That’s what it used to be like when my grandfather was fishing. It would be better and even for the community.”

Retired fisher Bull Stokes from Digby County was both dismissive of the indigenous rule-breaking on display in the moderate livelihood fishery, yet also appreciative of the alternative economics that they adhered to. Reemphasizing the potential of the fishery to sustain community and social relations, he echoed Leefer’s sentiments in noting³⁴⁵:

“There is a lot of suffering in small towns around this province. . . addiction, poverty. The fact that we don’t know how to leverage the wealth generated by this fishery to address that is shameful. I’ve worked with Mi’kmaw fisheries departments for years as an advisor and they prioritize community. I don’t want to romanticize it, but there is definitely something in that kind of community spirit that we could learn from. The only drive now is a neoliberal race to the markets. . . get it to China as fast as possible, don’t look back.”

Hence, as in the fishers around Arisaig and Lismore, Bull wasn’t advocating a full socialist takeover of the lobster industry, nor did he or the others have a concrete or thorough vision about what an alternative commercial sector would even look like. Yet, in those communities and others around the province that had fallen on hard times in recent decades, it was difficult for many to not consider the wealth being dragged out of the ocean four to five months a year as a potential remedy. While not necessarily offering a robust solution, the Mi’kmaw communities that were articulating a vision of the fishery that would benefit community, that would prioritize social relations above market relations, and that would place poverty reduction above profit motives were perhaps a step in the right direction. In other words, not just the lobsters, but perhaps the entire lobster industry could be pulled into moral proximity with and reflect moral obligations to the communities in which it is situated. For, if for nothing else, that sentiment reminds many fishers of the spirit of their own fisher forefathers.

³⁴⁴ Personal Communication, 15/04/2021, Anonymous, Lismore, Nova Scotia.

³⁴⁵ Personal Communication, 12/01/2021, Digby Neck, Nova Scotia.

However, the dreams of an alternative economic purpose of the fishery aren't shared by all. For example, in the more affluent fishing communities in Yarmouth and Digby counties, the market ethic reigns supreme with little reflection on alternative visions. Echoing the fishers from Cape Breton and Lunenburg quoted in *Chapter 7*, many in the secondary industries around the region see the current market-oriented capitalist model just fine as it is. Consider the thoughts of John Kennedy from The Lobster Gear and Bait Company, based in Yarmouth. For him, the market orientation, alternating seasonality to keep prices high, and the focus on exports are what have made the province the envy of fisheries around the world. He noted³⁴⁶:

“ . . . we have our critics, but the current model is what works, the current regulations work. If you want to survive you have to think global, you have to think exports, high-end Asian markets. We now use bigger boats, we provide the best traps that have ever been on the market, others provide the electronic gear. It's all targeted at extracting as much as possible in the short 5-month season as possible, and that's what gets you your paycheck. It's the best fishery in the world!”

Exporters in the region were more direct about the necessity of the current export-oriented model and the unrealistic nature of any alternatives. Nick Johnson from Clark's Harbour Fisheries, Ltd. not only defended the increasing focus on export markets and corporate consolidation of the industry, he was also indifferent to the accumulation of wealth the model results in. Johnson expanded³⁴⁷:

“We are the job makers, we find the markets and pass on the wealth to the fishers. They deserve it and so do we. The natives have their community licenses and that's fine for them. But it doesn't generate the kind of wealth that private access and exports do. The cooperatives of the past didn't work. They tried taxing us higher in the past but that was a bad idea. Just let the markets rip and that's what works. It's the only responsibility we have.”

William Erns from the Mobley Lobster Company, a buyer and exporter, was even more dismissive of the lobster industry “owing” anything to the local communities. For him, business is business, and if corporate consolidations take place, workers get laid off, or processing facilities close, “that's life”. He continued³⁴⁸:

“There was a lot of community angst back when the processors started to close around here and Digby. But they had to, the groundfish stocks had collapsed. And then they did a moratorium on licenses, and then some of the smaller buyers were bought up and consolidated in the bigger towns like Yarmouth. It caused a lot of anger in the communities. But what are we supposed to do. It's not a jobs program, it's business. The sector was too big before, it was bloated. Now it's leaner and more profitable so those of us in it still we benefit. There's not really another model that works or else we lose market access to competitors.”

³⁴⁶ Personal Communication, 26/04/2021, Yarmouth, Nova Scotia.

³⁴⁷ Personal Communication, 11/08/2021, Yarmouth, Nova Scotia.

³⁴⁸ Personal Communication, 21/04/2021, Yarmouth Bar, Nova Scotia.

Hence, as in many of the fishers who harvest in LFA 34 surrounding Digby and Yarmouth counties- the most lucrative in the province- there is little reason to ‘rock the boat’ of an expanding industry offering record-setting returns year on year. For, if the ocean continues to produce and the markets continue to generate the returns, then why not ride the wave while the fortunes are good.

While most of the primary actors of the capitalist ecology still ascribe to the fishery the primary *purpose* of feeding market demand above all else, the above discussion demonstrates that recent developments have opened up a certain fissure in that consensus. It’s not that the purported communalism on display in the recently launched Mi’kmaw fisheries offers a direct model that some seek to emulate, but rather that the focus on community and the leveraging of wealth generated by the lobster trade recalls for many the role the fishery played for their relatives generations ago. Though many understand that the fisheries of Nova Scotia have aligned with a market-oriented purpose since the earliest days of Euro-settler colonialism (See *Chapter 1*), they also know that a certain community ethic of previous generations served to at least moderate the excesses of market fundamentalism- the “smallest moral sphere of a capitalist system” (Browne 2009, 19)- currently on display. Public utterances and practices on the wharves and in their communities of economic alternatives from indigenous fishers around the province have therefore sparked a memory, or alternatively planted a seed, of myriad other ways, means, and outcomes of the fishery that could be realized. This is especially true in those communities that have variously suffered socioeconomic decline in recent years and are feeling the pains of late-capitalism’s ongoing dislocations. Though well short of a consensus, as is demonstrated above, a measure of market retreat as a primary fishery signifier is a welcome prospect for many.

In this study’s terms, the particular livelihood ethics on display in recently launched Mi’kmaw fisheries represent one aspect of the emergent ecological pluralization in Nova Scotia’s lobster fishery. Articulating alternative moral framings to that of the dominant capitalist ecology has therefore led some to question the dogmatic market-oriented purpose of the commercial fishery. Though some that adhere to the capitalist ecology- as in those from Arisaig, Lismore, and Ballantyne’s Cove quoted above- would welcome such modifications to the livelihood ethics that shape and frame their economic pursuits, others are less sanguine and perceive a direct threat from such alternatives. Since the outbreak of violence in late 2020, the latter have therefore been at times made to feel shame and embarrassment at the enormous sums of wealth the lobster fishery generates for some, while denying access to

others; a subjectivity that has only contributed to the pushback and sometimes violent rejection of the moderate livelihood fisheries in their midst. And the reality that certain of their fellow subjects from the capitalist ecology not only have sympathies for the indigenous cause, but also find value in their expanded moral framings of the fishery, is likely in the future to generate further entrenchment among allies and even more of a commitment to the market purpose of the fishery.

Value Counterbalance Hanging in the Balance

When formerly disgraced fisher Dan Garvin was found to be in violation of DFO rules for fishing with multiple lobster licenses in 2010, he was understood by his fellow fishers to have violated the near sacrosanct counterbalancing of the values of competition and honor that undergird the livelihood ethics of the capitalist ecology (covered in *Chapter 5*). For, if extreme levels of *competition* are to pervade nearly all transactions in the industry, and thus reflect the behavior of ‘proper’, ‘just’, and ‘professional’ actors, then the expectation of *honor* manifesting as a parallel value to frame and constrain competitive action within the rules of the game becomes equally important. In other words, when actors like Garvin pursue their livelihoods as if competition were not only the paramount, but also the singular, value guiding their actions, then rule breaking, violations of ‘codes’, and extreme forms of inequality among industry actors are sure to pass. The primary actors of the capitalist ecology see in such a reality something of a ‘tragedy of the commons’, in which not only would certain fishers and corporate actors perish in the competitive dust, but so too would the lobster stock collapse under the weight of competitive chaos. As such, the value of honor serves as a counterbalance to competition and implies that ‘proper’, ‘just’, and ‘professional’ actors also do their utmost to adhere to the regulations, recognize and treat with respect the myriad unwritten customs of the fishery, and generally align their practices with the principle of *techno-bureaucratic deference*. When counterbalanced, the mutually reinforcing values of the capitalist ecology are understood to engender a prosperous, fair, and sustainable fishery.

And it was precisely in upsetting this delicate balance that Garvin invited the wrath of his fellow Plymouth Rock fishers around the wharves of Shelburne. Hence, when Garvin decided to ignore the DFO regulation on license and trap limitations per fisher, not only had his dishonor allowed him to take in a bigger haul than his counterparts, it had also invited others to allow the value of competition to become singular, with potentially devastating

consequences. An acquaintance of Garvin's from Sandy Point, near Shelburne, commented³⁴⁹:

“He’s not the only one that has cheated, but what Dan did was wrong. This is how it used to be before DFO enforced the rules. It can quickly become the wild west and everyone taking what they can. As soon as Dan fished too many traps, then the next guy feels that he is entitled to as well. And then somebody else catches wind of what they’re doing and he decides to fish on Sunday, which we don’t allow. And it goes from there. It’s a slippery slope to overfishing.”

In other words, without adhering to the counterbalancing value of honor by following the regulations and creating an even playing field for all the others, Garvin had in fact invited others to follow suit. Thus, the others could only remain competitive if they too dropped the value of honor and fished according to their own terms. This predicament is variously referred to by Plymouth Rock members as “a race to the bottom”, “a downward spiral”, and even “shooting ourselves in our own feet”, which, given the potential consequences for the orderly and sustainable harvesting of lobsters, generates a strong desire among many to reflect and encourage honor in the fishery. The absence of honor, in other words, leads to runaway competition and a coming apart of the social ties and norms that constitute the commercial sector.

With the rise of an alternative set of livelihood ethics in the indigenous fisheries, it is exactly this type of imbalance of values that many fear, and the ‘race to the bottom’ that it would supposedly engender. Returning to the EFA offices in Meteghan, consider the concerns of these ‘honorable’ fishers should the previously discussed alternative fishing district proposed by the Bear River and Acadia Mi’kmaw communities go forward. For them, it’s not necessarily that additional indigenous fishers on the wharves and traps in the water would elevate the competitive spirit among their members to unsustainable levels. Most believed that “more competition is probably not even possible³⁵⁰!” The concern was that with Mi’kmaw fisheries departments demands for ‘self-government’ and the setting of their own rules outside of official frameworks for that new district, the value of honor among certain commercial fishermen would be pushed into the background. In other words, if Mi’kmaw fishers were going to show up on the wharves of Saulnierville, Meteghan, and Bear Cove out of the official seasons, with unauthorized numbers of traps, and even transgress the boundaries of the official LFAs, then violations of the official regulations by others was

³⁴⁹ Personal Communication, 03/09/2021, Anonymous fisher, Sandy Point Wharf, Nova Scotia.

³⁵⁰ Personal Communication, 22/04/2021, Anonymous, MFU group interview, Meteghan, Nova Scotia.

justified in order to create a level playing field for competition to be justly realized. EFA member Albert Bruns reflected³⁵¹:

“... imagine if DFO allows this to go forward and doesn't enforce the rules that we all follow! We might not see more conflict with the natives but just everybody saying 'okay, then we are going to follow their rules'. And that's it. It will be viewed as completely unfair if they can go out when they want and fish where they want. We'll do the same.”

For Bruns, competition was only possible and fair when a basic set of parameters were in place, which for him and his colleagues were the DFO rules that applied equally to everyone. If honor was not reflected by all, including the indigenous fishers, then it seemed hardly likely that it could be reflected by any.

EFA president Luke Pines sounded a similar note of despair in focusing more specifically on the additional traps in the water that the moderate livelihood fisheries were bringing to the area. According to Pines, it took years of pressure, enforcement, fines, and negotiation among fishermen's associations and DFO to get commercial harvesters to abide by the official trap limitations per license and to not skirt the rules as they saw fit. Such negotiations included a number of associations sharing their own voluntary data collected and demanding participation at DFO advisory committee meetings; all of which occurred at a time when the fortunes of lobster harvesters were dramatically increasing and thus increasing the acceptance of DFO limitations on effort. The result, according to him, is that nowadays there are hardly any transgressions of the trap limitation as an honorable and professional fisher could hardly sleep at night “had he cheated his colleagues in such a backstabbing manner”³⁵². He elaborated:

“This rule and its enforcement is on a knife edge. I know several guys who have extra traps ready to go should they hear of anybody else doing the same. Most follow the rules and consider it proper to do so. But there are others who would consider someone else laying extra traps as unfair, and they would then do the same the next day. They wouldn't report it to DFO. They would just cheat all the same.”

Hence, while honorable to fish with only the authorized number of traps, that value of honor could easily fade should the perception that others are getting an unfair advantage in the fishery come to the fore. And this is exactly what Pines worries will happen should additional moderate livelihood fisheries come to the area. He continued:

“Pretty much everyone considers the moderate livelihood traps as illegitimate and illegal, whether or not DFO eventually recognizes them or not. So if they continue to show up and lay traps, in whatever season, then others are going to see that they are getting an unfair advantage. Some may start laying more traps during the official season, some may go out of

³⁵¹ Personal Communication, 23/04/2021, Meteghan, Nova Scotia.

³⁵² Personal Communication, 20/04/2021, Meteghan, Nova Scotia.

season, some maybe even on Sunday when we aren't supposed to fish. I don't know exactly, but this is what will happen."

The number of traps fished, as a means to realize the competitive spirit in catching the most lobster, could therefore only be realized through the dishonor of violating the official rules. But, "that's how delicate this game is for most, either everyone follows the rules or possibly nobody does"³⁵³.

In Cape Breton, a similar concern exists not with regards to the official regulatory framework, but rather with certain of the unwritten customs that guide fishing practices. Around the wharves of Ingonish and North Sydney, one of the most sacrosanct thereof is the prohibition against fishing on Sundays, even during the LFA 27 fishing season. Though not outlined in the *Fishery General Regulations* nor enforced by DFO, the Sunday prohibition is strictly adhered to and assumes an almost religious character as it supposedly originates in the region's Irish Catholic heritage. As such, on Sundays honorable fishers spend time with their families, repair traps, stock their boats with bait, or repair damage to gear suffered in the previous week's harvesting. As the "right and proper"³⁵⁴ thing to do, fishers typically wouldn't dare to clear nor set their traps on Sunday, lest they invite widespread scorn on the wharf, traps cut and lost to the waves, or even worse, reciprocal Sunday fishing by others. In value terms, the realization of competition is thus reserved for the rest of the week and put on hold Sundays for the counterbalancing of honorable rest and relaxation that keeps the playing field level for professional fishers. According to the region's tongue-in-cheek lore, when in the past fishers regularly allowed their honor to be suppressed in the realization of hyper-competitive Sunday fishing, "some never saw the shore again"³⁵⁵.

Thus, when rumors that the moderate livelihood fishers from the Potlotek band have no regard for such norms reached the wharves of Ingonish and North Sydney, concern spread that the realization of honor in such customs could once again be undermined. For many, the concern wasn't necessarily that indigenous harvesters bringing their traps to Cape Breton's north coast on Sundays would decimate the stocks. Most acknowledged that their numbers were small anyway. Rather, the risk was that Sunday fishing would be viewed not only as a dishonorable act, but that it would create an imbalance in the otherwise healthy competition

³⁵³ *ibid.*

³⁵⁴ Common utterance among fishers around Cape Breton.

³⁵⁵ Personal Communication, 29/07/2021, Anonymous fisher, Louisbourg, Nova Scotia.

that plays out on the water during the six other days of the week when fishing is tolerated.

CBLA member James Wood made the point³⁵⁶:

“In lobster, there are the official rules and there are the unofficial rules. To be in good standing with everyone you have to follow all of them. In some ways, the unofficial rules are even more important for your relationships with other fishermen. Because it’s not DFO that comes up with them and enforces them. It’s your friends. The no fishing on Sunday is probably the best example. If there was native fishing on Sundays then no doubt others would put their traps out too, if for nothing else but to prevent them from getting the lobster that would otherwise be available on Monday.”

For others, if an indigenous presence on the waters on Sundays could undermine the capitalist ecology’s counterbalancing value of honor, and thus be reciprocated, then certainly other of their practices would invite the same ‘race to the bottom’ of unhinged competition. CBLA member Jason Starr commented³⁵⁷:

“There is a fishing culture in Cape Breton. Which means that we all understand each other, and we have been working alongside each other for a long time. And so we know what is expected, how to be respectful and such. But we don’t really know the natives around this part of Cape Breton. Even if they are following the season rules, how do they fish? When one of us is caught out doing something we aren’t supposed to there is either a fight, or you just start to do what they’ve done. Lay more traps, fish in their space. It seems inevitable that if the natives do things differently, then the white guys around here will too.”

In other words, by ‘doing things differently’ Starr is referring to practices that the non-natives discourage through an upholding of the value of honor. Without the same expectations or understandings of those dishonorable practices on the part of indigenous fishers, like Sunday fishing, honor will further recede and allow self-destructive competition to mount on all sides.

Shifting focus back to Antigonish County, fishers there foresee a similar receding of honor should moderate livelihood fisheries result in violations of the unofficial ‘gentlemen’s agreements’ that govern access to the region’s fishing territories (See *Chapter 5*). For many around Livingstone Cove and Lismore, the counterbalancing of competition to bring in the biggest hauls is realized through the previously discussed ‘rights’ and ‘obligations’ to fish only within the delimited spaces that extend from one’s adjacent coastal property. Though not codified on paper, nor enforced by official institutions, the honorable respecting of each other’s territories is more enforced by the social sanctions of potential exclusion from fishermen’s associations, ridicule in town gossip, or uncomfortable confrontations on the wharf. An additional outcome that has transpired in the past is the reciprocation of the act itself. In other words, when fishers have violated the gentlemen’s agreements and purportedly

³⁵⁶ Personal Communication, 30/07/2021, North Sydney, Nova Scotia.

³⁵⁷ Personal Communication, 18/06/2021, Ingonish, Cape Breton Island, Nova Scotia.

trespassed into other's waters to lay traps, the offended have tended to do the same and, in an equally dishonorable act, violate the other's territory. Fisher Lester Downs clarified³⁵⁸:

“This is what’s happened in the past. Somebody ignores the territorial boundaries of others and they reciprocate. It doesn’t happen often, because most understand the custom and want to be respected themselves. But say when a new fisherman comes into the area and isn’t familiar with how rigid the expectations are. Then it just happens right back to them and it can get ugly really fast.”

Thus, competition within delimited boundaries is fair game. Competition realized in transboundary violations is a dishonorable quasi-crime that demands reciprocation of equal proportions.

Downs and others fear that this is the kind of ‘downward spiral’ of diminished customs that would likely transpire with the arrival of newcomers to the fishery. For him, the nearest Mi’kmaw moderate livelihood fishers at Pictou Landing are a case in point as they have their own unique customs and expectations of rightful practices on the water. He noted:

“. . . the native fishers have their own plans, they have their own ways. I’m not sure what they know of these expectations around here. They fish how they want. They understand the region, the ocean in their way. If they bring the fishery up around Arisaig, Lismore, how are the fishers here going to react when they ignore those territories?”

Like in the concerns around Sunday fishing in Cape Breton, the fishers around Antigonish fear that the ignorance of their territorial customs would inevitably lead to reprisals, potentially conflict, but most likely violations of others’ territories by the commercial fishermen themselves. Fisher Jake Crowns from Lismore clarified³⁵⁹:

“Since the natives don’t have any claims to fishing territory around here, then when they fish in someone’s space, that person will feel some injustice. Then he will just do the same thing, lay traps, in another guy’s territory. I’m not saying I wouldn’t do the same. It’s a bit contradictory, but he would just retaliate towards another that hadn’t even done anything. It’s all foolish and self-defeating. But that’s how it is.”

Hence, the concern is that moderate livelihood fisheries that seemingly “violate” one fisher’s territorial waters, whether in season or not, would be seen as putting him in a competitive disadvantage. In order to correct the perceived injustice, and realize competition in just waters, he would suppress the value of honor and lay traps in another’s territory. Which would in turn invite further retaliations and a disintegration of the gentlemen’s agreements themselves. In other words, if the counterbalancing value of honor in respecting a centuries-old tradition of territorial exclusions falls short, or is simply unknown and therefore not

³⁵⁸ Personal Communication, 27/02/2021, Antigonish, Nova Scotia.

³⁵⁹ Personal Communication, 28/02/2021, Lismore, Nova Scotia.

adhered to, the value of competition will rise unchecked and result in further transgressions in this particularistic corner of the capitalist ecology's moral framing.

Thus, in this particular version of moral slippage rendered front and center by the return of ecological plurality we see *not* an alternative set of indigenous values that threaten to undermine those rendered inviolable by the rise of capitalist modernity in the lobster fishery. Rather, the introduction of indigenous commercial practices to certain corners of the fishery where they were previously absent has the potential to re-align, or rather cause flux in the balance between, the core values that already exist. In this way, the delicate equilibrium between *competition* and *honor* that has been honed over the years in a complex dialectic with the official regulatory system begins to appear less settled. Such a value reconfiguration is feared less for the stratospheric levels of competition it may engender, and more for the retreat it encourages of the counterbalancing function that honor has served in holding market fundamentalism at bay. For, absent this balance, what is left to prevent the very kinds of unregulated overfishing that the primary actors of the capitalist ecology claim to be concerned about? In many ways, the upending of the relevant moral framings by the above discussed inclinations of some to find a communalist purpose in the fishery, coupled with the seemingly anti-rationalist value advances and retreats that put the fishery on the precipice, represent a certain post-modern decay of the bureaucratic and ethical certainties of old. Or, in the words of one retired fisher:

“This model of the fishery was never going to last. I never thought it would be the natives that brought it to its knees. I thought greed and overfishing would kill it, just like the other species. Who knows who is in charge now! Is it the natives? DFO? The activists? I would never encourage my sons to fish. I’m glad they’ve decided to go to university.”



CONCLUSION

New Lobster Dynamics

Ecological Plurality as Retrograde Economics, Theater of Reconciliation, or Emergent Hybridity?

What we need is a cultural leave-us-alone agreement, in spirit and in fact.
Vine Deloria, Jr. in *Custard Died for Your Sins* (1969)

So, let's agree that Indians are not special. We're not. . . .mystical. I'm fine with that. Yes, a great many Native people have a long-standing relationship with the natural world. But that relationship is equally available to non-Natives, should they choose to embrace it. The fact of Native existence is that we live modern lives informed by traditional values and contemporary realities and that we wish to live those lives on our terms.

Thomas King in *The Inconvenient Indian* (2012, 266)

When the Scottish poet and explorer Sir William Alexander was granted large swaths of territory across the Atlantic by King James I of England, he not only wanted to draw on his love of classics in the naming of that territory, but to highlight national rebirth and a novel extension of his homeland. Thus, in drawing on the Latin, Alexander chose “Nova Scotia”, translated as “New Scotland” in English, for his new domain³⁶⁰. ‘Scotia’ highlighted to Alexander both his love of country as well as King James’ I sovereignty over the territory, while ‘Nova’ was an indicator of new possibilities, new imperial ambitions, and new opportunities for the masses of Europeans migrating to exploit the resources of the New World, including its fisheries. The scientific binomial nomenclature of lobster also employs the Latin, although less out of a desire to exult in ancient prose, and more of a way to communicate unambiguously about species characteristics. “*Homarus americanus*” thus designates this specific lobster’s habitat in the Northwest Atlantic (i.e., “americanus”), as well as its genus (i.e., “*Homarus*”) among other species of its kind³⁶¹. Hence, drawing on the two identifiers, the conjunctive title of the current thesis as *Nova Homarus* is meant to communicate a certain ‘new lobster’ on the fishery’s horizon. The lobster is not *new* in the sense of its biology or taxonomic hierarchy (e.g., species, genus, family, order, etc.), nor is it *new* in its commercial or consumptive status. Rather, new lobster is emergent in Nova Scotia because of the rise of ecological plurality within which its essence is understood, from which it shapes relationships, and of which particularistic ethical sensibilities are leveraged in its human use.

In this study’s exploration of the ecological contours of new lobster’s centuries long journey to contemporary emergence, several theoretical insights have been highlighted that may prove of some utility in future analyses of human-environment relations. For example, a number of social realities highlighted in the preceding chapters indicate that perhaps “the boundary between Nature and Society, between the world of objects and that of subjects” (Garuba 2013, 43) in ecologies that purportedly adhere to naturalist ontological assumptions is less fixed than one might assume. As was touched on in *Chapter 5*, many of the fishers involved in this study maintain near constant relations with their boats, traps, and other gear, which are thus understood as prominent objects to the capitalist ecology. Though these human-object relations are primarily mechanical and practical, and thus *denied sociality*, they

³⁶⁰ See “Origin of the names of Canada and its provinces and territories”, Government of Canada official website at <https://www.nrcan.gc.ca/earth-sciences/geography/origins-canadas-geographical-names/origin-names-canada-and-its-provinces-and-territories/9224>, accessed May 2022.

³⁶¹ American Lobster Overview at <https://www.parl.ns.ca/lobster/overview.htm>, accessed April 2022.

nonetheless present on the surface as morally infused and as if offering some form of communicative exchange.

However, this study's findings revealed that when fishers proclaim to 'care for' their boats, when they name and speak to the lobsters, and when they physically caress their traps and gear they are simply engaging in *intentional sociality* with other of the fishery's subjects- albeit through indirect communicative channels (i.e., through appearing to socially engage with objects). But what if a deeper look at these subject-object relations *did* reveal subjectivities of attraction, affection, bonding, or even symbolic exchanges across the ontological divide? Is there not something 'social' being exchanged when fishers refuse to sell off or retire their boats once they've stopped functioning and no longer facilitate the harvest? Is there not something 'moral' being exchanged when certain Catholic fishers flash the sign of the cross to a lobster before returning it to the water to continue its growth and maturity? Though these practices were documented in the fieldwork portion of the current study, their full significance and meaning is left to future analyses. Nonetheless, they do seem to reflect that in instances of intense and ongoing relationality between subjects and objects, certain social and moral attributes do start to emerge, or at least they start to be signed to others, in one fashion or another. Thus, perhaps a number of variables are at play in shaping and determining the ultimate outcome, or perhaps the ultimate essence, of subject-object relations, which, when properly identified, may reveal ties that we may term 'social' between the worlds of subjects and objects; an ontological blurring that recent pop culture literature has started to hint at (e.g., Wholleben 2015).

Similarly, and as was more definitively revealed in this study, the status of non-humans as perpetual objects seems to be more dependent on historical circumstance than on naturalism's certainties. For example, *Chapter 7* pointed to several instances in which emergent ecological plurality, replete as it is with divergences of ontological identifications, has pushed certain of the capitalist ecology's objects to become more 'subject like'. The examples highlight that whereas lobsters, groundfish, other predatory species, and oceanic and meteorological 'forces' were confidently excluded from all social intercourse and moral concerns in the past, they are now being pulled into 'moral proximity' with the ecology's primary subjects. Perhaps we could signify the phenomenon as one of *objecthood non-permanence* in which, once again, naturalism's purported rigidities start to become malleable given the right circumstances. In this case, those circumstances are alternative economic models emerging in parallel, climate activism engendering forms of moral guilt, and movements to protect and strengthen ecosystem dynamics extending protected status to more

species. Going forward, studies focused on human-environment relations that include affinities to naturalist assumptions could benefit by identifying the historically particular circumstances that may be leading to instances of objecthood non-permanence, including how relationships and sociality adapt accordingly.

In addition, the current study's findings highlight that in moments of ecological plurality, it is not only one's object or subject status that is tied to historical contingency, but also the configuration of relations that constitute an ecology's outer boundaries. Thus, when mapping an ecology's relational configuration in grid or schematic format, as was done on the capitalist ecology in *Chapter 5*, it is equally important to highlight relational fluidity- or perhaps the "chaotic dynamics" (Ghazoul 2020, 40)- of change as it is to map the domains of *positive* and *negative relationality* cross referenced to *intentional* and *denied sociality*. In other words, relationships, whether strictly between subjects or between subjects and objects, should more accurately be understood as in a constant state of flux that respond to myriad social forces within which they emerge. Hence, as ecological plurality engenders the transformation of economic structures, the alteration of political norms and regulatory oversight, or perhaps even the generation of feelings of guilt tied to historical injustices (as in the current study), relational hierarchies are shuffled, individuals are repositioned between *negative* and *positive relationality*, and new actors emerge that demand their own relationality with all manner of an ecology's subjects and objects. In addition, the attributes that characterize relations should also be recognized as fluid and unfixed, such as in cooperation shifting to competition, mutualism shifting to predation, or even one of control and domination shifting to indifference or non-recognition. In theoretical (or perhaps metaphorical) terms, an ecology's relations should therefore be mapped and analyzed not only with an eye to the web-like forms that emerge, but also to the wave-like fluidity that reveals a continuous transformation in like manner.

Of further theoretical interest, might it be favorable to conceive of an analytical framework to capture the ethical sensibilities that guide an ecology's human-environment relations that fall outside the realm of economic action? This study deployed the term 'livelihood ethics' to refer to the moral inclinations that shape those particular human-environment relations in which human actors put to use other non-human beings or entities for material gain, which was shown to include certain governance and moral framing elements. But how might we capture the ethical sensibilities that characterize an ecology that emerges from human behavior devoid of such economic motivations? For example, what of those human-environment relations whose sole purpose is a form of ritual or symbolic

manipulation, or alternatively the leveraging of the natural world for aesthetic, religious, or social integrative purposes³⁶²? The ecologies that configure themselves around such action most certainly reflect expectations of proper conduct, including values that shape that conduct and identifications of subjects with the authority to oversee the whole affair. As outlined in *Chapters 5 and 8*, this study's analysis of the capitalist ecology's livelihood ethics revealed a 'techno-bureaucratic deference', coupled with a market purpose and the complementary values of competition and honor. These ethical expectations point the capitalist ecology's moral compass to proper, just, and 'professional' lobster harvesting, and simultaneously identify and criminalize transgressors. Future studies might benefit from identifying similar frameworks that outline and codify to an ecology's human actors the socio-ethical boundaries within which other types of human-environment relations are expected to unfold.

But what, in a more real-world and lived experience sense, are to become of the lives and livelihoods caught up in the latest iteration of the centuries-long relational drama documented throughout this thesis in Nova Scotia? As the shifting back towards the ecological plurality axis of the continuum continues to unfold, the end point of these new lobster dynamics can be conceived of in a number of ways. For one, it does not seem hyperbolic to predict a continued escalation of tensions in the fishery, as certain of the capitalist ecology's primary actors increasingly view the pluralizing effects outlined in *Chapters 7 and 8* as an existential threat. For these individuals- found throughout the fishery and its secondary industries- the indigenous ecology that is variously taking steps to reassert itself is thought of as a form of retrograde economics. For, they see in ecological pluralization a denial of the lobster their proper commodity status, a denial of the "freedoms" of market fundamentalism to do as one pleases with those commodities, and a denial of late-capitalist modernity's ordering of social relations in ways that best achieve those objectives. Or, as one fisher derided, "these native fishermen belong in medieval times"³⁶³. As highlighted throughout this thesis, the contours of the capitalist ecology are closely linked to the Euro-settler identity of the place, and so an undoing thereof purportedly threatens not just economic opportunity, but what it means to be Nova Scotian. Such apocalyptic visions were expressed by many involved in this study and are perhaps reflective of wider forms of guilt and

³⁶² Relevant examples include the indigenous Karuk people of Oregon reviving "world renewal" ceremonies in which sacred rites and the controlled burning of the landscape are conducted in order to establish "balance" between the human world and the "spirit people" occupying features of the natural world (Mann 2022), or the recent reintegration of the sport "Indian relay" among the Piikani of Montana wherein the intimacy and "sacred ties" in human-animal relations are strengthened through the sport of horse racing (Allaire 2022).

³⁶³ Personal Communication, 12/12/2021, Anonymous fisher, Saulnierville wharf, Nova Scotia.

recognition of the historical injustices that have unfolded through time right alongside the development of the lobster fishery itself. Far less complex subjectivities than this have been known to engender protracted conflict in one form or another in many other times and places; a social reality that may engender reiterations of ecological hegemoniality in the years to come.

Another way to consider the future of the (re)pluralization phenomenon is to view the fishery through the lens of reconciliation and what opportunities that it could offer the State in realizing the multitude of commitments that it has made of late to indigenous people around Canada. For instance, although not without its prominent critics (e.g., King 2012; Niezen 2014), Canada's Truth and Reconciliation Commission (TRC), which was conducted from 2007-2015 at a cost of \$72 million to the taxpayer, sought to expose the suffering of those indigenous peoples that were forced to attend residential schools and tolerate other injustices at the hands of the State in recent decades³⁶⁴. As a result, in 2015 the TRC released a list of 94 "calls to action" as practical steps that could be taken to promote reconciliation and "repair the damaged relationship between indigenous and non-indigenous people in Canada"³⁶⁵. One principle set to guide those calls to action was for the Canadian government to repudiate anachronistic concepts that were used in the past to justify European sovereignty over and confiscation of indigenous lands and resources³⁶⁶. As such, many of those involved, including the former Minister of the Department of Fisheries and Oceans (DFO) Bernadette Jordan, see in the negotiations over the moderate livelihood fisheries an opportunity to promote "reconciliation in action" (quoted in Ritchie 2021). According to one journalist who has covered the dispute extensively³⁶⁷:

"A number of individuals see the fishery issue as an opportunity to address past injustices, to push the reconciliation issue, to tick those boxes, especially certain politicians and those in the academic and activist communities. But it's almost always those not directly involved in the industry!"

In other words, it's an opportunity that to many shouldn't go unnoticed, yet one conceived of among a cohort almost exclusively outside of the capitalist ecology.

³⁶⁴ See "Truth and Reconciliation Commission of Canada" at <https://www.rcaanc-cirnac.gc.ca/eng/1450124405592/1529106060525>, accessed January 2022.

³⁶⁵ National Center for Truth and Reconciliation's, *Calls to Action Booklet* (2015), available at <https://nctr.ca/shop/calls-to-action-booklet/>, accessed March 2022.

³⁶⁶ Outlined by the provincial government of British Columbia at <https://www2.gov.bc.ca/gov/content/governments/indigenous-people/new-relationship/truth-and-reconciliation-commission-calls-to-action>, accessed March 2022.

³⁶⁷ Personal Communication, 28/01/2021, Litalia Zemming, journalist at *Halifax Examiner*.

For those at the level of the capitalist ecology's primary actors, the notion is a nonsensical non-starter. While there may be some sympathies for the plight of the Mi'kmaq of an earlier era, contemporary sentiments in the fishery most commonly reject any responsibility for the correction of past injustices being hoisted upon the back of the industry. A common term heard from those involved in this study was "sacrifice", in that there is a perception that the lobster fishery could be "given away", or "sacrificed", by opportunistic politicians to score political points in meeting a TRC call to action. One fisher made the point³⁶⁸:

"...the DFO has held out so far but this is all political. What could happen after the next election. How is this our responsibility to correct those wrongs? It doesn't make sense. It would be quite easy for them to just throw the lobster fishery away, and say 'look we're doing reconciliation' and then get votes. All this history can't be put on our backs."

In other words, the view is that the injustices suffered by indigenous people in North America were orchestrated at the highest levels, were the machinations of a political and economic elite with little relation to lowly harvesters in today's fishery and were therefore someone else's problem to fix and 'reconcile'. Another fisher felt that it was an inevitability that more and more of the fishery would be hived off piece by piece in order to meet increasingly forthcoming demands from the Mi'kmaq for reparations. To him, this would only exacerbate the current problem. He noted:

"We have to stay the course on this issue. There was already the granting of food, social, ceremonial licenses to correct a wrong. Then the Marshall Decision licenses that were handed out. And now this? They are just going to keep pushing it until there is nothing left. The line has to be drawn somewhere and this is it. If not, and politicians continue to cave, then there will be more violence."

Though not wholly inconceivable, a future in which the lobster fishery of Nova Scotia serves as a theater for gestures of reconciliation, expanded rights, and inter-communal healing seems more like the fever dream of an opportunistic political class disconnected from the working lives on the line.

What then might the future of new lobster look like if not one of an "egalitarian coexistence" (Sprengr and Grossman 2018, xiii) of ecologies in parallel enacting livelihoods in their own particularistic ways, nor one in which a previously hegemonic ecology gives way to offer an unobstructed path towards healing and reconciliation so long in demand? Perhaps a more optimistic outcome to hope for is one in which these currently diverging, yet increasingly interrelating, ecologies become less plural and more fused in their knowledge,

³⁶⁸ Personal Communication, 01/09/2021, Jim Bauer, Jordan Bay, Nova Scotia.

relations, and ways. Building off Marisol de la Cadena's notion of "partial connections" in the realization of indigeneity in Latin America, might we envision a future in which a capitalist and indigenous ecology in the lobster sector continue to manifest as "more than one, yet less than two" (2010, 347). This potentiality reflects not a continuation of the hegemoniality of old with its ontological, relational, and livelihood ethical assaults and assimilationist envelopment of all that is considered non-modern. Nor does it reflect pristine and bounded ecologies- one modern, one of "exotic otherness" (Nugent 1996, 442)- operating in adjacent fishery scapes and grating in conflict in perpetuity. Rather, in a contemporary context shot through with demands for social justice and reconciliation *and* with opportunities of a growing market economy continuing to expand, might we see increasingly intimate relations between ecologies eventually result in hybrid forms that are neither one, nor the other?

In other words, perhaps in moments trending towards the plurality axis of the continuum, the reality that ecologies are "less formed by primordial imprinting but rather enacted dynamically" (Grossman2018, 332) becomes more salient, with inter-ecology relations effecting blurred boundaries and fuzzy demarcations between the two. For example, might we imagine a future in which the capitalist ecology *does* pull its objects into closer moral proximity with its subjects, as discussed in *Chapter 7*, thus reflecting less of the rigid ontological dualities of nature and culture from before. One outcome of this could be a reflection of indigenous conceptualizations of both a social *and* market commodity status for lobster, which would once again allow lobster to serve a communal purpose in strengthening community ties and well-being through its exchange. Moreover, as the detrimental impacts of climate change are increasingly felt in Nova Scotia, the fishery's weather, winds, and waves will have to become less object like if the fishery is to last, with moral commitments to them and their stability (i.e., through climate mitigation measures) rising to the importance of one's moral commitments to family and community. Once again, Mi'kmaw activism on the issue and practical steps toward caring for the environment serve as a reminder of the themes of *unity* and *interconnection* undergoing a renewal, and thus a way of understanding worthy of emulation- if not out of reverence, then at least for survival. Though the acquisition of full personhood qualities of said objects is unlikely to manifest in hybrid forms, naturalism's dichotomies might become less absolute.

New lobster's hybrid forms of ecology might also manifest as reconfigurations of relations, with fewer antagonistic subjects positioned in *negative relationality* for both indigenous and non-indigenous harvesters alike. For instance, as Mi'kmaw led conservation and lobster ecology themed scientific endeavors proceed, including those formed in

partnership with the prestigious Dalhousie University discussed in *Chapter 4*, new insights might serve to allay fears from the capitalist ecology of a fishery collapse faced with alternative frameworks. The conduct and publication of such irrefutable science may force the DFO's hand in broadening its own scientific mandate, thus slowly chipping away at certain institutional orthodoxies that have justified exclusionary regulations in the past. In other words, new lobster might open up doors to new knowledge, new ways of understanding, and, perhaps inevitably, new regulations that serve a less polarizing function. Might we then see not simply subjects 'shifting to' and 'emerging anew' in *negative relationality* with the capitalist ecology's commercial harvesters (See *Chapter 7*), but rather ever widening subject pools of actors collectively and cooperatively engaging the lobster harvest with more informed understandings of actual (e.g., climate change) versus scientifically questioned (e.g., fishing out of season) risks to the fishery. Such relational reconfigurations have the potential to shift not only indigenous harvesters into *positive relationality* with the industry, but perhaps even the full range of suspected indigenous allies (e.g., academics, NGOs, activists) that are currently held in contempt for their supposed misplaced sympathies.

As the two ecologies continue to interrelate, an emergent hybridity is likely to include a fusing of the livelihood ethics that currently communicate divergent governance and moral standards of the harvest as well. For instance, should the decentralized and band-centric model of Mi'kmaw fisheries governance outlined in *Chapter 6* prove more adept at responding to the vagaries of lobster migrations and ecosystem dynamics in the context of a changing climate, then the dogma of 'techno-bureaucratic deference' to the State might start to fade. Is it not foreseeable then that fishermen's associations, equally equipped with the scientific knowhow of the official science process and in less antagonistic relationality with their indigenous counterparts, might start to demand a more commanding governing mandate? Similar to band fishery departments, fishermen's associations, or perhaps other wharf or community-based collectives, might begin to see themselves as more connected to the local environment, more democratically oriented, and less politically skewed in regulatory decision making than DFO. The management of the lobster harvest and the stewardship of the oceanic environs might then become more decentralized, reflect new coalitions of users and consumers, and further embed the fishery in community (indigenous or otherwise), as opposed to subjecting it to the whims of politicians or politicized bureaucracies.

In like fashion, new lobster might fuse moral framings in a way that excludes neither market nor community in defining the purpose of the fishery, and that raises additional values to coexist alongside competition and honor in its pursuit. Is it not conceivable then that the

primary actors of the capitalist ecology increasingly recognize both the economic decline surrounding the fishery in rural Nova Scotia (See *Chapter 8*) and the communal benefits promised in a rising moderate livelihood fishery? More and more of said actors might therefore reconceive of the fishery's ultimate purpose and restrain the market fundamentalism of old that left many resentful and in many ways contributed to inequality in the province. By contrast, moderate livelihood fishers are likely to significantly benefit financially from their harvests, given record high prices for lobster in 2021 (See Mundie 2022), and thus equally envision commercial alongside communal temptations in putting the crustacean to human use. Moreover, while the counterbalancing of competition and honor as commercial industry values (See *Chapter 5*) is not likely to retreat in hybrid forms of ecology, more community-oriented values like reciprocity and sharing are equally unlikely to be held at bay as new lobster comes into view. In other words, the divergent moral framings coming into relation and friction today, and thus contributing for some to the perception of risk to the industry, might eventually counterbalance one another and result more in what Stephen Gudeman refers to as "strange economies" that somehow manage to "juxtapose self-interest and mutuality" in their very enactment (2016, 1).

New lobster then may not simply result in a reassertion of ecological hegemoniality in novel forms in an attempt to suppress and hold at bay alternatives for the fishery. It's also possible that new lobster is not a sign of perpetual conflict with an indigenous ecology firmly implanted and increasingly asserting itself in both official fora and on the waters. Rather, a more hopeful vision and an alternative future to work towards is one in which the particular divergences between the ecologies are increasingly recognized as strengths that could serve some adaptive function when adopted by the other side. As the subjects that constitute the capitalist and indigenous ecologies are themselves highly adaptive and motivated actors, it seems likely that some form of hybridization is likely to unfold as the two come into ever closer relations with one another. If new lobster does result in such a hybrid outcome, then we will certainly look back at nearly 400 years of fishery history as a wasted opportunity and a period of unnecessary strife. Thus, when this current state of ecological plurality comes to pass, let us hope that history does not repeat itself in such exclusionary ways. In other words, perhaps going forward we can dispense with the hegemoniality↔plurality continuum outlined in the current study and continue this research in a new era of hybrid ecologies that will one day constitute Nova Scotia's lobster fishery.

Bibliography

Acheson, James (1981) “Anthropology of fishing”, *Annual Review of Anthropology*, Vol. 10: 275-316.

Acheson, James (1988) *The Lobster Gangs of Maine*. Hanover: University Press of New England.

Alexander, Steven; Andrachuk, Mark; Armitage, Derek (2016) “Navigating governance networks for community-based conservation”, *Frontiers in Ecology and Environment*, Vol. 14(3): 155-164.

Alfred, Taiaike & Corntassel, Jeff (2005) “Being indigenous: Resurgence against contemporary colonialism”, in *Government and Opposition*. Oxford: Blackwell Publishing.

Allaire, Christiane (2022) “Scenes from America’s first extreme sport”, *Vogue*, March 14, 2022.

Allison, Edward; Ratner, Blake; Asgard, Bjorn; Willmann, Rolf; Pomeroy, Robert; Kurien, John (2012) “Rights-based fisheries governance: from fishing rights to human rights”, *Fish and Fisheries*, Vol. 13: 14-29.

Allison, Dargene. (1891) “Notes on a General Return of the Several Townships in the Province of Nova Scotia for 1767.” In *Collections of the Nova Scotia Historical Society*, Vol. 7, 45-71.

Århem, Kaj (2016) “Southeast Asian animism in context”, in Århem, Kaj & Sprenger, Guido (2016) *Animism in Southeast Asia*. London: Routledge.

Århem, Kaj & Sprenger, Guido (2016) *Animism in Southeast Asia*. London: Routledge.

APTN National News (2020) “The facts behind Mi’kmaw fishing rights”, December 2, 2020 at <http://www.aptnnews.ca/national-news/the-facts-behind-mikmaw-fishing-rights/>

Assembly of Nova Scotia Mi’kmaw Chiefs (2021) “Assembly supports Pictou Landing netukulimk harvesters”, Kwilmu’kw Maw-Klusuaqn Negotiation Office.

Assembly of Nova Scotia Mi’kmaw Chiefs (2009) “Unama’ki Moose Harvesting According to Netukulimk”.

Atlantic Fishermen (2021) “Acadia First Nation joins Bear River and Annapolis Valley First Nations in moderate livelihood fishery”, March 12, 2021.

Atlantic Integrated Commercial Fisheries Initiative (2018) “Indigenous program review” at www.indigenoufisheries.ca

Atlantic Aboriginal Economic Development Integrated Research Program (2011) “Social impacts of aboriginal economic development: Three case studies from Atlantic Canada”, Atlantic Policy Congress of First Nations Chiefs Secretariat.

Atlantic Integrated Commercial Fisheries Initiative (2010) National Indigenous Fisheries Institute.

Bailey, Alfred (1969) *The Conflict of European and Eastern Algonkian Cultures 1504-1700: A Study in Canadian Civilization*. Toronto: University of Toronto Press.

Bailey, Megan (2020) “Nova Scotia lobster dispute: Mi’kmaw fishery isn’t a threat to conservation, says scientist”, *The Conversation*, October 20, 2020.

Bailey, Megan & Charles, Anthony (2021, unpublished) “Lobsters and livelihoods: An access story”, Marine Affairs Program, Dalhousie University.

Baker, Oscar (2020) “Protesters demand return of Potlotek’s moderate livelihood traps”, *Saltwire Network*, October 21, 2020.

Barsh, Russel Lawrence (2002) “Netukulimk past and present: Mi’kmaw ethics and the Atlantic fishery”, *Journal of Canadian Studies*, Vol. 37, No. 1.

Bartlett, Richard H. (1978) “The Indian Act of Canada”, *Buffalo Law Review*, Vol. 27(4), 581-616.

Bartlett, Cheryl; Marshall, Murdena; Marshall, Albert (2012) “Two-eyed seeing and other lessons learned within a co-learning journey of bringing together indigenous and mainstream knowledges and ways of knowing”, *Journal of Environmental Studies*, 2: 331-340.

Barnett, Allain; Messenger, Robin; Wiber, Melanie (2017) “Enacting and contesting neoliberalism in fisheries: The tragedy of commodifying lobster access rights in Southwest Nova Scotia”, *Marine Policy*, Vol. 80: 60-68.

Bateson, Gregory (1972) *Steps To an Ecology of Mind*. Chicago: University of Chicago Press.

Battiste, Marie (1997) “Structural unemployment: The Mi’kmaq experience” in Joe, Rita & Choyce, Lesley (1997) *The Mi’kmaq Anthology*. Lawrencetown: Pottersfield Press.

Baxter, Joan (2020) “What about Clearwater and the offshore lobster fishery?”, *Halifax Examiner*, November 5, 2020.

Baxter, Joan (2020) “What ‘netukulimk’ means and how it applies to the moderate livelihood fishery”, *Halifax Examiner*, November 24, 2020.

Baxter, Joan & PannoZZo, Linda (2020) “Lobster fishery at a crossroads, Part 2: Tensions over a moderate livelihood fishery are hiding a much bigger threat to the inshore”, *Halifax Examiner*, October 7, 2020.

Berkes, Fikret (2018) *Sacred Ecology, 4th Edition*. New York: Routledge.

- Bernard, Amber (2020) “Moderate livelihood is not an illegal fishery- Mi’kmaq fishermen question if reconciliation is real”, *The Nova Scotia Advocate*, September 22, 2020.
- Beswick, Aaron (2020) “Dalhousie moderate livelihood email investigated”, *The Chronicle Herald*, September 30, 2020.
- Beswick, Aaron (2020) “Treaty day sees peaceful fishery”, *The Chronicle Herald*, October 2, 2020.
- Beswick, Aaron (2020) “Confusion grows in moderate livelihood fishery dispute”, *CBC News*, October 19, 2020.
- Beswick, Aaron (2020) “Fishery to proceed peacefully”, *The Chronicle Herald*, September 25, 2020.
- Beswick, Aaron (2020) “Jordan, First Nation to begin talks”, *The Chronicle Herald*, September 24, 2020.
- Beswick, Aaron (2020) “Social media boosts moderate livelihood push”, *The Chronicle Herald*, October 1, 2020.
- Beswick, Aaron (2020) “Catch in lobster negotiations: Sipekne’katik drops moderate livelihood talks with fisheries minister Jordan”, *Nova Scotia News*, December 10, 2020.
- Beswick, Aaron (2021) “Sipekne’katik First Nation sues province”, *The Chronicle Herald*, February 4, 2021.
- Bharti, Bianca (2020) “Fighting for a moderate livelihood: How Ottawa failed both indigenous and non-indigenous fishers”, *The Guardian*, October 21, 2020.
- Bird-David, Nurit (1992) “The hunting and gathering mode of subsistence: Culture-sensitive observations on the Nayaka and other modern hunter-gatherers” *Man*, Vol. 27, No. 1: 19-44.
- Blaikie, Piers (2011) “Should some political ecology be useful? The inaugural lecture for the cultural and political ecology specialty group, Annual meeting of the association of American geographers”, *Geoforum*, Vol. 43: 231-239.
- Blaser, Mario (2009) “The threat of the Yrmo: The political ontology of a sustainable hunting program”, *American Anthropologist*, Vol. 111, Issue 1: 10-20.
- Blaster, Mario (2013) “Ontological conflicts and the stories of peoples in spite of Europe”, *Current Anthropology*, Vol. 54, No. 5: 547-568.
- Blue Economy Strategy Engagement Paper (2021) Department of Fisheries and Oceans. Ottawa: Canada.
- Bodiguel, Clotilde (2002) “Fishermen facing the commercial lobster fishery licensing policy in the Canadian Maritime Provinces: Origins of illegal strategies, 1960-2000”, *Marine Policy*, Vol. 26: 271-281.

- Borrows, John (1997) "Living between water and rocks: First Nations, environmental planning and democracy", *The University of Toronto Law Journal*, Vol. 47, No. 4: 417-468.
- Bowles, Samuel (2008) "Policies designed for self-interested citizens may undermine the moral sentiments: evidence from economic experiments", *Science*, Vol. 320: 1605-1609.
- Brauchler, Birgit (2018) "Diverging ecologies in Bali", *Sojourn: Journal of Social Issues in Southeast Asia*, Vol. 33, No. 2: 362-396.
- Bresnihan, Patrick (2019) "The slow tragedy of improvement: Neoliberalism, fisheries management and the institutional commons", *World Development*, Vol. 120: 210-220.
- Brubaker, Elizabeth (2000) "Unnatural disaster: How politics destroyed Canada's Atlantic ground fisheries" in Anderson, Terry (ed.) (2000) *Political Environmentalism*. Stanford: Hoover Institution Press.
- Bryman, Alan (2008) *Social Research Methods*. Oxford: Oxford University Press.
- Bundale, Brett (2020) "N.S. First Nation struggles to find market for moderate livelihood fishery lobster", *OrilliaMatters.com*, October 22, 2020.
- Butler, Charles (2014) "Resistance and reinscription: Revitalizing Mi'kmaq culture in Newfoundland- A grounded theory discursive analysis of oppression and resistance", Masters thesis submitted to University of Calgary, February 24, 2014.
- CBC News (2021) "Mi'kmaw lobster fishing boats cut loose from wharf in Nova Scotia", *CBC News Editorial*, August 5, 2021.
- CBC News (2021) "Sipekne'katik Chief Mike Sack arrested, traps seized as treaty fishery begins its season in N.S.", *CBC News Editorial*, August 16, 2021.
- Cadena, Marisol de la (2010) "Indigenous cosmopolitan politics in the Andes: Conceptual reflections beyond 'politics'", *Cultural Anthropology*, Vol. 25, Issue 2: 334-370.
- Calhoun, Sue (1991) *A Word To Say: The Story of the Maritime Fishermen's Union*. Halifax: Nimbus Publishing.
- Canada's Oceans Action Plan (2005) Department of Fisheries and Oceans, Communications Branch. Ottawa: Canada.
- Canada's Oceans Strategy (2002) Department of Fisheries and Oceans, Communications Branch. Ottawa: Canada.
- Cartier, Jacques (1993) *The Voyages of Jacques Cartier*. Toronto: University of Toronto Press.
- Castree, Noel (2010) "Neoliberalism and the biophysical environment 1: What 'neoliberalism' is, and what difference nature makes to it", *Geography Compass*, Vol. 4: 1725-1733.

Cernansky, Rachel (2021) “In indigenous knowledge, innovative solutions”, *New York Times*, July 10, 2021.

Charles, Anthony (ed.) (2021) *Communities, Conservation and Livelihoods*. Halifax: International Union for Conservation of Nature.

Charles, Tony (2020) “Moving forward on lobster fishery means addressing access and conservation”, *Policy Options*, October 28, 2020.

Choyce, Lesley (1996) *Nova Scotia Shaped by the Sea*. Middlesex: Penguin Books.

Chute, Janet (1999) “Frank Speck’s contributions to the understanding of Mi’maq land use, leadership, and land management”, *Ethnohistory*, Vol. 46:3.

Clark, Andrew (1968) *Acadia: The Geography of Early Nova Scotia to 1760*. Madison: The University of Wisconsin Press.

Claxton, Nicholas (2019) “Reviewing the Fisheries Act: An indigenous perspective”, *The Indian Department*, March 25, 2019.

Coates, Ken (2000) *The Marshall Decision and Native Rights*. Montreal: McGill-Queen’s University Press.

Coates, Ken (2003) “Breathing new life into treaties: History, politics, the law, and aboriginal governance in Canada’s Maritime provinces”, *Agricultural History*, Vol. 77, Issue 2: 338-359.

Coates, Ken (2004) *A Global History of Indigenous Peoples: Struggles and Survival*. New York: Palgrave Macmillan.

Coates, Ken (2019) “The Marshall Decision at 20: Two decades of commercial re-empowerment of the Mi’kmaq and Maliseet”, Macdonald Laurier Institute.

Coates, Ken (2020) “Nova Scotia fisheries conflict decades in the making”, Macdonald Laurier Institute.

Colding, Johan & Barthel, Stephan (2019) “Exploring the social-ecological systems discourse 20 years later”, *Ecology and Society*, Vol. 24(1): 2.

Comeau, Tina (2020) “Sipekne’katik, DFO hold lobster fishery talks”, *The Chronicle Herald*, September 30, 2020.

Connors, Holly (2020) “Moderate livelihood fishery in Cape Breton is peaceful, but selling catch a challenge”, *CBC News*, October 16, 2020.

Cooke, Alex (2020) “Fire destroys lobster facility in southwest Nova Scotia amid escalating fishery tensions”, *CBC News*, October 17, 2020.

Cooke, Alex (2020) “Mi’kmaw fishermen launch self-regulated fishery in Saulnierville”, *CBC News*, September 17, 2020.

Cooper, Tom; Hickey, Terry; Sock, Leon; Hare, Gerald (2010) “Critical success factors in the First Nations fishery of Atlantic Canada: Mi’kmaq and Maliseet perceptions”, Atlantic Policy Congress of First Nations Chiefs Secretariat.

Copes, Parzival (1986) “A critical review of the individual quota as a device in fisheries management”, *Land Economics*, Vol. 62, No. 3.

Corntassel, Jeff (2012) “Re-envisioning resurgence: Indigenous pathways to decolonization and sustainable self-determination”, *Decolonization, Indigeneity, Education, and Society*, Vol. 1, No. 1: 86-101.

Corntassel, Jeff & Bryce, Cheryl (2012) “Practicing sustainable self-determination: Indigenous approaches to cultural restoration and revitalization”, *Brown Journal of World Affairs*, Vol. XVII, Issue 11.

Davie, Emma (2020) “Fishermen haul up, dump Mi’kmaw lobster traps to protest moderate livelihood fishery”, *CBC News*, September 21, 2020.

Davis, Anthony; Wagner, John; Prosper, Kerry; Paulette, Mary (2004) “The Paq’tnekek Mi’kmaq and Ka’t (American eel): A case study of cultural relations, meanings, and prospects”, *The Canadian Journal of Native Studies*, Vol. XXIV: 357-388.

Davis, Anthony (1991) “Insidious rationalities: The institutionalization of small boat fishing and the rise of the rapacious fisher”, *Mast*, Vol. 4(1): 13-31.

Davis, Reade (2015) “All in: Snow crab, capitalization, and the future of small-scale fisheries in Newfoundland”, *Marine Policy*, Vol. 61: 323-330.

Davis, Anthony & Jentoft, Svein (2001) “The challenge and the promise of indigenous peoples’ fishing rights- from dependency to agency”, *Marine Policy*, Vol. 25: 223-237.

Davis, Stephen (1997) *Mi’kmaq: Peoples of the Maritimes*. Halifax: Nimbus Publishing.

Deloria Jr, Vine (1969) *Custard Died for Your Sins*. Norman: University of Oklahoma Press.

Demont, John (1999) “Beyond Burnt Church”, *Maclean’s*, October 18, 1999.

Denny, Shelly (2020) “Making room for Mi’kmaw livelihood fishery easier than you think”, *Chronicle Herald*, October 14, 2021.

Denys, Nicolas (1908) *The Description and Natural History of the Coasts of North America*. Translated by W.F. Ganong. Toronto: The Champlain Society.

Descola, Philippe (2013) *Beyond Nature and Culture*. Chicago: The University of Chicago Press.

DeWolf, Gordon (1974) “The lobster fishery of the maritime provinces: Economic effects of regulations, Bulletin 187”, Halifax: Department of the Environment, Fisheries, and Marine Science Press.

- DFO-Coast Guard Reconciliation Strategy (2020) Department of Fisheries and Oceans. Ottawa: Canada.
- Dinsmore, Sandra (2012) “Fishermen’s coops in Atlantic Canada”, *Fishermen’s Voice*, Vol. 17, No. 1, January 2012.
- Dockstator, Jennifer; Duhaime, Gerard; Wien, Frederic (2016) “Pursuing mutually beneficial research: Insights from the poverty action research project”, *Engaging with Indigenous Knowledge*, Volume 2, Issue 1.
- Eastern Door (2020) “First Nations have their own legal authority to regulate their fishing rights”, October 22, 2020.
- Eastern Door (2021) “Fishing under netukulimk”, November 22, 2021.
- Elliot, Michael (2017) “Indigenous resurgence: The drive for renewed engagement and reciprocity in the turn away from the State”, *Canadian Journal of Political Science*, Vol. 51, Issue 1: 61-81.
- Fairley, Bryant; Leys, Colin, and Sacouman, James (eds.) (1990) *Restructuring and Resistance: Perspectives from Atlantic Canada*. Toronto: Garamond Press.
- Favrholdt, Ken (2022) “An indigenous cultural resurgence in Canada”, *Kamloops This Week*, June 20, 2022.
- Finlayson, Alan (1994) *Fishing for Truth: A Sociological Analysis of Northern Cod Stock Assessments from 1977-1990*. St. Johns: Institute of Social and Economic Research.
- Folke, Carl (2006) “Resilience: The emergence of a perspective for social-ecological systems analyses”, *Global Environmental Change*, 16: 253-267.
- Forsyth, Tim (2003) *Critical Political Ecology*. London: Routledge.
- Friedman, Gabriel (2020) “No science behind lobster dispute: Unpacking the ugly conflict exploding in Nova Scotia”, *Financial Post*, October 21, 2020.
- Fukuyama, Francis (2022) “The war on liberalism” *Financial Times*, March 5, 2022.
- Ghazoul, Jaboury (2020) *Ecology*. Oxford: Oxford University Press.
- Gieryn, Thomas (1999) *Cultural Boundaries of Science*. Chicago: University of Chicago Press.
- Gillis, Angeline (2020) “Two-eyed seeing in the ocean economy: Indigenous knowledge and western science working together”, *OSC Current*.
- Global Ocean Grab (2014) Published by Transnational Institute Agrarian Justice Programme.

Gomez-Pompa, Arturo & Kaus, Andrea (1992) "Taming the wilderness myth: Environmental policy and education are currently based on Western beliefs about nature rather than on reality", *American Institute of Biological Sciences*.

Gordon, Scott (1954) "The economic theory of a common-property resource: The fishery", *Journal of Political Economy*, Vol. 62, No. 2: 124-142.

Graeber, David (2015) "Radical alterity is just another way of saying "reality": A reply to Eduardo Viveiros de Castro", *HAU: Journal of Ethnographic Theory*, 5(2): 1-41.

Grant, Josh (2021) "For the 1st time, Listuguj Mi'kmaq can legally sell fall lobster catch", *CBC*, September 28, 2021.

Grossman, Kristina (2018) "Conflicting ecologies in a 'failed' Gaharu nursery programme in central Kalimantan", *Sojourn: Journal of Social Issues in Southeast Asia*, Vol. 33, No. 2: 319-340.

Gudeman, Stephen (2016) *Anthropology and Economy*. Cambridge: Cambridge University Press.

Hagar, Stansbury (1895) "Micmac customs and traditions", *American Anthropologist*, Vol. III, No. 31.

Hagar, Stansbury (1896) "Micmac magic and medicine", *The Journal of American Folklore*, Vol. 9, No. 34: 170-177.

Hagar, Stansbury (1900) "The celestial bear", *The Journal of American Folklore*, Vol. 13, No. 49: 92-103.

Hallowell, Irving (1924) "Bear ceremonialism in the northern hemisphere", *American Anthropologist*, Vol. 28, No. 1.

Hajer, Maarten (1995) *The Politics of Environmental Discourse: Ecological Modernization and the Policy Process*. Oxford: Clarendon Press.

Hardin, Garrett (1968) "The tragedy of the commons: The population problem has no technical solution; it requires a fundamental extension in morality", *Science*, Vol. 362: 1243-1248.

Haug, Michaela (2018) "Claiming rights to the forest in East Kalimantan: Challenging power and presenting culture", *Sojourn, Journal of Social Issues in Southeast Asia*, Vol. 33, No. 2: 341-361.

Henderson, S. (1997) *The Mi'kmaq Concordant*. Halifax: Fernwood Publishing.

Hoffman, Bernard (1955) *The Historical Ethnography of the Micmac of the Sixteenth and Seventeenth Centuries*. PhD thesis. University of California, Dept. of Anthropology.

Holbraad, Martin & Pedersen, Morten (2017) *The Ontological Turn: Anthropological Exposition*. Cambridge: Cambridge University Press.

Hornborg, Anne-Christine (2008) *Mi'kmaq Landscapes: From Animism to Sacred Ecology*. Sweden: Ashgate Publishing.

Huitric, Miriam (2005) "Lobster and conch fisheries of Belize: a history of sequential exploitation", *Ecology and Society*, Vol. 10(1): 21-35.

Ingold, Tim (2006) "Rethinking the animate, re-animating thought", *Ethnos*, Vol. 71, Issue 1: 9-20.

Isaac, Tom (2001) "The Marshall Decision and the government's duty to regulate", *Policy Options Magazine*, June 1, 2001 at <https://policyoptions.irpp.org/magazines/political-dissent/the-marshall-decision-and-governments-duty-to-regulate/>

Jesuit Relations (1896-1901) *The Jesuit Relations and Allied Documents: Travels and Explorations of the Jesuit Missionaries in New France, 1610-1791*. (73 vols.) Cleveland: Burrows Brothers.

Joe, Rita & Choyce, Lesley (1997) *The Mi'kmaq Anthology*. Lawrencetown: Pottersfield Press.

Johnson, Frederick (1943) "Notes on Micmac shamanism", *The George Washington University Institute for Ethnographic Research*.

Johnson, Jay; Howitt, Richard; Cajete, Gregory; Berkes, Fikret; Louis, Renee Pualani; Kliskey, Andrew (2016) "Weaving indigenous and sustainability sciences to diversify our methods", 11: 1-11.

Johnson, Nicole (2010) "Impact of the Marshall Decision on the development of a Mi'kmaw commercial fishery", Shannon School of Business.

Johnston-Laurette, Stephanie (2018) "Mirroring the ecosystem", *Ecology and Action*, Vol. 36, No. 3: 18-20.

Jordan, Bernadette (2021) Interview with CBC News "Fisheries officers will enforce the rules if Mi'kmaq fish out of season, says minister", *CBC News*, March 9, 2021.

Jordan, Sandra (2000) "Lobster wars enrage Indians", *The Guardian*, September 3, 2000.

Joseph, Bob (2018) *21 Things You May Not Know About the Indian Act*. Port Coquitlam: Indigenous Relations Press.

Julian, Jack (2021) "Dozens protest outside DFO offices in Dartmouth over Mi'kmaw treaty rights", *CBC News*, September 23, 2021.

Julien, Donald M., Tim Bernard, and Leah Rosenmeier with the Mi'kmawey Debert Elders' Advisory Council (2008) "Paleo is not our word: Protecting and growing a Mi'kmaw place", in Rubertone, Patricia (ed.) *Archaeologies of Placemaking: Monuments, Memories, and Engagement in Native North America*. Walnut Creek: Left Coast.

- Karlsson, Bengt (2015) "Political ecology: Anthropological perspectives", *International Encyclopedia of the Social and Behavioral Sciences*, Vol. 18.
- Kassam, Karim-Aly (2010) "Pluralism, resilience, and the ecology of survival: Case studies from the Pamir mountains of Afghanistan", *Ecology and Society*, Vol. 15(2), No. 8.
- Kearney, John (2004) "Extreme makeover: The restructuring of the Atlantic fisheries", *Acadiensis*, XXXIV, 1: 156-163.
- Kenton, Edna, (1927) *The Indians of North America, Volume 2*. New York: Harcourt Brace.
- Kimmerer, Robin (2000) "Native knowledge for native ecosystems", *Journal of Forestry*, Vol. 98(8): 4-9.
- Kinnear, Lacia (2007) "Contemporary Mi'kmaq Relationships Between Humans and Animals: A Case Study of the Bear River First Nation Reserve in Nova Scotia", Masters Thesis submitted to Dalhousie University, Halifax, Nova Scotia.
- King, Thomas (2012) *The Inconvenient Indian: A Curious Account of Native People in North America*. Anchor Canada.
- Knott, Christine & Neis, Barbara (2017) "Privatization, financialization and ocean grabbing in New Brunswick herring fisheries and salmon aquaculture", *Marine Policy*, Vol. 80: 10-18.
- Kohn, Eduardo (2015) "Anthropology of ontologies", *Annual Review of Anthropology*, 44: 311-327.
- Lao, David (2020) "Mobs are attacking indigenous fisheries in Nova Scotia", *Global News.ca*, October 19, 2020.
- Latour, Bruno (1987) *Science in Action*. Cambridge: Harvard University Press.
- Latour, Bruno (1993) *We Have Never Been Modern*. Cambridge: Harvard University Press.
- Lavoie, Sophie (2018) "Coming together for environmental change: Mi'kmaq knowledge navigator shares solutions", *New Brunswick Media Co-op*, 19/01/2018.
- Lescarbot, Marc (2018) *History of New France, Volume 1*. Toronto: The Champlain Society.
- Levinson-King, Robin (2020) "Inside Canada's decades-long lobster feud", *BBC News*, October 19, 2020.
- Listuguj Mi'kmaq Government (2020), "Listuguj Mi'kmaq government fall lobster fishery a success despite opposition from Department of Fisheries and Oceans", October 5, 2020.
- Long, Rachel; Charles, Anthony; Stephenson, Robert (2015) "Key principles of marine ecosystem-based management", Vol. 57: 53-60.
- Luck, Shaina (2021) "Lobster landings data released by DFO show complex picture", *CBC News*, March 8, 2021.

- MacDonald, Martha & Connelly, Patricia (1990) “A leaner meaner industry: A case study of ‘restructuring’ in the Nova Scotia fishery”, in Fairley, Bryant; Leys, Colin, and Sacouman, James (eds.) (1990) *Restructuring and Resistance: Perspectives from Atlantic Canada*. Toronto: Garamond Press.
- MacDonald, Fiona (2011) “Indigenous peoples and neoliberal privatization in Canada: Opportunities, cautions, and constraints”, *Canadian Journal of Political Science*, Vol. 44: 257-273.
- MacDonald, Ray (2020) “We’re not backing down: Potlotek First Nation Chief says of lobster fishery”, *CTV News*, October 22, 2020.
- Maillard, Antoine (1762/2015) *An Account of the Customs and Manners of the Micmakis and Maricheets Savage Nations, Now Dependent on the Government of Cape Breton*. New York: Dossier Press.
- Mallet, Martin (2020) “Canada’s fisheries may be destroyed”, published as press release from the Coalition of Atlantic and Quebec Fishing Organizations, September 20, 2020.
- Mann, Charles (2022) “We are here: North America’s indigenous nations are reclaiming their sovereignty, control of their lands, laws, and how they live”, *National Geographic*, July 2022.
- Mansfield, Becky (2004) “Neoliberalism in the oceans: “rationalization”, property rights, and the commons question”, *Geoforum*, Vol. 35: 313-326.
- Marshall, Albert (2005) “Unama’ki Institute of Natural Resources: A Vision” at <https://www.uinr.ca/people/albert-marshall/>
- Marshall, Albert; Knockwood, Carola; Bartlett, Cheryl Dr. (2018) “The best of both worlds”, *EdCan Network*, Summer 2018.
- Martin, Calvin (1978) *Keepers of the Game: Indian-Animal Relationships and the Fur Trade*. Berkeley: University of California Press.
- May, Jack (2001) “A run on the banks”, *E Magazine*, February, 28, 2001.
- McCallum, Margaret (2004) “Rights in the courts, on the water, and in the woods: The aftermath of R. v. Marshall in New Brunswick”, *Journal of Canadian Studies*, Vol. 38, No. 3: 204-218.
- McGee, Harold (1977) “The Case of the Micmac Demes,” in William Cowand (ed.), *Actes du Huitieme Congres Des Algonquinistes*. Ottawa: Carleton University.
- McGee, Dennis (2020) Letter addressed to Minister Jordan and Members of the Standing Committee on Fisheries and Oceans. Northumberland Fishermen’s Association. November 9, 2020.
- McGinnis, Michael & Ostrom, Elinor (2014) “Social-ecological system framework: initial changes and continuing challenges”, *Ecology and Society*, Vol. 19(2), Issue 30.

- McHugh, Jess (2022) “Once nearly extinct, bison are now climate heroes”, *The Washington Post*, July 14, 2022.
- McIntosh, Robert (1987) “Pluralism in ecology”, *Annual Review of Ecology*, Vol. 18: 321-341.
- McKenna, Cara (2021) “Indigenous chief to request UN peacekeepers to prevent lobster fight boiling over”, *The Guardian*, April 29, 2021.
- McMillan, Jane (2011) “Colonial traditions, co-optations, and Mi’kmaq legal consciousness”, *Law and Social Inquiry*, Vol. 36, Issue 1: 171-200.
- McMillan, Jane (2018) *Truth and Conviction: Donald Marshall Jr. and the Mi’kmaq Quest for Justice*. Vancouver: UBC Press.
- McMillan, Jane & Davis, Anthony (2010) “What does this tell us about? Social research and indigenous peoples: The case of the Paq’tnek Mi’kmaq”, *Traditional Marine Resource Management and Knowledge Information Bulletin #27*.
- McMillan, Jane & Prosper, Kerry (2016) “Remobilizing netukulimk: Indigenous cultural and spiritual connections with resource stewardship and fisheries management in Atlantic Canada”, *Review of Biology and Fisheries*, 26: 629-647.
- McMillan, Jane; Prosper, Kerry; Moffit, Morgan; Davis, Anthony (2016) *Netukulimk Narratives*. Edmonton: University of Alberta Press.
- Menzies, Charles (ed.) (2006) *Traditional Ecological Knowledge and Natural Resource Management*. Lincoln: University of Nebraska Press.
- Menzies, Charles & Butler, Caroline (2006) “Understanding ecological knowledge”, in Menzies, Charles (ed.) (2006) *Traditional Ecological Knowledge and Natural Resource Management*. Lincoln: University of Nebraska Press.
- Metallic, Naomi & MacIntosh, Constance (2020) “Canada’s actions around the Mi’kmaq fisheries rest on shaky legal ground”, *Policy Options*, November 9, 2020.
- Meuse, Theresa (2016) *L’Nuk, The People. Mi’kmaq History, Culture, and Heritage*. Halifax: Nimbus Publishing.
- Miller, Andrew & Davidson-Hunt, Iain (2013) “Agency and resilience: Teachings of Pikangikum First Nation elders, Northwestern Ontario”, *Ecology and Society*, 18(3): 9.
- Miller, Virginia (1995) “The Micmac: A Maritime Woodland Group,” in Bruce Morrison and C. Roderick Wilson (eds.), *Native Peoples: The Canadian Experience*, 2nd ed. Oxford: Routledge.
- Milley, Chris & Charles, Anthony (2001) “Mi’kmaq fisheries in Atlantic Canada: Traditions, legal decisions and community management”, Atlantic Policy Congress of First Nations Chiefs Secretariat, Proceedings September 2001.

- Mi'kmaq Grand Council (1993) *Mi'kmaq Fisheries Netukulimk: Towards a Better Understanding*. Truro: Union of Nova Scotia Indians.
- Mi'kmaq Grand Council (1987) *Mi'kmaq Treaty Handbook*, Sydney: Union of Nova Scotia Indians.
- Mi'kmaq and Maliseet News (2021) "Canada recognizes Listuguj's laws and authority in fisheries governance", Vol. 32, No. 5.
- Mi'kmaw Resource Guide, 4th Edition (2007) Truro: Eastern Woodland Publishing.
- Miller, Virginia (1976) "Aboriginal Micmac population: A review of the evidence", *Ethnohistory*, Vol. 23/2.
- Mills, Elyse (2018) "Implicating fisheries justice movements in food and climate politics", *Third World Quarterly*, Vol. 39, No. 7: 1270-1289.
- Minke-Martin, Vanessa (2020) "Mi'kmaw fishery dispute is not about conservation, scientists say", *Hakai Magazine*, October 9, 2020.
- Minke-Martin, Vanessa (2020) "The long, expensive fight for First Nation' fishing rights", *Haika Magazine*, October 23, 2020.
- Morden, Michael (2014) "The limits of the TRC", *Literary Review of Canada*, <https://reviewcanada.ca/magazine/2014/10/the-limits-of-the-trc/>
- Mundie, Jessica (2022) "Demand in China, US making Atlantic lobster too expensive for Canadians, industry fears", *National Post*, <https://nationalpost.com/news/canada/atlantic-lobster-prices-reach-all-time-high-i-view-it-as-a-very-serious-thing>
- Nadasdy, Paul (2021) "How many worlds are there? Ontology, practice and indeterminacy", *American Ethnologist*, Vol. 00, No. 0: 1-13.
- Netting, Robert (1977) *Cultural Ecology*. Manila: Cummings Publishing Company.
- Nietfeld, Patricia (1981) "Determinants of Aboriginal Political Structure", PhD thesis, The University of New Mexico.
- Nova Scotia Advocate (2020) "Fishing under netukulimk", October 6, 2020, <https://nsadvocate.org/author/nova-scotia-advocate/>
- Nova Scotia Department of Fisheries (1986) *Sea, Salt, and Sweat: A Story of Nova Scotia and the Vast Atlantic Fishery*. Halifax: Four East Publications.
- Nugent, Stephen (1996) "Postmodernism," in Barnar, Alan & Spencer, Jonathan (eds.), *Encyclopedia of Social and Cultural Anthropology*. London: Routledge.
- Nuna, Richard; Sable, Trudy; Foxcroft, Dawn; Simbine, Marta (2021) "Indigenous perspective on community conservation", *Communities, Conservation, and Livelihoods*.

- O'Connell, Jim (2020) "The reason for no season", *Fishery Nation*, October 22, 2020.
- Orlove, Benjamin (1980) "Ecological anthropology", *Annual Review of Anthropology*, Vol. 9: 235-273.
- Ostrom, Elinor (2007) "A diagnostic approach for going beyond panaceas", *Proceedings of the National Academy of Sciences*, September 25, 2007.
- Ostrom, Elinor (2009) "A general framework for analyzing sustainability of social-ecological systems", *Science*, Vol. 325.
- Pannozzo, Linda (2016) "Fishers being squeezed: Changing the owner operator policy could amount to a corporate raid on Nova Scotia's inshore fishery", *Halifax Examiner*, November 29, 2016.
- Pannozzo, Linda (2020) "In search of common ground: An interview with Arthur Bull about the lobster fishery crisis in St. Mary's Bay", *Halifax Examiner*, November 1, 2020.
- Pannozzo, Linda (2020) "United we fish: How the DFO implementation of the Marshall decision dealt a blow to both indigenous self-governance and community-based fishing", *Halifax Examiner*, November 23, 2020.
- Pannozzo, Linda & Baxter, Joan (2020) "Lobster fishery at a crossroads, Part III: What are the prospects for the Atlantic lobster fishery?", *Halifax Examiner*, October 10, 2020.
- Pannozzo, Linda & Baxter, Joan (2020) "Lobster: the last, best fishery", *Halifax Examiner*, November 26, 2020.
- Pannozzo, Linda & Baxter, Joan (2020) "Lobster fishery at a crossroads, Part 1: It's been 20 years since the Marshall Decision, so why is there still no moderate livelihood fishery?", *Halifax Examiner*, October 5, 2020.
- Parsons, Elsie (1925) "Micmac folklore", *The Journal of American Folklore*, Vol. 38, No. 147: 55-133.
- Parsons, Elsie (1926) "Micmac notes. St. Anne's mission on Chapel Island, Bras d'Or Lakes, Cape Breton Island", *The Journal of American Folklore*, Vol. 39, No. 154: 460-485.
- Paul, Daniel (1999) "Overview of Mi'kmaq history: In the beginning. . .", *Halifax Herald*, December 31, 1999.
- Paul, Daniel (2000) *We Were Not the Savages*. Halifax: Fernwood Publishing.
- Paul, John & Coates, Ken (2019) "How a 20 year old fishery ruling has redefined First Nations relations in the Maritimes", Macdonald Laurier Institute.
- Pictou, Sherry (2009) "How deep are our treaties?" International Collective in Support of Fishworkers.

Pictou, Sherry (2018) “The origins and politics, campaigns and demands by the international fisher peoples’ movement: An indigenous perspective”, *Third World Quarterly*, Vol. 39, No. 7: 1411-1420.

Pictou, Sherry (2018) “Mi’kmaq and the recognition and implementation of rights frameworks”, *Treaties, Rights, and Titles*, June 5, 2018.

Pinkerton, Evelyn (2015) “The role of moral economy in two British Columbia fisheries: Confronting neoliberal policies”, *Marine Policy*, Vol. 61: 410-419.

Pinkerton, Evelyn (2017) “Hegemony and resistance: Disturbing patterns and hopeful signs in the impact of neoliberal policies on small scale fisheries around the world”, *Marine Policy*, Vol. 80: 1-9.

Pinkerton, Evelyn & Davis, Reade (2015) “Neoliberalism and the politics of enclosure in North American small-scale fisheries”, *Marine Policy*, Vol. 61: 303-312.

Polanyi, Karl (1944) *The Great Transformation: The Political and Economic Origins of Our Time*. Boston: Beacon Press.

Poliandri, Simone (2003) “Mi’kmaq people and tradition: Indian Brook lobster fishing in St. Mary’s Bay, Nova Scotia”, *Papers of the 34th Algonquian Conference*, ed. H.C. Wolfart. Winnipeg: University of Manitoba, pg. 303-310.

Poliandri, Simone (2011) *First Nations, Identity, and Reserve Life: The Mi’kmaq of Nova Scotia*. Lincoln: University of Nebraska Press.

Porter, Suzanne; Yoshi, Ota; Cisneros, Andres; Pictou, Sherry (2019) “The role of indigenous resurgence in marine conservation”, *Coastal Management*, Vol. 47, Issues 6: 527-547.

Prins, Harald (2002/ reprint of 1996 version) *The Mi’kmaq: Resistance, Accommodation, and Cultural Survival*. Mason: Cengage Learning.

Prosper, Kerry (2009) “Netukulimk a circular relationship in shifting ideologies: An investigation into the altered and realigned spiritual and cultural connection shared by moose and Mi’kmaq a result of colonialism and cultural revitalization”, *Anthropology Honors Thesis* submitted to St. Francis Xavier University, November 19, 2009.

Prosper, Kerry; McMillan, Jane; Davis, Anthony (2011) “Returning to netukulimk: Mi’kmaq cultural and spiritual connections with resource stewardship and self-governance”, *Traditional Knowledge, Spirituality, and Lands*, Vol. 2, Issue 4.

Redford, Kent (1991) “The ecologically noble savage”, *Cultural Survival Quarterly Magazine*, March 1991.

Reid, Andrea; Eckert, Lauren; Lane, Francis-John; Young, Nathan; Hinch, Scott; Darimont, Chris; Cooke, Steven; Ban, Natalie; Marshall, Albert (2021) “Two-eyed seeing: An indigenous framework to transform fisheries research and management”, *Fish and Fisheries*, 22: 243-261.

- Remme, Jon Henrik Ziegler (2016) “Actualizing spirits: Ifuago animism as onto-praxis”, in Arhem, Kaj & Sprenger, Guido (2016) *Animism in Southeast Asia*. London: Routledge.
- Renic, Karla (2020) “Fisheries committee hears from Mi’kmaw experts and commercial fishermen association”, *Global News*, October 21, 2020.
- Reynolds, Ardelle (2021) “DFO, Potlotek First Nation reach agreement on moderate livelihood fishery”, *Halifax*, June 1, 2021.
- Rhodes, Blair (2021) “Fisheries rights trial for 4 Mi’kmaw fishermen delayed”, *CBC News*, May 21, 2021.
- Ritchie, Sarah (2021) “Federal enforcement in N.S. fisheries dispute ‘political’: Mi’kmaw lawyer”, *Global News*, September 20, 2021, <https://globalnews.ca/news/8204388/liberals-fishery-dispute-mikmaw-lawyer/>
- Robbins, Joel (2004) *Becoming Sinners: Christianity and Moral Torment in a Papua New Guinea Society*. Berkeley: University of California Press.
- Robbins, Joel (2007) ‘Between reproduction and freedom: Morality, value, and radical culture change’, *Ethnos*, 73(3): 293-314.
- Robbinson, Margaret (2014) “Animal personhood in Mi’kmaq perspective”, *Societies*, 4: 672-688.
- Robinson, Deborah (2021) Letter from Acadia First Nation to members, available at www.acadiafirstnation.ca
- Ross, Anne & Pickering, Kathleen (2002) “The politics of reintegrating Australian aboriginal and American Indian indigenous knowledge into resource management: The dynamics of resource appropriation and cultural revival”, *Human Ecology*, Vol. 30, No. 2.
- Ryan, Haley (2020) “3rd Mi’kmaw community launches moderate livelihood fishery in N.S.”, *CBC News*, November 4, 2020.
- Ryan, Haley (2020) “Mi’kmaw First Nation planning hundreds of legal suits amid opposition to fishery”, *CBC News*, November 12, 2020.
- Sable, Trudy & Francis, Bernie (2012) *The Language of this Land, Mi’kmaki*. Sydney: Cape Breton University Press.
- Sabau, Gabriela & Jong, Michael (2015) “From unjust economic growth to sustainable fisheries in Newfoundland: The true cost of closing the inshore fishery for groundfish”, *Marine Policy*, Vol. 61: 376-389.
- Sahlins, Marshall (1985) *Islands of History*. Chicago: University of Chicago Press.
- Saltwire Network (2020) “Potlotek First Nation set to launch own fishery to mark Treaty Day”, September 30, 2020.

Scott, Anthony (1955) "The fishery: The objectives of sole ownership", *Journal of Political Economy*, Vol. 63, No. 2: 116-124.

Scott, James (1976) *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia*. New Haven: Yale University Press.

Scott, Jacquelyn Thayer (2004) "Doing business with the devil: Land, sovereignty, and corporate partnerships in Membertou Inc.", Atlantic Institute of Market Studies.

Scott, Jacquelyn Thayer (2012) "An Atlantic fishing tale: 1999-2011, A policy rags to riches story", Macdonald Laurier Institute.

Seguin, Nicola (2021) "Sipekne'katik First Nation's lobster study aims to assess impact of summer and fall fishing", *CBC News*, October 6, 2021.

Seymour-Hourie, Rayana & Carlson, Deborah (2020) "Unravelling the colonial thread: a look at the lobster fishery dispute in Mi'kmaki", *West Coast Environmental Law*, November 18, 2020.

Silberman, Alexandre (2021) "Listuguj, Ottawa to collaborate on fishery regulations", *CBC News*, April 18, 2021.

Smith, Emma (2020) "Scale of Sipekne'katik fishery won't harm lobster stocks, says prof", *CBC News*, September 22, 2020.

Snan, Nebal (2020) "It is not illegal: Mi'kmaq sell lobster outside of N.S. provincial legislature", *The Guardian*, October 16, 2020.

Snow, Dean (1968) "Wabanaki family hunting territories", *American Anthropologist*, Vol. 70, No. 6: 1143-1151.

Social Research for Sustainable Fisheries Fact Sheet 1 (2001) "Highlights of the Marshall Decision", St. Francis Xavier University Community-University Research Alliance.

Social Research for Sustainable Fisheries Fact Sheet #3 (2001) "Who'll be left fishing?: The Dilemma of Recruitment in Small Boat Fishing", St. Francis Xavier University Community-University Research Alliance.

Social Research for Sustainable Fisheries Fact Sheet #7 (2002) "The Mi'kmaq relationship with Kat (American eel)", St. Francis Xavier University Community-University Research Alliance.

Sowman, Merle; Rice, Wayne; Arce- Ibarra, Minerva; Pena-Azcona, Ivett (2021) "Meanings and motivations: Communities and conservation", *Communities, Conservation, and Livelihoods*.

Sprenger, Guido (2018) "Buddhism and coffee: The transformation of locality and non-human personhood in southern Laos", Vol. 33, No. 2: 265-290.

- Sprenger, Guido (2021) “Can animism save the world? Reflections on personhood and complexity in the ecological crisis”, *Sociologus*, Vol. 71, Issue 1: 73-92.
- Sprenger, Guido & Grossman, Kristina (2018) “Introductory Essay: Plural ecologies in Southeast Asia”, *Soujourn: Journal of Social Issues in Southeast Asia*, Vol. 33, No. 2: ix-xxi.
- Stevenson, Marc (2006) “The possibility of difference: Rethinking co-management”, *Human Organization*, Vol. 65, No. 2.
- Stevenson, M.G. (1998) “Traditional knowledge in environmental management? From commodity to process”, Working Paper 1998-14, University of Alberta, Sustainable Forest Management Network.
- Stiegman, Martha (2011) “In the same boat? Exploring treaty rights, resource privatization, community resistance, and Mi’kmaq/ non-native solidarity in Bear River First Nation, through video based participatory research” Masters thesis submitted to Concordia University.
- Talaga, Tanya (2020) “Canada doesn’t have the right to tell indigenous people what moderate livelihood means”, *The Globe and Mail*, October 22, 2020.
- Tennant, Zoe (2021) “The new lobster wars”, *The Walrus*, January 29, 2021.
- Thorburn, Mike (2017) “The Hector settlers: Creating a ‘New Scotland’ in Canada,” *Scotland is Now*, November 8, 2017, <https://www.scotland.org/features/the-hector-settlers-creating-a-new-scotland-in-canada>.
- Todd, Zoe (2014) “Fish pluralities: Human-animal relations and sites of engagement in Paulatuuq, Arctic, Canada”, *Studies*, Vol. 38: 217-238.
- Turner, Nancy; Davidson-Hunt, Iain; O’Flaherty, Michael (2003) “Living on the edge: Ecological and cultural edges as sources of diversity for social-ecological resilience”, *Human Ecology*, Vol. 31, No. 3.
- United Nations Economic and Social Council (2004) “Indigenous Issues: Report of the special rapporteur on the situation of human rights and fundamental freedoms of indigenous people”, Mission to Canada, December 2, 2004.
- Upton, Leslie F. S. (1979) *Micmacs and Colonists: Indian-White Relations in the Maritimes, 1713-1867*. Vancouver: University of British Columbia Press.
- Viveiros de Castro, Eduardo (1998) “Cosmological deixis and Amerindian persepectivism”, *Journal of the Royal Anthropological Institute*, Vol. 4: 469-488.
- Viveiros de Castro, Eduardo (2004) “The transformation of objects into subjects in Amerindian ontologies”, *Common Knowledge*, Vol. 10:3, 463-484.
- Viveiros de Castro, Eduardo (2014) *Cannibal Metaphysics*. Minneapolis: University of Minnesota Press.

- Viveiros de Castro, Eduardo (2015) *The Relative Native: Essays on Indigenous Conceptual Worlds*. Chicago: HAU Books.
- Viveiros de Castro, Eduardo (2015) “Who is afraid of the ontological wolf? Some comments on an ongoing anthropological debate”, *Cambridge Journal of Anthropology*, Vol. 33, No. 1: 2-17.
- Wallis, Wilson & Wallis, Ruth (1955) *The Micmac Indians of Eastern Canada*. Minneapolis: University of Minnesota Press.
- Wagner, John & Davis, Anthony (2004) “Property as a social relation: Rights of kindness and the social organization of lobster fishing among Northeastern Nova Scotian Scottish Gaels”, *Human Organization*, Vol. 63, No. 3: 320-333.
- Walters, Mark (2001) “Brightening the covenant chain: Aboriginal treaty meanings in law and history after Marshall”, *Dalhousie Law Journal*, Vol. 24, No. 2: 75-138.
- Warwick, Emma (2020) “The Sipekne’katik moderate livelihood fishery”, *The Brunswickan*, September 29, 2020.
- Wiber, Melanie & Milley, Chris (2013) “After Marshall: Implementation of aboriginal fishing rights in Atlantic Canada”, *The Journal of Legal Pluralism and Unofficial Law*, Vol. 39: 163-186.
- Wien, Frederic (1983) *Socioeconomic Characteristics of the Micmac in Nova Scotia*. Halifax: Institute of Public Affairs.
- Wildsmith, Bruce (1995) “The Mi’kmaq and the fishery: Beyond food requirements”, *Dalhousie Law Journal*, Vol. 18(1)
- Withers, Paul (2021) “Lobster stock healthy, not overfished in Canada’s richest fishing ground”, *CBC News*, May 1, 2021.
- Withers, Paul (2021) “MPs issue conflicting reports on contentious First Nations fishery”, *CBC News*, May 13, 2021.
- Withers, Paul (2021) “Why baby eels could be the next indigenous moderate livelihood fishery in N.S.”, *CBC News*, April 7, 2021.
- Withers, Paul (2021) “Sipekne’katik may seek UN peacekeepers for contentious N.S. fishery relaunch”, *CBC News*, April 22, 2021.
- Withers, Paul (2021) “Sipekne’katik pivots on controversial lobster fishery in southwest N.S.”, *CBC News*, May 27, 2021.
- Withers, Paul (2021) “An appeal for calm as tensions rise again over N.S. Mi’kmaw lobster fishery”, *CBC News*, August 10, 2021.
- Withers, Paul (2021) “N.S. fishing industry wants say in Mi’kmaw treaty rights case”, *CBC News*, September 22, 2021.

Whitcomb, Ed (2019) *Understanding First Nations: The Legacy of Canadian Colonialism*. Ottawa: From Sea to Sea Enterprises.

White, Cliff (2016) “Nova Scotia fishery faces court challenges to its governing rules” *Seafood Source*, December 19, 2006.

White, Graham (2006) “Cultures in collision: Traditional knowledge and Euro-Canadian governance processes in northern land-claim boards”, *Arctic*, Vol. 59, No. 4: 401-414.

Whitehead, Ruth & McGee, Harold (1983) *The Micmac: How Their Ancestors Lived Five Hundred Years Ago*. Halifax: Nimbus Publishing.

Whitman, Zabrina (2013) “Finding balance: Determining the relationship between economic development, traditional knowledge and natural resource management in the context of the Nova Scotia Mi’kmaq”, Masters Thesis Submitted to Queen’s University.

Wiber, Melanie (2000) “Fishing rights as an example of the economic rhetoric of privatization: Calling for an implicated economics”, *CRSA*, Vol. 37: 267-288.

Wiber, Melanie; Berkes, Fikret; Charles, Anthony; Kearney, John (2004) “Participatory research supporting community based fishery management”, *Marine Policy*, Vol. 28: 459-468.

Wiber, Melanie; Rudd, Murray; Pinkerton, Evelyn; Charles, Anthony; Bull, Arthur (2010) “Coastal management challenges from a community perspective: The problem of stealth privatization in a Canadian fishery”, *Marine Policy*, Vol. 34: 598-605.

Wien, Frederic (1986) *Rebuilding the Economic Base of Indian Communities: The Micmac of Nova Scotia*. Montreal: The Institute of Research on Public Policy.

Williams, Rick (2021) “Fisheries seasonality and the allocation of labour and skills: Labor market information study”, Canadian Council of Professional Fish Harvesters.

Withers, Paul (2021) “Two Nova Scotia First Nations propose first-ever moderate livelihood elver fishery”, *CBC*, June 25, 2021.

Withers, Paul (2021) “Peacemaker files bleak assessment of N.S. lobster tensions”, *CBC News*, January 22, 2021.

Wohlleben, Peter (2015) *The Hidden Life of Trees: What They Feel, How They Communicate*. Munich: Random House.

Wooliscroft, Eric (2021) “4 Mi’kmaw bands launch moderate livelihood fisheries with federal approval”, *CBC*, October 13, 2021.

World Bank (2012) “Overview: Global partnerships for oceans”, February 23, 2012.

World Fishers (2019) “The global ocean grab: A primer”, at www.worldfishers.org

Wright, Louis (1965) *The Elizabethan's America: A Collection of Early Reports by Englishmen on the New World*. Cambridge, MA: Harvard University Press.

Young, Tuma (2018) "Ko'wey net Biodiversity?", *Ecology and Action*, Vol. 36, No. 1: 10-12.



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