

Of Land and Ocean: Climate Change Vulnerability and Resilience on Inishbofin Island

Shirley A. Howe

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Irish Climate Analysis and Research Institute (ICARUS)

Department of Geography, Maynooth University

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Head of Department

Dr. Stephen McCarron

Research Supervisors

Primary: Prof. Conor Murphy, Department of Geography

Secondary: Dr. Chandana Mathur, Department of Anthropology





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ABSTRACT

Ireland's Inishbofin Island, situated in the north-east Atlantic, is particularly exposed to climate change. Weather-dependent access and frequent isolation from the mainland necessitate continuous adaptation to erosion and extreme weather. Understanding how Islanders adapt is hindered by a lack of longitudinal studies and data on Irish islands. Developing and deploying an interdisciplinary ethnographic framework drawn from geography, anthropology and island studies, this research examines the interplay between culture, identities, and socio-ecological dynamics to enhance understanding of resilience and vulnerability in Inishbofin. Key objectives include understanding the significance of island identities for resilience; exploring the impacts of colonial legacies and post-colonial governance on climate resilience and vulnerability; assessing the exposure of island services, infrastructures, and livelihoods; and investigating the lived experiences of the island's weather, or weatherworld, and future implications.

Identity is enmeshed within Inishbofin's distinct socio-ecological dynamics, particularly exchanges between land and ocean, and internal and external governance. Resilience emerges from memory (sometimes tragic) and experience of incremental and abrupt changes in society, weather and the sea, formed by continuous transformation of and attachment to place, with fluidity being a central characteristic of both islandness and resilience. Findings underscore the critical role of power relations and political narratives in shaping island resilience and vulnerability. Historical marginalisation, exemplified through suppression of the Irish language and theft of human remains for science, has impaired equitable planning and policy, contributing to vulnerability.

Marginalisation persists through deferral of essential services and infrastructures, including electricity grid connection and an accessible deep-sea pier, available only in 1998. As Inishbofin's non-Gaeltacht status precludes a secondary school, migration ensues from childhood. Tourism and proliferation of second home ownership mean that nearly half of its housing remains unoccupied for much of the year yet is inaccessible to locals. Water supply has faced suspensions due to elevated manganese levels, and primary livelihoods of fishing, farming and tourism are at risk from climate change. While islandness is a factor in determining the availability and exposure of services, infrastructures and livelihoods, national policy and external governance are a greater determinant. Adaptation is restrained by mainland projections of island stasis rather than its ongoing transformation.

Implementing adaptation designed for the mainland, oblivious to island weatherworlds, leads to policy failures and destabilises political narratives. This dynamic, heightening tensions between island resilience and external pressures, results in an approaching tipping point whereby population decline may threaten the sustainability of island communities.

By analysing geographical, cultural, social, historical, political, economic and psychological factors, the research provides a comprehensive view of the processes that generate resilience and vulnerability in Inishbofin. The findings are not unique to this island and call for a greater focus on justice, together with recognition and affirmation of islandness in responding to climate change in these distinctive, important places of land and ocean.

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Go raibh míle maith agaibh go léir.

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FIGURE 1: MAP OF IRELAND'S PPNN ISLANDS

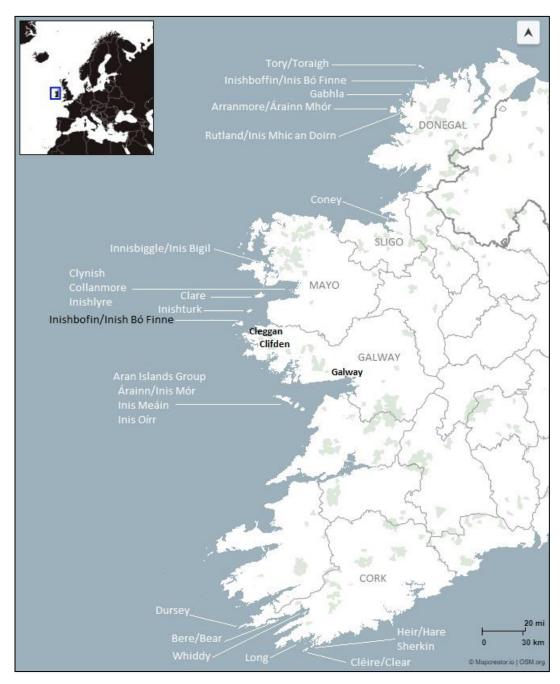


Figure 1: Map of Ireland's Permanently Populated Non-linked Non-privately owned (PPNN) islands according to Census 2022 data.

Source: Author (2023)

FIGURES 2 AND 3: INISHBOFIN ISLAND



Figure 2: Bofin Harbour viewed from the East with Inishark Island in the background.
Included courtesy of the photographer.
Photographer: Jack Kelly (2017)



Figure 3: Inishbofin Island viewed from the Northwest.
Included courtesy of the photographer.
Photographer: Jack Kelly (2017)

FIGURE 4: LOCATIONS MENTIONED IN THE TEXT

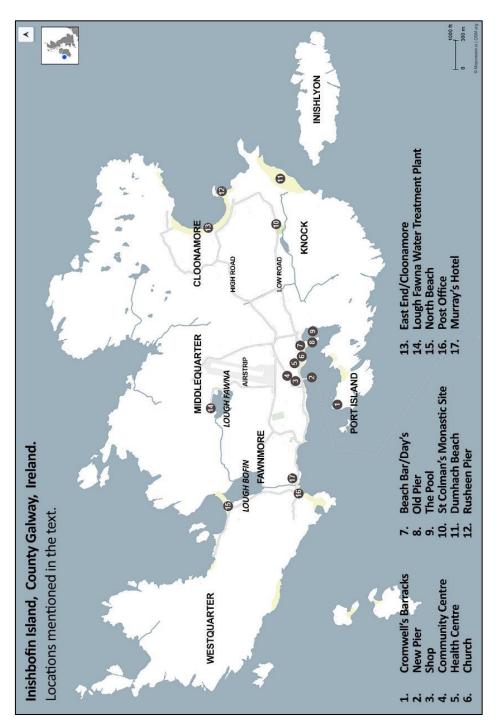


Figure 4: Inishbofin Island, County Galway, Ireland.
Map of locations mentioned in the text.
Source: Author (2023)

SEEING THINGS

by Seamus Heaney (1991)

Inishbofin on a Sunday morning. Sunlight, turfsmoke, seagulls, boatslip, diesel. One by one we were being handed down Into a boat that dipped and shilly-shallied Scaresomely every time. We sat tight On short cross-benches, in nervous twos and threes, Obedient, newly close, nobody speaking Except the boatmen, as the gunwales sank And seemed they might ship water any minute. The sea was very calm but even so, When the engine kicked and our ferryman Swayed for balance, grabbing for the tiller, I panicked at the quick response and heft Of the craft itself. What guaranteed us-That fluency and buoyancy and swim-Kept me in agony. All the time As we went sailing evenly across The deep, still seeable-down-into water,

And loved in vain our bare, bowed, numbered heads.

It was as if I looked from another boat

Sailing through air, far up, and could see

How openly we fared in the light of morning,

1. INTRODUCTION

1.1 Introduction

On the periphery of Europe, Ireland's islands are among its most remote and least populated places. Inishbofin is one of Ireland's most distant inhabited islands (Figure 1). Highlighting ambitions 'to ensure our offshore islands continue to support sustainable and vibrant communities' and 'that visitors have an opportunity to experience and appreciate the unique culture, heritage and environmental richness the islands have to offer', the Rural Development Policy 2021-2025 (Department of Rural and Community Development, 2021: 87-88) states that challenges 'include an extra dimension due to the islands' separation from the mainland'. This thesis argues that the challenges experienced in Inishbofin, including climate change vulnerability, are contributed to by policy and practice originating from mainland understandings through which the characteristics of islandness, the significance of socio-ecological relationships, and the validity of local knowledge and meaning are unintelligible. It aims to advance understandings of how conceptualisations and enactment of resilience and vulnerability are formed through consideration of the historical and contemporary causes, experiences, impacts and responses to the issues most influential in shaping the community's future: population decline, marginalisation, and climate change. To establish the context within which this research is undertaken, this chapter clarifies the problem at its centre and its significance. It briefly introduces Inishbofin Island and the characteristics of islands, though more detailed analysis follows in Chapter 2, and provides a rationale for the choice of Inishbofin as an appropriate location for this study. The research objective and questions are then discussed. Reference is made to literature, methods and the conceptual framework underpinning this research before these are more comprehensively discussed in Chapters 2, 3 and 4. The chapter concludes with an outline of the structure of the thesis.

1.2 Research Context

1.2.1 Research Problem

It is 'unequivocal that human influence has warmed the atmosphere, ocean and land' (IPCC, 2021). Current temperature trends for Ireland are an increase across the island though spatial and seasonal patterns indicate a higher rise in the east, and a higher summer and autumn increase at all locations (O'Loughlin and Mozafari, 2023). Recent

research shows that the signal of anthropogenic warming is emerging across the island and in temperature and precipitation estimates. As a whole, Ireland has warmed significantly since early industrial conditions, with 0.88 °C per degree warming in Global Mean Surface Temperature (GMST) (Murphy et al., 2023). Additionally, the signal of anthropogenic climate change has emerged from variability for spring, summer and autumn mean temperature at many weather stations, with 'changes in cool/warm days and nights' 'unfamiliar relative to early industrial climate', 'increases in annual precipitation totals [that] have emerged as unusual for western stations with large increases in winter totals per degree warming in GMST', and 'increases in rainfall intensity [that] have emerged as unusual for 30% of stations' (Murphy et al., 2023: 12). There is an increase in the frequency of extreme weather events, with altered precipitation patterns resulting in less rainfall over the year but an increase in total heavy and very heavy rainfall days (O'Loughlin and Mozafari, 2023). Murphy et al. (2023) find that Galway meteorological station, the closest mainland station to Inishbofin Island included in their analysis, evidences one of the largest increases in winter hot days per degree warming in GMST of 0.93 °C. Large increases in winter precipitation totals per degree warming in GMST are also evident for Galway (18.3%) and for other west coast weather stations. Increased flood and drought events are a projected outcome of the changing patterns identified, with the north-west experiencing the worst of heavy/very heavy rainfall events.

Climate change drivers are rooted in culture, and potential climate futures are dependent on human behaviour. The Environmental Protection Agency (EPA, 2014) states that social and economic factors resulting from cultural frameworks influence solutions and barriers to sustainable production, consumption and behaviour, and that better understanding of how individual and collective behaviour 'can either help or hinder' achievement of Ireland's climate objectives is required. Ireland 'must invest in structural and behavioural change to enable the transition to a climate neutral, climate-resilient country' (EPA, 2023). However, longitudinal qualitative climate and climate change studies with communities in Ireland is lacking. While no research method is 'superior' to any other, 'in natural and social science studies, quantitative methods emphasizing number and statistical or numerical models are becoming the dominant approach, and climate change research is no exception' (Editorial, *Nat. Clim. Chang.*, 2021). Hulme (2011: 247) proposes that we now live in an era whereby 'neoenvironmental determinism' or 'climate reductionism' prevails because of overreliance on quantitative climate change data that cannot account for human agency. Moore (2015: 177) rejects 'carbon fetishism' and industrialisation as the only sources of current

challenges. Crate and Nuttall (2016: 426) argue that 'climate change is a complex interplay of physical processes and environmental, historical, social, cultural, and economic factors'. The complexity of climate change therefore 'demands the development of innovative multidisciplinary collaboration and research methodologies' through integration of different kinds of knowledge: scientific, social scientific, and local (Crate and Nuttall, 2016: 432). Brondizio (2016: 121) recognises that scholars must confront the realisation that disciplinary approaches, within rigid or conservative institutional structures, may not be sufficient to respond to the rate and complexity of the societal and climate transformations underway.

Thus, these interlinked issues—less qualitative study compared to quantitative, and lack of in-depth, longitudinal research focused on climate change experiences, perspectives and understandings in Ireland—coalesce as a challenging problem because omission can suggest that anthropogenic climate change is not impacting on the peoples, places, and the rest of nature within all cultural 'boundaries'. This keeps the focus on both the 'exotic other' and on the future. For instance, a survey conducted for the EPA by the Yale Program on Climate Change (Leiserowitz et al., 2022) found that 36% of the Irish population believe that anthropogenic climate change is 'a real and immediate threat', yet 48% 'view it as a less immediate threat', 12% 'are less likely to think it will personally affect them' and 3% 'do not perceive it as a threat'. Socio-cultural response, accordingly, may be that climate change is occurring far away, spatially and temporally. Simultaneously, communities are required under national policy and international agreements to alter behaviour and practice while funding adaptation and mitigation measures. These measures are often prescriptive in nature and affect communities differently through the accepted yet not unproblematic climate policy concepts of adaptation, vulnerability, and resilience, with social and spatial justice implications. In Ireland, there is an additional challenge. Whether quantitative or qualitative, physical or social science, minimum data are available for the places likely to be most impacted by a changing climate: the offshore islands.

1.2.2 Introduction to Inishbofin Island

Inishbofin Island, or Bofin, is located in the north-east Atlantic (Figure 1) off County Galway. The island is almost 11.3km by sea to the mainland pier. Ireland's islands have experienced insidious population decline since the first census in 1841. At some point in time, 258 of these islands have been settled by humans (Royle, 1994). In 1841, 211 islands were inhabited by 34,219 people (CSO, 2020). In the most recent census in 2022, there were 8,945 people recorded on 85 islands. Inishbofin's population in 1841 was 1,404. It is now

184 people (CSO, 2023a). Inishbofin identities are entwined with land and ocean, farming and fishing. Both farming and fishing persist on a reduced scale, though seasonal tourism is now the mainstay of island economy. Therefore, local livelihoods remain 'weather dependent'.

Analysing the English word 'island' and its origins, differences in cultural perspectives of islands, and the characteristics of islands and islandness, Royle and Brinklow (2018: 3) argue that the 'perfectly acceptable' Compact Oxford English Dictionary definition of island as 'a piece of land surrounded by water' does not reconcile with its usage. Islands present a 'vast variety of geographical, social, cultural, political, and economic conditions, and a great multiplicity in the combination of these elements' (Hache, 1998: 35). The geographical and geopolitical distinctiveness of the planet's 80,000 permanently inhabited islands (Baldacchino, 2018) mean that there can be no heterogeneous interpretation of 'islandness' while island studies or nissology, the production of a coherent theory of islands and islandness, is questioned (Hay, 2006). That islands, as a (nebulous) category, have a distinct character has long been recognised, however (Conkling, 2007; Dommen, 1980). Hay (2006: 26) argues that 'the metaphoric deployment' of island is so pervasive and enduring that island is arguably the most dominant metaphor in western discourse. The study of islands across disciplines including Geography and Anthropology has contributed to development of these disciplines. The propositions that islands are 'models of coupled human and natural systems' (DiNapoli and Leppard, 2018: 157) or 'natural history's best shot at something approaching the controlled experiment' (Kirch, 1997: 30) suggest that they are optimal locations for the study of global change, when aligned with the recognition that islandness does not necessarily mean that these are closed locations (Kirch, 1986: 2).

Among their physical characteristics, land boundedness, smallness and isolation contribute to the recognition of islands as being highly vulnerable to the impacts of climate change. Small Island Developing States (SIDS) are acknowledged as amongst the most vulnerable globally. This vulnerability is extensively examined (Albert *et al.* 2016; Barnett, 2011; Foley, 2019; Locke, 2009; McCubbin *et al.*, 2015; and others). Additionally, the contribution and importance of SIDS in advancing the political agenda on climate change is acknowledged (Ourbak and Magnan, 2018), as is their capacity as early adaptors (Betzold, 2015; Dumaru, 2010). The Intergovernmental Panel on Climate Change (IPCC, 2014: 1616) recognises that response to climate change drivers by island communities *because* of their diversity means that vulnerability, climate change impacts and adaptation will be variable. It also

acknowledges that island response has not always been adequately integrated in adaptation planning. EU policy regarding islands, including sustainability challenges, has been 'incremental' and 'fragmented' (Moncada *et al.*, 2010: 61). Islandness is a considerable influencer on the socio-ecological system of an island (Nel *et al.*, 2021). Island communities live within a *weatherworld*. Characteristics of islandness that contribute to the climate vulnerability of SIDS are common to the smaller offshore islands of more economically developed countries, including Ireland's islands.

A characteristic of islands pertinent to this research is scale. Large enough to be able to sustain community life, Inishbofin and the other islands discussed herein are not 'too small' yet they are geographically 'small enough' that their inhabitants are in continuous socioecological contiguity with the ocean. Ireland's islands, however, and their populations totalling 8,945 people (CSO, 2023) are not centred in climate change policy. In relation to Ireland's populated islands, a ten-year islands development strategy, *Our Living Islands*, was published in June 2023 (Government of Ireland, 2023a). It has been twenty-seven years since the previous islands strategy was published in 1996 (Houses of the Oireachtas, 2022a). During this time, population decline for the islands continued. In Inishbofin, changes in sea level and weather are observed and include experience of extreme events such as the impactful storms of winter 2013/2014 (discussed in Chapter 8). However, a prevailing lack of scrutiny of the many drivers of vulnerability and climate change responses on non-SIDS small islands results in a risk of significant knowledge being missed (Petzold and Magnan, 2019).

1.2.3 Field Rationale

In 2017, while planning my final year undergraduate projects in both Geography and Anthropology, my engagement with Inishbofin began. I had identified the gap in qualitative climate change study within the Irish context, and that this may be a barrier in design and implementation of effective climate planning and policy. An initially broad internet search for 'storm destruction Ireland' generated results describing the impacts of the storms experienced in Inishbofin from December 2013 to February 2014. Media stories lauded Islanders as heroes responding to destruction while cut off from the mainland. Further research revealed that the Irish islands, long marginalised, are at the forefront of Atlantic storm tracks. This and the recent experience of extreme events confirmed Inishbofin as an appropriate field site. The terms 'field' and 'field site' are applied with reservation. Inishbofin is primarily the home of an entangled community. A prevalent theme in this research is *entanglement*, notably the importance of socio-ecological, or human-

environment, relationships. I spent six days on the island in November 2017 for my undergraduate research. In addition to forming connections, this time increased my awareness of the extent of the existing knowledge gap for communities 'at the edge'. It directed my attention to processes of resilience and vulnerability, and offered hints of the dynamism of the weatherworld. It clarified, too, how much remains to be understood about the formation of socio-ecological and socio-cultural drivers of climate resilience and vulnerability, and of how climate change perspectives and responses form. Subsequently, these ideas became shaped into the research aims of this thesis.

1.2.4 Objective and Questions

'To engage with the public on the topic of climate change requires recognition of individual differences in beliefs and attitudes about the topic along with multiple psychological, historical, cultural, and political influences' (EPA, 2021). The objective of this research is:

• To expand understandings of climate change resilience and vulnerability by investigating the relationships between culture, identities and socio-ecological dynamics on Inishbofin Island.

To fulfil the research objective incorporates examination of the influences identified by the EPA. Socio-cultural influences are also particular to society, place and time. Thus, initial fieldwork findings revealed challenges specific to Inishbofin that are interlinked with climate change responses, perspectives, understandings and impacts. Accordingly, the following research questions formed:

- 1. What are island identities and why are they important for resilience?
- 2. How do colonial legacies and post-colonial governance contribute to climate change resilience or vulnerability?
- 3. What is the exposure of island services, infrastructures and livelihoods?
- 4. What are the lived realities of the island weatherworld including implications for the future?

This thesis aims to contribute knowledge through an interdisciplinary approach in geography, anthropology and island studies centring ethnographic enquiry in response to these research questions. The starting point is consideration of the scholarship of Glacken (1967, 1992) to examine historical nature-culture conceptualisations that positioned humans and culture in a hierarchical position over the rest of nature. Nature/culture and similar binaries are associated with Cartesian thinking as drivers of colonialism, racism and

industrialisation (Glacken, 1967; Moore, 2015, 2016; Plumwood, 1994). They remain evident today as anthropocentrism and human exceptionalism (Caillon *et al.*, 2017; Fuentes, 2010; Haraway, 2008). These binaries also contribute to the separation of social and physical sciences within academia (Foster, 1999; Jones, 2009; Tadaki *et al.*, 2012). An outcome of this separation is the prevalence of quantitative over qualitative climate change study (Hulme, 2009, 2011, 2017). Scholars recognise and attempt to overcome these binaries (Berkes, 2017; Dove and Barnes, 2015; Crate and Nuttall, 2016; Haraway, 2003; Marx, [1844] 1932; Moore, 2016; Snow, 1959; White *et al.*, 2017; Williams, 1980). Examination of this literature illuminates the research problem, leading to formation of the primary research objective. Subsequently, the research questions are responded to through consideration of the following theories and literature.

Socio-ecological systems (SES) and relationships are considered under varying theoretical approaches aiming to reunite the realms of nature and culture (Berkes, 2017; Berkes, Colding and Folke, 2002; Berkes and Folke, 1998; Carpenter, 2001; Delgado, Marin and Pérez-Orellana, 2020; Ingold, 2000, 2007, 2010, 2011; Meerow *et al.*, 2016; Olsson and Folke, 2001; Walker *et al.*, 2002). These are incorporated into this research along with a critical posthumanism perspective that recognises the end of the nature/culture dichotomy simultaneously with its continuance within societal structures (Braidotti, 2018; Haraway, 2008; Herbrechter, 2022; Marston *et al.*, 2005). Socio-ecological relationships are connected to place. Much consideration is given to what landscape and place are (Buttimer, 1976; Cresswell, 2009; Hoskins, [1954] 1985; Jackson, [1960] 1997; Massey, 1994; Sauer, 1963; Tuan, 1990) and their meanings, notably historical and political inheritances of place in the present (Massey, 1995; Jackson, [1960] 1997; Wylie, 2007). How people inhabit place is analysed with reference to theories of dwelling (Ingold, 2000), and linked to relationality and assemblage theory (Anderson and McFarlane, 2011; DeLanda, 2006; Tsing, 2015).

Theories of justice and slow violence, and their construction, occurrence, and impact in place are also recognised as highly relevant to this research (Davies, 2019; Galtung, 1969; Nixon, 2011; Said, 1979, 1994; Soja, 2010) and related to ideas of unfairness (Adger *et al.*, 2016; Royle and Scott, 1996). A review of colonialism and post-colonial scholarship in Ireland (Connolly, 1999; Horning, 2013, 2018; McDonough, 2005; Montaño, 2011; Morrissey, 2004; Smith, 1999) includes a focus on displacement within the landscape (Flaherty, 2015; Lash, 2019; Slater and Flaherty, 2023; Taylor, 1980). Literature focussing on coloniality of power and knowledge within an Irish context is found to be sparse. Lloyd's

(2001) theories are drawn on, along with those of scholars of global coloniality including Ahmed (2000), Castro-Gómez (2008) and Mignolo (2007, 2008). Repatriation as a complicated post-colonial issue is also considered (Ermine, 2007; Gulliford, 1996; Krmpotich, 2010; Pullman, 2017; Scarre, 2009). These ideas are incorporated into analysis of memory and identity, and are relevant to resilience and vulnerability formation. How identity is formed is considered with reference to Breakwell's ([1986] 2015) theories of a 'dynamic social product' that must be understood 'in relation to its social context and historical perspective', and those of Berenskoetter (2011) and Tajfel and Turner (2004). These are aligned with consideration of memory and remembering (Connerton, 1989, 2011; Gillis, 1994; Haripriya, 2020; Schwartz *et al.*, 2005), language as a social structure (Giddens, 1984) and social class (Bourdieu, [1985-1986] 2020) to contribute understandings relevant to analysis of fieldwork findings.

Conceptualisation of the weather world of place draws from Ingold (1993, 2000, 2007, 2010, 2011) and Hulme (2009, 2011, 2017), with examination of the relationship between weather, climate and culture also informed by Hulme's scholarship. These ideas contribute to discussion of vulnerability and resilience, and how they form in place over time. Vulnerability and resilience are ideas deeply considered in this thesis, and a diversity of scholarship is drawn on (e.g., Adger, 2000; Adger et al., 2012; Berkes, 2017; Burrows and Gnad, 2018; Hess et al., 2008; IPCC, 2014, 2022; Korosteleva and Petrova, 2021, 2022; Lie, 2004; Massey, 1996; Quinn et al., 2020; Thywissen, 2006). Ideas of adaptation and adaptive capacity (Barnett et al., 2021; Orlove, 2009) and climate justice (Bordner, Barnett and Waters, 2023; Crate, 2011; Fiske et al., 2015; Liebenberg, 2018; Sultana, 2022; Williams et al., 2020) are also considered. Throughout, this research builds on an islands studies foundation in its intent to analyse the island 'on its own terms' in prioritisation of islandness (Baldacchino, 2004, 2005, 2007, 2008; Brookfield, 1981; Conkling, 2007; Depraetere, 2008; DiNapoli and Leppard, 2018; Hay, 2005; Kirch, 1986, 1997; McCall, 1994, 1996; Péron 2004; Royle, 1986, 1994, 2003, 2010; Stratford, 2003, 2015).

Theoretically, then, this research draws from and synthesises ideas from geography, anthropology and nissology/island studies, primarily, in an interdisciplinary approach. Interdisciplinarity is understood as research that centres the research problem rather than a particular discipline (Easton, 1991; Klein, 1990; Winter, 1996) as it holds 'promise for grappling with wicked problems' (Wohlgezogen *et al.*, 2020: 1048). This enables the research framework and methodology to examine and include theories, concepts and methods from more than one discipline. It considers scholarship in climate change,

climatology, colonialism, coloniality, environmental psychology, history, phenomenology, and political ecologies. From this consideration, and knowledge gained within the island and its community through dwelling, a transformative perspective emerges. This is developed through methodology which centres analysis of positionality (Leavy, 2020; Madison, 2020; Ravitch and Carl, 2016). Methods are designed around application of a *critical climate ethnography* building on Madison's (2020) ideas of critical ethnography and Crate's (2011) ideas of climate ethnography in an attempt to surmount the 'inherent complexity in addressing climate change's sociocultural aspects' (Crate, 2011: 179) and 'bridge abstracted climate science and 'lived' socio-cultural contexts' (Goodman, 2018: 345). Thematically, this research responds to the Environmental Protection Agency's (EPA) *Climate* research pillar, as mentioned, and acknowledges funding through the Irish Research Council and EPA.

1.2.5 Chapters Outline

The remainder of this thesis is organised as follows. In *Chapter 2, Island Studies and Inishbofin Island*, the discipline of island studies/nissology is considered with a focus on the key theories and literature contributing to this research. Inishbofin is fully introduced as the site of study, including its history and contemporary marginalisation. The depopulation of neighbouring Inishark in 1960 is considered from the perspectives of altered socioecological relationships and impacts on the remaining community in Inishbofin. Population trajectories and demographics are also analysed. By exploring the context of these two ongoing challenges for the island—population decline and marginalisation—this chapter therefore serves as a framework for those that follow and facilitates analysis of the research questions.

Chapter 3, Literature Review evaluates and synthesises the literature within the primary conceptual categories shaping this research, all of which contain crossover and interlinkedness, to position it within the existing literature and identify possible gaps. These categories are nature and culture which incorporates natureculture, socio-ecological relationships and posthumanism, place and people or the specificity of place and socio-cultural drivers relevant to this research including dwelling, justice, colonialism, coloniality, memory and identity, and weather and climate in the context of the 'weatherworld' and climate change vulnerability, resilience, adaptation and justice. Additionally, the 'Small Islands' chapters in the IPCC's AR5 and AR6 report cycles are reviewed.

In *Chapter 4, Methodology* the process of developing the interdisciplinarity scaffold underpinning the research and how this leads into design of the conceptual framework is detailed, with acknowledgement of theories, positionality, ethical considerations, and limitations of the research including challenges experienced. It argues that interdisciplinarity, in siting the research problem at the centre of the study, may be added to the academic 'toolbox' as a valuable resource.

Chapter 5, Culture, Identities and socio-ecological Relationships addresses the first research question: what are island identities and why are they important for resilience? It identifies the differing perspectives of islandness and mainlandness, explores Inishbofin Islander identities, and introduces the concepts of hybrid memory actionality and strategic remembering as processes that contribute to formation of socio-ecological understandings and resilience. It analyses the land-water binary, land, ocean and wind.

Chapter 6, Governance, Marginalisation and Justice responds to the second research question: how do colonial legacies and post-colonial governance contribute to climate change resilience or vulnerability? It examines the 2023 repatriation of human remains taken during colonisation to explore ideas of cultural authority and knowledge. It then investigates internal governance, with consideration of island law and island time, before exploring the processes and impacts of external governance. Issues of trust, marginalisation, access to resources and justice are discussed, with implications for resilience and/or vulnerability.

Chapter 7, Services, Infrastructures and Livelihoods extends this discussion in response to the third research question: what is the exposure of island services, infrastructures and livelihoods? It systematically examines the fundamental services required for any society to function well, within the categories of housing, education, health, religion, communications, transport and infrastructure, energy, water, and livelihoods. It illustrates how official neglect, deferral and delay by state and local authorities amplify marginalisation and vulnerability.

In *Chapter 8, The Weatherworld: Lived Realities – Past, Present and Future*, the discussion and themes of previous chapters coalesce in response to the fourth research question: what are the lived realities of the weatherworld and implications for the future? The web or mesh of entanglement including weather and climate is proposed as contributing to resilience through collective knowledge and a shared vision. The impacts of the storms of winter 2013/2014 are examined. Islanders' observations regarding weather, sea level and

biodiversity are discussed. The chapter proposes that local drivers of resilience that create a futuring vision are countered by external governance.

This thesis concludes in *Chapter 9, Discussion and Conclusion* with a review and consolidation of its principal arguments and findings, consideration of areas of future research, evaluation of limitations and implications of the research, and policy recommendations.

1.3 Conclusion

With the intention of establishing the context within which this research has been undertaken, this chapter has clarified the problem at its centre. It results from two issues compounded: (1) there is less qualitative climate change study compared to quantitative in Ireland, and (2) there is an absence of in-depth, longitudinal qualitative study of 'western' societal perspectives, understandings, and experiences of climate change. This research addresses the gap in the literature within an Irish context, and a notable paucity of climate change research relevant to Ireland's islands. The chapter introduced Inishbofin Island and the characteristics of islands, and the background and rationale for the choice of Inishbofin as the focus of this study. It outlined the research aims before summarising the key concepts, theories and literature drawn on throughout the thesis. The chapter concluded with an outline of the thesis structure. Accordingly, through discussion of the origin, background, and significance of the research, this chapter provides a foundation for the unfolding of findings and arguments ahead. Building on this, the next chapter considers island studies theory and literature, explores Inishbofin in more detail with examination of its history including the depopulation of its sister island, Inishark, and analyses islands population data.

2. ISLAND STUDIES AND INISHBOFIN ISLAND

2.1 Introduction

This chapter will consider island studies, and introduce Inishbofin Island more fully as the focus of this research. Island studies, islandology, or nissology is vast, transgressing and/or combining disciplines, and demonstrating a great diversity of research aims. However, island studies as a specific discipline wherein islands and islandness are centred as loci of study is both new and questioned. An ongoing debate is if it is possible for one theoretical framework for the study of islands to be applied, given their diversity. This thesis attempts to consolidate key thematic approaches within island studies. Accordingly, this chapter discusses the origins of contemporary thinking in island studies in the context of this debate, while also identifying literature and concepts that hold particular resonance for this research. Approaching island studies as a distinct academic discipline founded on interdisciplinary methods allows this review to contribute understandings that are incorporated into the research framework discussed in Chapter 4. Combined with fieldwork findings, this approach additionally supports analysis throughout this thesis in response to the research objectives, and development of the knowledge required to enable islandness to remain at the centre of the study. This chapter will then briefly explore the island's historical settlement, and examine the issue of population decline which is one of the greatest concerns of the Inishbofin community today. Historical experience in place and population decline are proposed as highly relevant to conceptualisation and enactment of resilience and vulnerability. The chapter therefore aims to establish the importance of islandness, history and population decline in consideration of climate change resilience and vulnerability in Inishbofin.

2.2 Islands

2.2.1 Island Studies/Nissology

Island studies is a recognised yet still emerging discipline (Grydehøj, 2017; Stratford, 2015). Islands have long been sites of often pioneering research: for instance, Darwin's ([1859] 2009) study of Galápagos finches; Wallace's ([1880] 2016) of birds of paradise on the Aru Islands; Haddon's research in the Torres Strait Islands (1898) and Irish islands including Inishbofin (1890, 1893); Malinowski's ([1922] 1978) with the Kiriwina (or Trobriand) Islanders of Papua New Guinea; Mead's ([1928] 1942, [1934] 1943) in Samoa and the

Admiralty Islands; MacArthur and Wilson's ([1967] 2016) *Theory of Island Biogeography*; Bonnemaison's geographical-anthropological ethnography (1985) in Tanna, Vanuatu; and many more. Thus, geographers, anthropologists and other scientists have been fascinated by islands as they offer what appears to be a defined boundary for the study of human, ecological and physical processes (Baldacchino, 2004, 2007, 2018; Brookfield, 1981; DiNapoli and Leppard, 2018; Kirch, 1997). Investigations into the 'true nature' of islands and islandness, and analysis of how their distinctiveness is experienced, are approached through a diversity of epistemologies and praxes.

Nissology is the theoretical position described as 'the study of islands on their own terms'. It originated with McCall, an anthropologist, who outlined points of study in seminal papers in 1994 and 1996, building on the work of three geographers: Moles (1982), Bonnemaison (1985, 1986) and Depraetere (1990-1991). McCall identifies 'eight clear characteristics of islands and islanders': the clarity of land borders, the surrounding sea as a larger part of the island, claiming of islands by continental states, the 'perception of scarcity of land' 'mirrored in scarcity of terrestrial ... resources', being a bounded entity with a 'clear ideological' in-group and out-group, a 'sense of limitation' through smallness and boundedness that is 'not physical' but 'echoes that ecology socially and culturally', particular social relationships and shared regional, ethnic or kin connections meaning that bureaucratic processes developed for continental or mainland places may fail, and migration as a 'major preoccupation' and a 'systemic imperative' as a consequence of boundedness (McCall, 1994: 104-105). A nissological point of view is one that aims to understand the 'true nature of islands' and how 'they are felt by Islanders themselves' by 'not impos[ing] continental notions on them' (McCall, 1996: 78). McCall (1994) also argues that any islands study should be multidimensional, with a complexity of processes analysed across scales to incorporate all contemporary socio-cultural influences. Malm (2007) has a similar theoretical standpoint, arguing that analysis of an island should include its history if its contemporary positionality and external relationships are to be understood.

Baldacchino is also an early proponent of island studies. Baldacchino (2004, 2007) states that *islandness*, composed of locality, insularity, identity and vulnerability, is the defining characteristic of islands. It is this overarching characteristic, islandness, that means islands are effectively micro laboratories where macro processes are exacerbated. Baldacchino (2004) describes this as 'globalisation of locality'. Baldacchino, a pluri-disciplinary social scientist, also questions how the relationship between islands and their study is defined within nissology as, for Baldacchino (2008b: 37), the phrase 'the study of islands' intimates

that research will be 'directed by outside forces'. This creates both epistemological and methodological difficulties for the author owing to the impact of islandness on identity and location of the subjects in the study, meaning that those conducting the study are usually outsiders looking in. Baldacchino's (2008b: 39) concern, therefore, is that islands and Islanders are eternally 'object matter'.

2.2.2 The True Nature of Islands

The concept of the 'true nature' of islands is widely acknowledged as being challenging to define or analyse as these are 'paradoxical spaces' (Baldacchino, 2007: 166). Islands are 'bounded but porous'; 'isolated, connected'; 'colonised, postcolonial'; 'vulnerable and robust'; and 'utopian and dystopian' (Stratford, 2003: 495). Nonetheless, there is constancy in the three primary physical characteristics of islands and islandness that are analysed. These are land *boundedness* or insularity, *isolation* and *smallness*. The concept of land boundedness or insularity is deeply examined. Its counterpart of connectivity which also bears relation to the characteristic of isolation is similarly examined, with approaches incorporating historical connectivities such as migration and trade, and contemporary globalisation processes of connectivity including tourism and digital exchange. Christensen and Mertz (2010) argue that connectiveness and outside forces, specifically migration and human mobility, are an essential aspect of islands and island studies, linked to livelihoods, socio-ecological relationships and climate change.

Notwithstanding that islands defy straightforward categorisation, the idea of islands as distinct places is an accepted constant in the literature, with the question of what creates this sense of 'difference' awarded much consideration. For Depraetere (2008b: 31), the 'most intricate' point about nissology is that, through enabling incorporation of representation and metaphor, it provides an 'opportunity and not a burden' for such theoretical analysis. Péron (2004) discusses the 'lure of the island' and the often contrasting perceptions of people from the island and those from the mainland. Mainlanders, on reaching an island, perceive that they gain access to an 'ageless', 'primitive', 'honest' 'other world' as the island is 'nature in all its forms' and a 'remedy for the madness of life', their 'normal' life on the mainland (Péron, 2004: 331-334). The author proposes that a link between the constraints of island geography and the western construction of the island as a 'cultural object' engenders the fascination (Péron, 2004: 334). For Conkling (2007: 191-192), 'certain island qualities transcend local culture' as an 'important metacultural phenomenon', resulting in a 'metaphysical sensation' difficult to verbalise. While these and other scholars employ a diversity of ontologies, they link by

responding to the distinctiveness of islands and islandness. There are two important and consistent points of analysis: (1) islands as a grouping are distinct to the mainland, yet islands are also distinct from one another, and (2) socio-ecological relationships are a driver of the differences of islands and islandness.

Correspondingly, there is a move away from analysis of a containing or constricting, defined island edge to concepts of a 'sea of islands' (Hau'ofa, 1994) and a re-examination of the land-water binary (Krause, 2022; Lahiri-Dutt, 2015). Hayward's (2012: 5) argument for a more 'holistic' understanding of the 'interrelation of marine and terrestrial spaces' corresponds with Lahiri-Dutt's (prompted by study of chars, shifting riverine islands) that a combination of socio-ecological interactions during and after colonisation contributes to creation of these liminal or hybrid environments. Steinberg (2001: 201) argues that the ocean, like the "fixed" places of land-space', is 'socially constructed'. Krausse (2022) builds on these ideas to argue that the land-water nexus is beyond spatiality and it is spatiotemporality, or the rhythms of water and how people engage with them, that should inform socio-culture-water understandings. This highly corresponds with tidal and seasonal influences on socio-cultural activities in Inishbofin contributing to how conceptualisations of land and ocean (analysed in Chapter 5) and 'island time' (Chapter 6) evolve, with this research considering fluidity as a primary characteristic of islandness.

There is a significant gap of governance theory specific to smaller islands founded on the principles of island studies/nissology, though Warrington and Milne (2018: 173-201) propose that there are seven patterns of island governance. These are: civilization such as Britain or Japan, islands with a global impact; fief with the examples of Sicily and Haiti today and Ireland in the past, where peripherality and vulnerabilities are increased through colonialism and exploitation; fortress like Malta or Hong Kong, bulwarks and bases for projecting power; refuge like Cuba or Taiwan, islands of contested emancipation following confrontation with a dominant regional power; settlement which are settlement colonies such as Australia and New Zealand mainly by voluntary migrants; plantation including several Caribbean islands which were under imperial control including slavery or slave-like labour; and entrepôt, with the examples of Singapore and Mauritius, and Ireland today, where location, centrality and market transactions are attributes used to internally generate economic and other successes. Warrington and Milne's typology highlights how history, location, spatiality and temporality merge in the present. As with Malm (2007), these theories therefore additionally demonstrate how historical experiences drive an island's contemporary societal structures, concerns and identity. This research also draws from Connell's (2018) focus on governance and tourism through examination of 'the complex relationships between sustainability, development and islands'.

2.2.3 Debates within the Discipline

The basic definition of an island is that it is a geographical unit of land surrounded entirely by water. However, an ongoing lack of agreement persists regarding other attributes including size, land links and tidal access. Attempts to circumscribe 'island' into an absolute definition by size according to Hache (1987: 88, 89) will 'quickly run into trouble' and it is 'not altogether displeasing' that islands 'do resist the simple classification of definition and statistics'. This debate is if the size of the land area surrounded by water determines if this surrounded land is or is not an island. For instance, Brunet et al. (1993: 168) propose that an island is 'an intermediate size, between an islet and a continent' to which Taglioni (2011: 46) responds, 'what are the limits of an islet or a continent?' Taglioni (2011: 61) argues that debates about defining the 'specific nature of the island as a geographical object' create an 'artificial problem' that equates to town planners attempting to define a town's limits. The author instead proposes the category of 'small insular spaces' incorporating insularity as the key theoretical consideration with linked themes including islandness, insularism, connectivity, and peripherality. Depraetere (2008a, 2008b: 27) proposes a complete reconceptualisation with Planet Earth envisaged as a 'world archipelago' through analysis of the physical structures and processes of geographical islands, and incorporating other representations of islands. As Baldacchino observes (2008b: 38), it is usually 'others' who write about the smaller, poorer and less populated islands in particular and he suggests this leads to a difficulty with the meaning inherent in the descriptor 'small' because 'large' is equated in the literature with 'normal'. Smaller, he proposes, is preferred. Baldacchino (2004: 272) also contests the term 'insularity' as carrying the 'semantic baggage' of backwardness and separation and so 'islandness' is preferred. How these concepts are applied in this research is detailed in Chapter 4.

Arguments regarding the validity of a distinct discipline are also varied. Hay (2006: 19) identifies three 'fault lines' in nissology: how the island's 'edge' is understood, how island memory and identity are important including migration, and how island 'realness' can be appropriated by people who understand only the metaphor of the island. Accordingly, islands warrant a 'special focus of place studies' but 'a purpose-built nissology' will be constrained by an 'epistemological paradigm' that is 'continentally-derived' (Hay, 2006: 34). Fletcher (2011: 18), critical of 'an impasse ... in the binary thinking of island studies', queries

when academic writing about islands qualifies as 'island studies' to argue that island studies scholarship, though purportedly interdisciplinary in nature, favours geographical study.

These debates highlight the importance of reflexivity within academic pursuit and of attempting to implement a theoretical framework that can be replicated across research. Nevertheless, particularly given the diversity of islands and island experiences even while their populations share common concerns including climate change, island studies is evolving and can be variously responded to. This research attempts to build the study around Inishbofin Island and islandness rather than utilise the island simply as a place, or as a type of 'platform' or 'jetty' (Derrida, 1989), to facilitate access into a separate area of primary concern. The aim, therefore, as outlined in Chapter 4, is to situate this thesis within, and hope it may contribute to, the epistemology of island studies.

2.2.4 Ireland's Islands

Early ethnographers in Ireland, generally British or American, were concerned largely with rural, peripheral culture. Egan and Murphy (2015) offer a perspective of the anthropology of Ireland that highlights how ethnographies of the west prioritised stereotypes and essentialisms, including Haddon and Browne's studies of the 'ethnical characteristics' of the people of the western counties and islands including Inishbofin and the Aran Islands in the 1890s, to Arensberg and Kimball's (1968) kinship and social networks study in County Clare between 1932 and 1934. In 1969, Aalen and Brody considered the factors leading to Gola Island's depopulation, and Fox's ethnography about the people of Tory was published in 1978. Beaumont (2005) published 'Achillbeg: The Life of an Island' based on memories of surviving Islanders from the community resettled in 1965. An island ethnography by Messenger (1969) resulted from research on Inis Oírr in the Aran Islands, masked as Inis Beag, in periods between 1959 and 1961. Similar to Fox's, it gained notoriety because of how it discussed islanders' sexual practices. Scheper-Hughes' ethnography of the peripheral, also masked, Dingle Peninsula village of Ballybran (An Clochán/Cloghane) entitled 'Saints, Scholars and Schizophrenics: Mental Illness in Rural Ireland' (1979) also became controversial. Responses by the communities studied to these ethnographies, and to Tall's Inishbofin memoir mentioned shortly, reinforce that representation is political as 'a practice through which things take on meaning and value' (Shapiro, 1988).

The contemporary research drawn on here is largely published through the University of Notre Dame's 'Cultural Landscapes of the Irish Coast' (CLIC) project which has resulted in rich studies with a primarily ethno, medieval and community archaeology focus during its

Inishark archaeological field project. Several outputs from CLIC, particularly the doctoral dissertation of Lash (2019) entitled 'Island Taskscapes: Heritage, Ritual, and Sustainability on Inishark and Inishbofin, Ireland', are referenced. Lash examines how maintaining and adapting traditional rituals and heritage monuments contributed to the sustainability of Inishark and Inishbofin's communities. Research that centres an island studies perspective or contemporary long-term ethnographic engagement with an Irish island community appears sparse. In particular, the continuing lack of extended islands climate change research is both surprising and concerning. However, Royle's scholarship of Ireland's islands began in the 1980s and is heavily drawn on in this thesis. Royle (2014: 29) defines islandness based on the characteristics of being surrounded by water, being bounded, 'discretion' or being removed from the outside gaze, relative powerlessness, small scale with scarcity of land, and remoteness as islands always 'lie off the edge of the continent'.

BiblioMara is an 'annotated indexed bibliography of cultural and maritime heritage studies of the coastal zone' by the Coastal and Marine Resources Centre (CMRC) and University College Cork (UCC) which draws together materials published from c. 1900 on archaeological, architectural and built heritage, and occupational folklore including traditional crafts, boat-building and fishing (Kozachenko et al., 2004). Historical works specifically about Inishbofin and referenced in this thesis include Browne's 1893 ethnography and Freeman's 1958 economic geography analysis. Both are sources of carefully compiled information though they must be assessed as representative of the ideologies of their disciplines and time. In Browne's case, this was evolutionary science and colonialism, and in Freeman's, marginalisation and stereotypes of islandness, and post-Independence economic stagnation. The commonalities of marginalisation are examined in a history of Ireland's islands by Ferriter (2018) that details devastating population decline, echoing a concern of Inishbofin's community today, and the themes of modern Ireland through island experiences. Official neglect was prevalent even while islands were widely viewed through a lens of nationalistic romanticism including calls for their traditional cultures to be preserved (Ferriter, 2018). As Ferriter finds, the experiences of all islands are distinct. There remains a gap for a comprehensive history of each Irish island from an islandness perspective. In Inishbofin, several community members have recently contributed to, or compiled, historical accounts which are referenced throughout this thesis and proposed as ethnographic objects symbolic of a shift in how the identity of the Islander is embodied, controlled and presented, as considered in Chapter 5.

Many Irish islands including the now depopulated Blaskets became known for literary output during the Gaelic Revival era of the early 20th century which included Tomás Ó Criomhthain's *An tOileánach* (The Islander) ([1929] 1973); Muiris Ó Suilleabháin's *Fiche Bliain ag Fás* (Twenty Years A Growing) ([1933] 2001); and Peig Sayers' 1936 memoir, *Peig*. A national gathering of folklore as told by Irish children in the 1930s, 'The Schools Collection' (National Folklore Collection, 2023), is devoid of the voices of Inishbofin's children. In 1936, however, Brían Mac Lochlainn gathered lore in Inishbofin and Inishark, available in Volumes 0237 and 0423 of the National Folklore Commission, UCD. Often in these writings, mention is made of the influence of the wind. Some research considers wind-culture relationships within communities categorised as indigenous (Li *et al.*, 2019; Tuan, 1990) and Goff (1964) analyses place names incorporating the word 'hurricane' in Georgia, USA yet there is little investigation of the influence of the wind as a persistent socio-cultural driver. How it influences culture in Inishbofin is also considered in Chapter 5.

A resonating theme of island literature is that of metaphorical and literal enmeshment with nature, and notably in response to its 'visual phenomenon' (Gee, 2019), the ocean. Artists attracted to Inishbofin include Cecil Day-Lewis, Seamus Heaney, Ted Hughes, Tom MacIntyre—resident from 1972-1977, Sylvia Plath, Theodore Roethke, and Deborah Tall—resident from 1972-1977. Tall's 1986 memoir, 'The Island of the White Cow', remains a subject of controversy for some in the community, contributing to distrust of resident researcher-writers. An early story set in Inishbofin was first published in 1880 by Dickens. 'The Hungry Death' by Rosa Mulholland, Lady Gilbert, centres socio-ecological relationships, storms and 'the struggle to win sustenance from land and sea' during the Great Famine (1845-52) (Klitzing, 2021). Tim Robinson, an influential writer and cartographer of the islands and Ireland's western coastline, explores the relationship between the human and the other than human through application of geology, folklore and myth. Extracts from the poems of Richard Murphy, associated with Inishbofin and Cleggan for over twenty years from the late 1950s, are included in this thesis.

What of those who must earn their living
On the ribald face of a mad mistress?
We in holiday fashion know
This is the boat that belched its crew
Dead on the shingle in the Cleggan disaster.

Extract from 'Sailing to an Island' by Richard Murphy (1963)

2.3 Inishbofin Island

2.3.1 Geography

Inishbofin Island, or Bofin, is one of Ireland's most westerly inhabited locations (Figure 1). Its current population is 184 people (CSO, 2023b). Located off the Northwest Atlantic coast of Connemara, County Galway at 53°36′75′N, 10°12′45′W, the island is approximately 11.3km by sea to Cleggan Pier on the mainland. It measures approximately five and a half by three and a half km at its widest and narrowest points, with an area of ~12 km² (Figure 4). Its highest elevation is the Westquarter Mountain at 890 metres.

2.3.2 Early History

Corresponding with the assertion that 'no other type of territory has been so affected by colonial endeavour as islands' (Baldacchino and Royle, 2010) and despite being described by Haughton (1956) as 'unattractive to settlement', Inishbofin has a long, often turbulent history of occupation. Its past and present fuse in realisation of two routine metaphors of islandness: 'prison' and 'paradise' (Royle and Brinklow, 2018: 16). Pollen cores taken from lake sediments on the island suggest the possibility of post-glacial human influence on vegetation (O'Connell and Ní Ghráinne, 1994), and there is much evidence of Bronze Age settlement (Gibbons and Higgins, 1993; Lash, 2019; Quinn *et al.*, 2018) including hut circles, forts and field systems. The 6th century saint, Scuithin or Scaithín, is believed to have founded a church on the island and St Fechín and St Flannán lived here in the 600s (Coyne, 2007).

St Colman, on resigning his post as Abbott of Lindisfarne, relocated with Saxon and Irish monks to Inishbofin and founded a monastic settlement in c. 665 which was in use until at least the early 10th century (Lash, 2019: 83). A mention in the *Annals of Ulster* in 668 CE refers to its foundation (Mac Airt and Mac Niocaill, 1983) and an early 8th century entry by the Venerable Bede mentions that Northumbrian monks took refuge here (Gibbons, 2013). A 1684 reference about the Gaelic king, Guairim, a contemporary of Colman, is that his seat was in Middlequarter near the current church (O'Flaherty, 1846). The *Annals of Inisfallen* document a Viking raid on the monastery in 795 (Mac Airt, 1988: 119). In 1334, it was looted and burned by the Lord Justice, Sir John D'Arcy (Concannon, 1993: 11). The monastic site continues in use as a graveyard for Islanders, as illustrated in Figure 2.1.



Figure 2.1: St Colman's Monastic Site: contemporary and medieval graveyard, ruins of 14th c. church over 7th c. abbey, with the Twelve Bens/Twelve Pins mountains.

Source: Author (2020)

The island's natural harbour provided strategic advantage. Two dominant Gaelic maritime lordships, the O'Malleys and the O'Flaherties, contested this space (Gibbons, 2013). Bofin was captured in 1380 by the O'Malley clan. Gráinne (Granualie or Grace) O'Malley (Ní Mháille), the 'pirate queen', later built her fort (dún) on one side of the harbour. Her (possibly) Spanish collaborator, Don Alonzo Bosco, had his fort built at the opposite side. Stories are told that they stretched a chain across the harbour mouth to scuffle ships attempting entry. Gráinne regularly went into battle with the English navy yet met with Queen Elizabeth I in 1593 at Greenwich Castle, England. All charges against her were dropped and she continued her piracy until her death, c. 1603 (Chambers, 1979).

Inishbofin was the last Gaelic stronghold to fall to Cromwell (Gibbons, 2013) when, in February 1653, Parliamentarian forces took control (Walsh, 1990). Don Bosco's fortress was restructured for use as a garrison. In June 1655, Inishbofin was included in a Commonwealth Council list of garrisons ordered to have 'no Popish recusant' living or with lands 'within one English mile therof' (Dunlop, 1913: 163). It was also ordered that no Irish could keep boats in the area and that 'all ill-affected Irish' should be excluded 'out of that island' (Seymour, 1921: 213). Islands are often utilised as a 'dumping-ground for prisoners' (Aldrich and Johnson, 2018: 161) and in February 1657, Inishbofin was officially decreed a penal settlement (Conconnon, 1993: 17; Walsh, 1990). Irish clergy, in resistance to Commonwealth forces, were imprisoned here until 1662-3, often dying from torture and

starvation. Others were shipped from Inishbofin to labour in the islands of the West Indies. Known today as Cromwell's Fort, Don Bosco's Castle or The Old Barracks (Figure 2.2), the garrison is first seen from sea while on approach to the harbour. Now populated only by sheep, and a hiking destination for day trippers and holiday makers, it remains imposing. Cromwellian soldiers remained based in the fortress until the early 1680s (Walsh, 1990). With secure anchorage at premium value, the island was subjected to numerous additional battles for ownership, including ongoing battles between Jacobite and Williamite forces in the next decades (Concannon, 1993: 11-18).

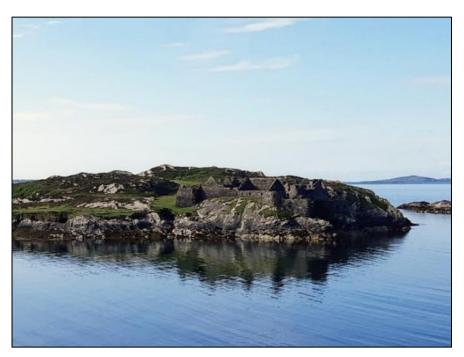


Figure 2.2: Cromwell's Fort/Don Bosco's Castle/The Old Barracks, built c. 1656, on Port Island to the eastern side of Bofin Harbour entrance.

Source: Author (2022)

Inishbofin and Inishark passed from the jurisdiction of Mayo to Galway in February 1873. Thomas Brady, who would later advocate on behalf of their communities, visited Inishbofin and Inishark in 1873 in his role as Inspector of Fisheries. He reported sheep dying of starvation and no fishing gear resulting in 'distress amounting almost to destitution' (Ferriter, 2018: 25). The poor condition of Inishbofin's roads and harbours was raised in the House of Commons on 15th July 1873 as 'an injustice', reflective of contemporary issues. On 14th May 1873, the County Surveyor for Galway, Samuel Roberts, had reported:

The road ... [is] now in very bad condition, the surface either torn up by floods, or worn into deep ruts, and in some places cut away by the encroachment of the sea to an extent that renders it unsafe for traffic.'

The Marquess of Sligo, Howe Peter Browne, who had taken ownership of the islands in the 1820s from the Clanricarde Burkes, was followed by Henry William Wilberforce of London (Lash, 2019: 340). Their agent, Henry Hildebrand, is documented for coercing Islanders into selling their catch and purchasing fishing equipment only from him, under threat of eviction (Lash, 2019: 340). In 1876, Cyril Allies, a Catholic landlord from Oxfordshire, England took possession (Landed Estates of Ireland, n.d.) and became Inishbofin's first residential landlord. Allies authorised his brothers to manage Inishbofin for periods and resided there variously himself. Kathleen, his wife, died on the island in February 1894. In 1900, Cyril Allies returned and married Elizabeth Ellen Wilkinson. He is recorded as resident in Census 1901 and Census 1911 (National Archives of Ireland, n.d.). Their five children were born on the island between 1904 and 1911. Intending to modernise fishing and farming practices, Allies implemented structural works including a fish curing station at Inishbofin's harbour. He banned the cutting of scraw (peat) owing to his concerns that the hills were becoming denuded and grazing was reduced. With no alternative fuel sources, Islanders covertly continued the practice. Allies contributed to building the current parish church, also named St Colman's, on which work began in 1910. In February 1916, Elizabeth died in Inishbofin and Allies returned to England with their children, ending the residency of the family on the island. Elizabeth, Kathleen and one of Allies' brothers, Basil (who died from cholera), are buried in St Colman's graveyard (Figure 2.3). On 5th September 1916, Cyril Allies died in London. He 'was remembered with fondness' as 'an improving landlord who took an interest in the welfare of his tenants' (Concannon, 1993: 64).



Figure 2.3: Allies family grave in St Colman's cemetery. Source: Author (2020)

In 1907, Allies passed full management of Inishbofin and Inishark to the Congested Districts Board (CDB), subsequently selling Inishbofin to the CDB for £8,301 including £401 for tenants' interests (Freeman, 1958). Van Krieken (2011) argues that 'sheer greed' and 'a sense that the Gaelic Irish failed to extract nearly enough value from their landholdings' resulted in enactment of policy which subjected Irish people to 'a process of psychological and cultural 'compartmentalisation''. On neighbouring Clare Island, its landlord Lord Lucan evicted the population of 250 and destroyed their homes in 1851. Islanders today remember that Allies would employ English-only speakers, meaning that those who refused to comply risked starvation. Concannon (1993: 79) describes that a stick locally referred to as a cloigeann capaill (vernacular translation similar to 'blockhead') was suspended on a string around a child's neck. If the child spoke a word of Irish, a notch was made on the stick and punishment ensued when these accumulated. The loss of the Irish language in Inishbofin is therefore attributed to Allies. In a census analysis of people who spoke 'no language save Irish', only two are recorded for Inishbofin by 1912 (Anon., 1912). In 1958, Freeman notes that 'the people are entirely English-speaking: the Irish speech was lost almost 60 years ago'. The impacts of this loss of linguistic identity continue to be experienced, as examined in Chapter 6 along with the contemporary impacts of the covert removal in 1890 of thirteen crania from the graveyard. Ethnologist Alfred Cort Haddon and his then student, Andrew Francis Dixon, removed the skulls for scientific examination under the belief that island communities were descendent from a 'primitive' 'race'. Islanders were also later subjected to craniometry (measurement of the cranium) and anthropometry (scientific physical measurements). In addition, the dissolution of the Rundale System with a corresponding destruction of social groupings, villages (clacháns) and shared farm holdings, and further relocations under Allies and the CDB, combined with language and livelihood implementations in a complete reordering of pre-existing island socio-cultural structures. High emigration is evident in this period. Compounding factors for increased migration potentially also included An Gorta Beag (The Small Famine) of 1879, as described by an MP remembering his campaign visit to Inishbofin and Inishark in 1880:

'When I visited the wild islands of Inishbofin and Inishark in December, I found men and women lying on the floor of their cabins, too weak from hunger to rise, or even to frighten the rats which ... were beginning to attack them in their beds. There was nothing to eat except slocaun cooked with Indian meal, and not much of that. A relief schooner, laden with meal, was lying in Westport, waiting for an abatement of the tempest that howls along this formidable coast for weeks together in the winter.'

William O'Brien, MP, The Irish People, 23rd March 1907

The 'Long Depression' of the late 19th century was highly detrimental to rural populations across Ireland and clearly starkly experienced in Inishbofin. Slocaun, or Sleabhcán, is a seaweed. It has often been remarked to me by Islanders that for their grandparents, 'it was eat seaweed or starve'. Some tradition of migration had become established here after the Great Famine (*An Gorta Mór*, 1845-1852). Under the voluntary assisted emigration schemes initiated between 1882 and 1884 by the philanthropist, James Hack Tuke, 3,214 people from surrounding areas emigrated through Clifden Poor Law Union (Moran, 2018). During the residency of Allies, Inishbofin's population more than halved. The contemporary history of Inishbofin, including its colonial legacy and continued marginalisation post-Independence, are discussed in Chapter 6 in consideration of governance and justice, and implications for climate vulnerability and resilience.

2.4 Population Decline

2.4.1 Today's Population

Population and its shifts, and consideration of ways to maintain and increase it, are always at the centre of this community. What may elsewhere manifest as an imperceptible population change is of great significance. Each death, birth and migration is vitally important. These are events mourned or celebrated at individual, familial and community levels but also, conceptually, for their potential future implications, at a futuring level. Each person contributes cultural, social and economic effects that ripple across the past, present and future. For instance, should the island's childcare manager relocate to the mainland when their children reach secondary school age, as no one else is qualified for this role, the impacts would be significant and would likely include cessation of the service. Working parents who avail of the service, particularly if experiencing other challenges such as security of housing, could be influenced to relocate. Potential returning migrants or other incoming residents could be deterred. Community morale could be impacted by the loss of another service. The responsibility carried by individual members of island communities is therefore arguably greater than that of their peers on the mainland. This is a lived responsibility to the place and the people and the rest of nature with which it is shared in a vision for the future, and a factor in both resilience and vulnerability. It is evident within an islandness perspective but seems less understood in policy originating from the mainland. Two events during fieldwork also illustrate this effect.

During spring 2022, an Islander who has lived overseas for twenty years, his partner and their three children relocated to the island. People happily told me that the school would

now have its highest roll since the 1970s. Soon after, I attended a ceremony in St Colman's Church. Three Catholic religious milestones were celebrated: a Christening, a First Holy Communion, and a Confirmation (Figure 2.4). In contrast to the mainland where these are for a large group, there was one island child per sacrament. The celebrant, Fr Anthaiah Pudota, travelled from Letterfrack as there is no priest in residence in Inishbofin. As officiation of Confirmation is usually only within a bishop's remit, special authorisation was granted by the Archbishop so that Fr Pudota could minister. Noticeably moved by the rarity of this occasion, the priest spoke about his privilege in administering here. Stained-glass windows mediated the weather, casting pale spring light into dancing blooms of colour as the power of ritual captured us, fleetingly, within a timelessness of connection. An Islander sang, her voice purely resonating through the vibrant, multi-coloured nave and transepts which were decorated with artistic posters by the island's school children. The ceremony was filled with laughter and warmth. Members of the children's families composed the small though attentive congregation, continuing the practice of their ancestors in this place built by their ancestors. It is a place where the motifs of the sea interweave with the symbols of the saints worshipped and the names of the drowned memorialised. Later I would enjoy the christening party. During the ceremony though, I contemplated an insight shared with me by an Islander during my first visit to Inishbofin in 2017:

'There probably needs to be another good hundred people living here, to make it.'



Figure 2.4: Christening, Communion and Confirmation, St Colman's Church, 23rd April 2022. Source: Author (2022)

Consequently, with the understanding that they create geographical, political, economic, environmental, cultural, social and socio-ecological conditions distinct to any that may be experienced or perhaps understood by mainland policy makers, the analysis to follow centres the characteristics of islandness to illustrate that the impact of contemporary pressures, particularly climate change, piling on a history of marginalisation is to generate ongoing uncertainties over the long-term survival and furtherance of the community. The experience upon which these concerns form is the depopulation of Inishark.

2.4.2 The Depopulation of Inishark

Inishark (*Inis Airc*), or Shark Island, is 2.5 km long and 1.2 km wide. Its 'unusual geology' includes some of Ireland's oldest rocks, and ice age tills that 'are some of the westernmost Ice Age sediments in Europe' (Meehan *et al.*, 2019). The island is a site of identified ecological importance, including as a Special Area of Conservation (SAC) for the Corncrake (*Crex crex*) (National Parks and Wildlife Services, 2015). St Leo built a monastery on Shark in the 7th century, resulting in a distinctly localised culture and socio-ecological relationships incorporating a local *turas* tradition (Kuijt *et al.*, 2015; Kuijt *et al.*, 2021; Lash, 2018; Lash, 2019; Quinn *et al.*, 2018). Inishark and Inishbofin share remembered and clearly understood links for generations. Family names are common to both islands, with marriage and movement between them regularly practiced. From the 19th century, the people of Shark were usually buried at St Colman's Graveyard in Bofin (Lash, 2019: 21).



Figure 2.5: Looking across Shark Sound from Westquarter Mountain, Inishbofin Island towards the ruins of Inishark Village, Inishark Island.

Source: Author (2022)

Separated from Inishbofin by Shark Sound, a narrow stretch of water with dangerous currents, Inishark has no harbour. The community navigated this thoroughfare to Inishbofin for religious services, for supplies, for post, and for medical aid. The solidarity of shared socio-cultural experience at the periphery combined with direct lineage links, is that the people of these islands viewed each other as kin. Shark and Bofin Islanders were therefore one clan or community living on sister islands. The Islanders of Inishark remain known to those of Inishbofin through the hybrid memory actionality and strategic remembrance processes analysed in Chapter 5. An Inishbofin documentary maker, Ciaran Concannon, produced 'Inis Airc, Bás Oileáin' ('Inishark, Death of an Island') in 2007 for TG4, the Irish language public service broadcaster. The ruins of the village on Shark, clearly visible from Inishbofin (Figure 2.5), symbolise one potential future.

Shark's people were known for their ability to predict weather and its fishermen as 'the best and most practical ... on the west coast' (Browne, 1893). Demonstrating how society and environment are mutually contingent and co-constructive, the convergence of changing patterns in the socio-ecological system resulted in the community of Inishark being driven to accept resettlement. An assemblage of drivers therefore combined to reduce the resilience and adaptive capacity of Shark Islanders. For a short period in the late 1800s to early 1900s, implementations of Allies to establish a fishing industry and subsequent CDB projects had created temporary paid employment. This had served to support the community during a time of accelerated emigration. CDB works included a newly built national school in 1898, field enclosures, stone roadways, a 'breakwater near the island's landing place' and a renovated pier (Kuijt *et al.*, 2015: 135-6). Following Independence, government funding was allocated for completion of the pier in 1932 and a slipway with 'a winch to aid hauling up boats' but 'these infrastructural developments could do little to slow emigration or mitigate the danger of landing or launching in foul weather' (Lash, 2019: 368).

Less availability of labour resulted in challenges in meeting the remaining community members' needs, following the return to being fully dependent on traditional subsistence fishing and farming. Freeman (1958) notes in 1954 that there are 'now only nine ablebodied men, six of whom are needed to man a boat sea-worthy in winter'; 'an epidemic might be disastrous'. Allocation of roles, whereby men spent large parts of the day working at sea while women worked the land, required balancing of genders and ages for the community to persist (examined in Chapter 5, Section 5.3.5). Migration also reduced possibilities, and hope, of marriage or parenting, undermining future viability. The early

loss of the Irish language awarded little mainland 'value' to Shark's culture and heritage compared to Irish-speaking islands, many of which received ongoing infrastructural and other investment. Additional drivers were the lack of fundamental services including that the island had no resident doctor or nurse, no resident priest and, by the evacuation, no resident teacher. Furthermore, while neither island had electricity, Inishark also had no means of outside contact. Government policy required provision of a telephone line to island populations greater than 100 people. Connections for 'the small population to be served in each case and the heavy costs involved', according to then Minister of State at the Department of Posts and Telegraphs, T.J. Fitzpatrick, were unwarranted, with only the 23 most populated islands of the 84 then populated in receipt of a mainland telephone connection by 1979 (Flynn, 1998).



Figure 2.6: Photograph of framed newspaper article on display in Oliver's Bar, Cleggan. The article is 'Death of an Island' by Dixon Scott, Daily Mirror, Thursday 27th October 1960.

Source: Author (2017)

The framed newspaper article from 1960 at Figure 2.6 details the evacuation which occurred on 20th October that year, in which Scott writes: 'The Atlantic beat them. It hammered them into submission.' Several recent tragedies had occurred. In 1949, three young men from the Lacey family drowned on their return from Easter Sunday mass in Inishbofin (Figure 2.7). The death of a teenager by appendicitis two years before the evacuation is partially attributed by the Inishbofin community to the lack of a telephone line being installed. As Inishark was cut off for five days during a storm, a bonfire was lit to attempt to communicate with Inishbofin that help was needed. George Murray, aged 20 during the evacuation, recalls that the community was 'without tea, sugar and paraffin for five weeks' during the November and December prior to relocation as 'there were only six days when it was possible to leave or land on Shark' (Scott, 1960) because of a series of

severe storms. Twenty-three people from six families along with their possessions, and cats, dogs and hens, travelled on four Inishbofin skippered boats to Cleggan, as detailed by Scott (1960) who sailed with them. There, they were met by government representatives and given the keys to newly built bungalows in different areas along Galway's coast, eight acres of land, grazing rights and a share of bog (Scott, 1960). The cost to government to relocate the community was, Inishbofiners contend, less than the cost to repair and improve infrastructure on the island. In Inishbofin, Islanders' resistance and resilience form partly in response to the depopulation of Inishark, as memory, reminder, and a demonstration of respect.



Figure 2.7: The Lacey Memorial, Westquarter, Inishbofin Island. Source: Author (2022)

In Inishbofin, I am told:

'They'd still be there if they'd just given them two things. A safe pier and a nurse.'

Islander, 2022

'What happened [for Shark] is never that far away for us. It's like we've been fighting to stay ever since. And part of the fight is cos of them, you know. It's like we owe it to them.'

Islander, 2019

'You also feel really vulnerable. It's like something someone said about when the people left Inishark. One of the things you noticed. You were now on the edge. You were the front line. There was always this thing here, almost, in the mind-set of people that didn't realise it until afterwards. That when you looked west, there were lights on Inishark. So you weren't quite—there was another line of defence. Then all of a sudden, when they left, people felt, if that could happen to them, it could happen to us. You're starting to think that these sorts of communities are not quite as eternal as you thought they were.'

Islander, 2017

2.4.3 Population Trajectories and Demographics

The characteristics of islandness mean that population trends on the island of Ireland and on Ireland's offshore islands cannot be expected to be replicated. Additionally, Ireland has 'an unusual population history in the last couple of centuries' which means 'consideration of any aspect of its social or economic history over time must take cognizance of that' (Royle, 2008). During the 1840s, the people of the island of Ireland, then part of the United Kingdom of Great Britain and Ireland, were predominately agricultural with widespread dependence on the potato as a high yield crop. However, *Phytophtora infestans* (late blight), led to the Famine of 1845-1852. A soaring death rate, collapsing birth rate and accelerated emigration resulted (Royle, 2008), indicative of the socio-ecological relationships then prevalent, and the cultural, political and economic imperatives of colonialism. Therefore, the all-island population of 8,175,233 in 1841 fell to 6,552,115 in ten years to 1851 (Royle, 2008). Illustrated in Figure 2.8, this declining trend continued for over one hundred years with the lowest population of 4,243,983 recorded in the 1961 censuses: 2,818,341 in the Republic of Ireland, and 1,425,642 in Northern Ireland.

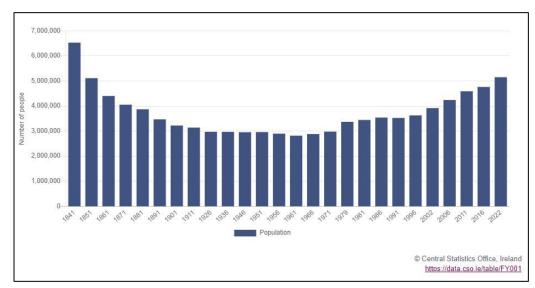


Figure 2.8: Population of Ireland at each census, 1841 to 2022. Source: Central Statistics Office (CSO) of Ireland (2023a)

Following the War of Independence from 1919 to 1921, the Anglo-Irish Treaty was signed in December 1921 with six counties in the north-eastern part of the island of Ireland remaining under British governance as Northern Ireland. Bere Island, County Cork was additionally retained until 1938 as an army barracks. The Irish Free State became effective from December 1922. Official declaration as a Republic followed in 1949. Rathlin Island, Ireland's most northerly inhabited island with a population of 141 people (NISRA, 2021) is

the only populated offshore island now within British jurisdiction. The discussion to follow pertains to the 26 counties and their islands of the Republic of Ireland where national population began to rise after 1961. In Census 2022, for the first time in 171 years, it exceeded five million people with a recorded 5,149,139. Compared to the intercensal period 2011 to 2016 with total growth of 3.8%, growth since the previous census in 2016 is shown to be 8.1% (CSO, 2023a).

At some point in time, 258 of Ireland's islands have been inhabited by human populations (Royle, 1994). In 1841, 211 of these islands were inhabited by 34,219 people (CSO, 2020). There is a decrease of 74% in total islands population from 1841 to 2022 (Figure 2.9). National population growth since 1961 is therefore not replicated for islands which demonstrate a continuing steep decline, with a slight increase of 2% since Census 2016 compared to the previous intercensal period (2011 to 2016) which shows a 4% decrease. Census 2022 records a total of 8,945 people on 85 islands (CSO, 2023b) potentially indicating that an increasing number now have permanent, year-round populations. However, the accuracy of islands' census data may not be comparable to that of the mainland. The two key influencers are the intermittent residency of Islanders who must relocate part-time or seasonally for employment and education, and the part-time and/or seasonal residency of non-Islanders who own second homes or rent holiday homes.

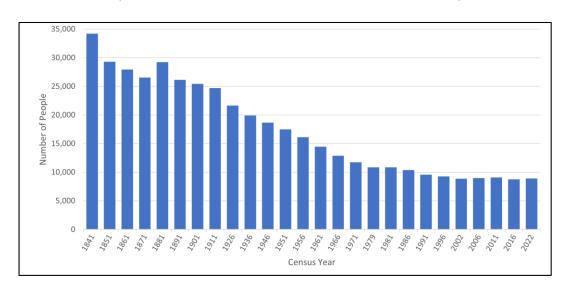


Figure 2.9: Population of Ireland's inhabited islands at each census, 1841 to 2022. Source: Adapted from Central Statistics Office (CSO) of Ireland data tables CNA35 (11/05/2020) and F1019 (29/06/2023) by author (2023)

The absence or presence of a small number of residents is therefore of high statistical significance. Census questions that may suitably pertain to mainland living do not capture

the realities for island populations. With potential limitations in the data acknowledged, insight, though tentative, can nonetheless ensue. Analysis finds that the total population of the 40 non-linked, 'true' inhabited islands is 3,301 people. Five islands have a population of one, and 26 have a population of less than twenty. One island, Haulbowline off County Cork, is a military base with a population of 149 people. It, depopulated, not contemporaneously inhabited and privately owned islands are not included in the *Our Living Islands* policy (Government of Ireland, 2023a). There is a lack of continuity apparent in the definition of islands applied in government policies. In *Our Living Islands*, the definition of islands used in that document is on page 7:

'In the context of this policy, islands are defined as islands that are cut off daily by the tide, are not connected to the mainland by a bridge or causeway, have permanent year-round populations and are not in private ownership.'

County	Island	Population
Cork	Bear (Bere)	218
Cork	Cléire (Clear) (Cape Clear)	110
Cork	Dursey	3
Cork	Heir (Hare) (Inishodriscol)	22
Cork	Long	17
Cork	Sherkin	110
Cork	Whiddy	31
Donegal	Árainn Mhór (Arranmore)	478
Donegal	Gabhla	15
Donegal	Inis Mhic an Doirn	12
Donegal	Inish Bó Finne	16
Donegal	Tory (Toraigh)	141
Galway	Árainn (Inis Mór)	820
Galway	Inis Oírr (Inisheer)	343
Galway	Inish Meáin (Inishmaan)	184
Galway	Inishbofin	184
Mayo	Clare (Inishcleer)	138
Mayo	Clynish	3
Mayo	Collanmore	5
Mayo	Inis Bigil	12
Mayo	Inishlyre	3
Mayo	Inishturk	56
Sligo	Coney (Inishmulclohy)	1
Total		2,922

Table 2.1: Populations of Ireland's 23 PPNN islands in Census 2022. Some islands have similar names including Inishbofin/Inishboffin/Inish Bó Finne in Counties Galway and Donegal. Source: Adapted from Central Statistics Office (CSO) of Ireland data table F1019 (29/06/2023) by author (2023)

This grouping is referred to in this thesis as *Permanently Populated Non-linked Non-privately owned (PPNN)* islands. These 23 islands have a combined population of 2,922 people (Table 2.1). In Census 2022, Ireland's population is 83% higher than 61 years previously (CSO, 2023a). The ten PPNN islands recording the highest populations in Census 2022 are shown in Table 2.2, which also details these islands' population changes from the first to current census, and from Census 1961 after which contemporary national population growth commenced. In contrast to the rates of national increase after 1961, island populations have continued to decline at an average rate of 31% for the ten islands listed, with many near or exceeding a loss of half of their population in this period.

Island	1841	1851	1961	1996	2011	2016	2022	1841 to 2022	1961 to 2022
Árainn Mhór (Arranmore), Donegal	1,431	1,166	948	602	514	469	478	-67%	-50%
Bear (Bere), Cork	2,122	1,454	382	212	216	167	218	-90%	-43%
Clare (Inishcleer), Mayo	1,615	845	205	136	168	159	138	-91%	-33%
Cléire (Clear) (Cape Clear), Cork	1,052	819	235	145	124	147	110	-90%	-53%
Inis Meáin (Inishmaan), Galway	473	503	357	191	157	183	184	-61%	-48%
Inis Mór (Árainn), Galway	2,592	2,312	933	838	845	762	820	-68%	-12%
Inis Oírr (Inisheer), Galway	456	518	358	274	249	281	343	-25%	-4%
Inishbofin (Inis Bo Finne), Galway	1,404	909	248	200	160	175	184	-87%	-26%
Sherkin (Inisherkin), Cork	1,131	696	101	98	114	111	110	-90%	9%
Toraigh (Tory), Donegal	399	402	264	169	144	119	141	-65%	-47%
Average % change								-73%	-31%

Table 2.2: Population change from Census 1841 to Census 2022 for the ten highest populated PPNN islands.

Source: Adapted from Central Statistics Office (CSO) data tables CNA35 (11/05/2020) and F1019 (29/06/2023) by author (2023)

In 1995, the first islands policy followed the depopulation of another ten islands between Census 1986 and 1991 (Royle and Scott, 1996). Accordingly, Census 1996 is included in this analysis (Table 2.3). Decline continues with losses of approximately one fifth to one quarter of 1996 populations by 2022 for some islands. Compared to 1996 to 2016 with almost 13% decline, from 1996 to 2022, average decline is 3% (3,145 to 2,922 people). While some data may potentially skew outcomes, a slowing of the decline rate in this period likely results from two drivers. These are: (1) initiatives undertaken by Islanders in tourism, and (2) a policy focus on development of harbours, access and transport.

Island	1996	2022	1996 to 2022
Árainn Mhór (Arranmore), Donegal	602	478	-21%
Bear (Bere), Cork	212	218	3%
Clare (Inishcleer), Mayo	136	138	1%
Cléire (Clear) (Cape Clear), Cork	145	110	-24%
Inis Meáin (Inishmaan), Galway	191	184	-4%
Inis Mór (Árainn), Galway	838	820	-2%
Inis Oírr (Inisheer), Galway	274	343	25%
Inishbofin (Inis Bo Finne), Galway	200	184	-8%
Sherkin (Inisherkin), Cork	98	110	12%
Toraigh (Tory), Donegal	169	141	-17%
Average % change			-3%

Table 2.3: Highest populated PPNN islands population change, Census 1996 to Census 2022. Source: Adapted from Central Statistics Office (CSO) data tables CNA35 (11/05/2020) and F1019 (29/06/2023) by author (2023)

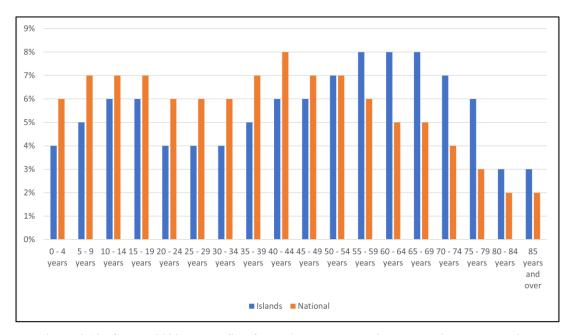


Figure 2.10: Census 2022 age profiles for all islands population and national population. Source: Adapted from Central Statistics Office (CSO) data tables F1002 and F1042 (29/06/2023) by author (2023)

Importantly, there are fewer younger people and more older people in island populations. Figure 2.10 illustrates a shift in population make-up that occurs at the age point 50-54. To

this point, the percentages of younger age demographics is higher nationally and lower for islands. For instance, 4% of islanders are in the 30-34 age bracket compared to 6% of the mainland population. At age 50-54, the national and islands rate is equal at 7%. After this, rates across all age groups from 55 to 85 and older reduces nationally and significantly increases for islands. In the islands data, for instance, people aged from 65 to 85 years and over total 27%, while the national proportion is 16% in Census 2022 (CSO, 2023a, 2023b).

A higher number of retirees at 19% live on islands compared to 13% nationally, according to *Our Rural Future: Rural Development Policy 2021-2025* (Department of Rural and Community Development, 2021: 88). Only 15% of islands population is aged 0 to 14 years; the national rate is 20% (CSO, 2023b). Additionally, 29% of Islanders are aged between 20 to 49—the core family formation demographic—compared to 40% nationally (*ibid.*). Employment figures for islands are less than the national average though vary considerably (Department of Rural and Community Development, 2021: 88). At 32%, the island population with no formal education after primary level is more than double the national average of 15%, and the percentage of people on islands holding a Third Level qualification is 18%, also considerably lower than the national rate of 25% (Department of Rural and Community Development, 2021: 88).

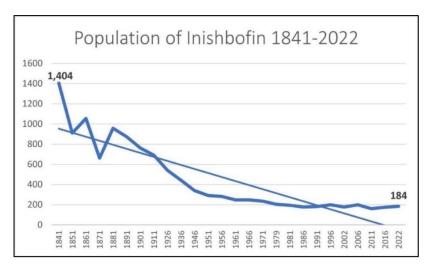


Figure 2.11: Population of Inishbofin Island, Galway from Census 1841 to 2022. Source: Adapted from Central Statistics Office (CSO) data tables CNA35 (11/05/2020) and F1019 (29/06/2023) by author (2023)

The population density of Inishbofin in 1841 was 117 people per km². Based on Census 2022, it is 15 people per km². Figure 2.11 charts Inishbofin's population from Census 1841 to Census 2022. In addition to the characteristics of islandness mentioned, the date of the Census is highly influential for an island population. The 2022 census took place on Sunday,

3rd April. I was then resident in Inishbofin and completed it there. According to members of the community, Inishbofin's permanent, full-time resident population is closer to 150 people. Yet this may not be the 'full picture' either and it is increasingly complex. Correspondingly, it is challenging to accurately account for the diversity within the population make-up, and how it is affected by the season and the weather. Population movement incorporates students attending third level education who return at weekends and holidays, parents and secondary school age children living on the mainland who usually return on Friday evening to Sunday evening or Monday morning, Islanders who move between the mainland and the island for work, and second-home owners (notably retirees) who often extend their time on the island as they reduce their mainland commitments.

2.4.4 Contemporary Population Stratification

Low level, consistent inward migration has become a feature of the island's contemporary experience, as it was in its historic past. There are broadly three categories of migrant island resident, each of which is connected to the island and becomes part of the community in varying ways. The first is *Islander incoming*. Older Islanders may return to retire, often having lived in cities like New York or London throughout their working lives for decades. Some younger Islanders may return after years working and travelling abroad. They may be accompanied by partners and/or children. Additionally, descendants—children and grandchildren—of Islander migrants relocate to Inishbofin. Their stories offer similarities; experiences of immediate connection to the island and a feeling of returning 'home'. As land is scarce here, inheritance may open the only avenue of return. Local kinship can appear complex to outsiders. Some families with the same surname are not related which, in an island community of approximately 150 people, may seem initially surprising. These lines are known to Islanders on a continuum since before written records began. For migrant Islanders and their families, and migrant descendants, returning means (re)insertion into clan and community, as components of a living network.

The second category is *non-Islander full-time* residents. These residents are the individuals and families with no kinship connection, often previous holiday-makers here, who relocate full-time. They join the community, working in island-based jobs or remotely. Younger people and families who relocate thus are predominately renters. Others who relocate full-time are mainland or overseas retirees who purchase second island homes. Inishbofin's permanent full-time residents today include people from Dublin and Galway cities and across Ireland, and from countries including Australia, Belgium, England, Finland, Germany, Italy, Scotland and the USA.

The third category is *non-Islander part-time* residents. They own a holiday home on the island or may hold long-term lease or rental agreements. Throughout the year, they are variously present for periods of days to weeks. Repeat holiday makers are also significant. Renting the same house within the same period year-to-year, sometimes for the entire summer, these are usually families with children with some now including second or third Bofin generations. Another core population strata is returning workers within tourism: non-permanent, full-time though seasonal residents. Chefs, bar tenders and housekeeping staff, the majority people in their twenties and thirties, they work in Inishbofin from approximately early April to mid-September every year. A few secure year-round employment. The majority work elsewhere over winter and return the next summer. Winter and summer populations are divergent in composition, therefore, as who is in at any time is influenced by the season and weather. In summer, the greatest and highly impactful population flux results from the arrival of day-trippers. Figure 2.12, exemplar of typical Inishbofin days in January and in July, is illustrative of island population patterns.

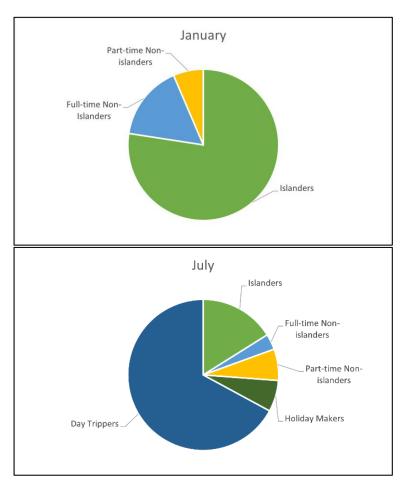


Figure 2.12: Representation of Inishbofin population composition comparing typical days in January and July.

Source: Author (2023)

2.5 Conclusion

This chapter has considered the characteristics of islandness from the global to the national to Inishbofin, through exploration of theory and literature within island studies that inform this research. It outlined Inishbofin's history to highlight that historical occupations greatly shaped local culture, with impacts today including the loss of the Irish language and ongoing marginalisation. The depopulation in 1960 of Inishark was juxtaposed with its contemporary meaning in Inishbofin to argue that it now contributes to community resistance and resilience, as memory and as respect of the people of Inishark. It is also proposed that Inishark became depopulated as a result of changing socio-ecological relationships which reduced islanders' adaptive capacity and increased vulnerability. Drawing on Census data, the decline in population for the islands compared to the mainland was analysed, further illustrating the impacts of marginalisation. Thus, in examining the characteristics of islandness, and contextualising ongoing challenges population decline and marginalisation—this chapter begins to respond to the overall research consideration of the relationships between culture, identities, and socioecological dynamics while outlining core data relevant for analysis of the research questions. Chapter 3, by evaluating the literature in the conceptual categories shaping this research—nature and culture, place and people, and weather and climate—will build on this chapter to further analysis and understanding in response to the research aims.

3. LITERATURE REVIEW

3.1. Introduction

This review aims to evaluate and synthesise influential and current thinking within the primary conceptual categories shaping this research. Its intent is to contextualise and place this study within the existing literature, while considering if there are any apparent gaps in the literature. The conceptual groupings are *nature and culture* which incorporates natureculture, socio-ecological relationships and posthumanism, *place and people* or the specificity of place and socio-cultural drivers relevant to this research including dwelling, justice, colonialism, governance, memory and identity, and *weather and climate* in the context of the 'weather world' and climate change vulnerability, resilience, adaptation and justice. While separated here to facilitate discussion, all are interlinked and mutually constitutive with themes of temporality and spatiality also threaded throughout.

3.2 Nature and Culture

3.2.1 Nature-culture

The ideas that became formed into the research objectives of this work originated with the nature-culture, or nature/culture, 'question'. Early reading included a focus on Glacken (1992: 104) who states:

'... the nature and quality of human life have, early in Western civilization, been closely related to a teleological view of nature, to the idea of design, one drawn up by a god or gods, and planning a harmonious whole, with all life forms adapted to the environmental conditions for which they have been created.'

Glacken (1967) follows linkages between geographical and anthropological thinking in the intellectualisation of the relationship between human culture and the nature that this culture is a part of, and/or apart from, within western socio-cultural understandings. Glacken (1992: 103) establishes that ideas endure, they are not static, and there is difficulty in ascertaining exactly where it is that they begin. Glacken (1992: 103) identifies four major themes in western nature-culture thinking which are 'vital and powerful ideas or sets of ideas about nature and humanity current today' with a long history traceable to 'the ancient world'. These are: (1) the relationship of humans to other life, (2) examination of 'interrelationships in the natural world', or ecology, (3) the 'transformation of nature by

human agency', how this has been interpreted and ideas resulting from this, and (4) 'subjective, emotional, and aesthetic reactions to nature' (Glacken, 1992: 103). The scholarship analysed from the Enlightenment or Age of Reason through the 17th and 18th centuries, evidences a practical emphasis on weather, environmental and climate change as a result of human action, and population growth. These ideas continue to dominate contemporary discourse. Glacken (1967: 426-427, 476-477) discusses Descartes whose *Discourse on Method* (1637) defines the goal of attaining 'purposive control over nature' through 'applied science' at a time when hydraulic engineering in the Netherlands was creating new land. Descartes therefore 'had confidence in the power of knowledge to control the environment' and outlined the ways in which '[humans] can make ourselves, as it were, the lords and masters of nature' (Glacken, 1967: 476-477).

Montesquieu's 'meteorological climate theory' of 1678 associated use of natural resources and response to climate with the evolutionary 'level' of societies, attributing both to cultural development (Glacken, 1967: 565-578). Montesquieu proposed that the most successful societies, those located in the 'optimal' climatic conditions of central Europe, were successful because of how nature was utilised using modern production systems and new technologies, contributing to 'development'. Cultural development was benchmarked by economic success founded on viewing the natural environment primarily as a resource for human populations. Concurrently, this was aligned with the on-going fear that nature still could overwhelm culture, underpinning the conceptualisation of two oppositional forces: nature and culture. Buffon's thesis, published between 1749–1788, was founded on a hierarchical nature-culture relationship with natural resources valued for how they can serve human society (Glacken, 1967: 658-659). Buffon's scholarship, 'read by practically every educated European' (Mayr, 1982: 101), theorised that humans had assumed an active role in shaping the natural world, 'seconding' the 'operations of nature' (Glacken, 1967: 655, 664) and becoming more civilised as an expression of humans as 'nature's most precious production' and 'man' as a 'vassal of heaven' and 'King on Earth'.

These and other theories, in application of an Enlightenment logic incorporating science and philosophy, strongly influenced subsequent development of reason-based methodologies, including those used in justification of colonialism and racism, and that have contributed to anthropogenic climate change and biodiversity loss. During the Age of Reason, and the European switch from an agrarian to technological culture from the mid-1700s and ongoing industrialisation, their influence is apparent. Malthus's (1798) theory of exponential population growth and arithmetic food supply growth, also discussed by

Glacken, and following similar theories by Derham (1713), is an example. Recognised as damaging, and discredited, Malthusian theories continue to stimulate contemporary academic discussion (for instance, Chatterjee and Vogl, 2018; Gu and Kung, 2021; Ojeda, Sasser and Lunstrum, 2020; Pedersen *et al.*, 2021).

The influences of Descartes in contemporary science and philosophy include acceptance of another binary; mind/body dualism or more recently, the matter/mind dichotomy. A nature-culture conceptualisation proposed in the 19th century by Coleridge distinguishes 'Reason' as a higher form of perception available only to humans, and 'Understanding', a lower order, allocated to (other) animals, as one of many theoretical 'efforts to portray the essential differences between human and other forms of life' through the 1800s (Glacken, 1992: 105). These ideas influenced de Chardin's Phenomenon of Man, written in the 1930s, which asserts that humans have the only form of consciousness and are superior to all other animals. Nature-culture thinking therefore now evidenced an anthropocentric view of the human race with a crude form meaning that the rest of nature was viewed as 'nothing but human resources' and an exalted form situating humans as superior custodians (Glacken, 1992: 106). Glacken (1992: 106) argues that the crude form survives as the 'purely utilitarian conception of nature' evident as the 'dominant philosophy of many governments', the 'developer's mentality' and 'many national and international corporations and conglomerates'. It is resonant in, for instance, 'ecosystem services' narratives today. The 'philosophies, concepts and stories' used to 'make sense' of 'today's global turbulence' are often 'inherited from a different time and place' and are 'unlikely to help us solve it' (Moore, 2016: 1). Glacken establishes that the persistently western foundational concept is of an adversarial nature-culture relationship whereby humans are separated from and subjugate the 'natural world' so that a conceptual 'western civilisation', or culture, will achieve its highest potential. Thus, nature-culture division derived culture 'divides' to 'evolve', 'progress' and 'develop'. A final argument of Glacken's included here for its influence on this thesis is the relevance of interdisciplinary thinking:

'A historian of geographic ideas . . . who stays within the limits of his discipline sips a thin gruel because these ideas almost invariably derive from broader inquiries. Of necessity they are spread widely over many areas of thought. Problems like this must be faced by anyone who wishes to go beyond the narrowest limits.'

Glacken (1967: viii)

3.2.2 Natureculture

Anthrocentrism 'sees humans as the source of all value, since the concept of value itself is a human creation, and that sees nature as of value merely as a means to the ends of human beings', with human exceptionalism as the view 'that humans are different from all other organisms, all human behaviour is controlled by culture and free will, and all problems can be solved by human ingenuity and technology' (Oxford Reference, 2023a, 2023b). Haraway (2008: 11) describes human exceptionalism as 'the premise that humanity alone is not a spatial and temporal web of interspecies dependencies'. *Natureculture* is the term and reconceptualisation proposed by Haraway to replace nature-culture or nature/culture. Correspondingly, acknowledging that nature and culture are inseparable through a symbiosis of socio-cultural and biophysical entanglement, natureculture incorporates multispecies relationships (Fuentes, 2010; Haraway, 2008). Removing the hyphen or the slash may serve only to symbolically reunite the two realms yet, though nature has yet to receive the same status as culture in western societies (Caillon *et al.*, 2017), to begin to dismantle this binary 'is a political act in itself' (Jones, 2009: 320).

The transformation in analytical paradigms of nature and culture 'involved a twofold process of rejecting much of previous thought as ecologically unsound, together with an attempt to build on the past, where possible', according to Foster (1999: 366). The author identifies Geography and Anthropology as the two disciplines that 'adapted most easily' to the increase in environmental awareness evident from the 1960s. Foster (1999: 368) argues, with reference to Dunlop and Martin (1983), that the divide had been facilitated by 'the success', economic and technical, of the industrial revolution which gave 'the impression that human society is independent of its natural environment' and centred the humanistic view. In exploring how these barriers were theoretically addressed, Foster (1999: 369) examines Marx as an environmental thinker within a materialist framework, under the term 'metabolic rift'. The author takes as a starting point Marx's ([1844] 1932) critique of capitalism which was 'governed by a critique of the alienation of nature under capitalism', both human nature and 'the alienation of nature as the external body of humanity' (Foster, 1997: 281).

'Man lives from nature—i.e., nature is his body—and he must maintain a continuing dialogue with it if he is not to die. To say that man's physical and mental life is linked to nature simply means that nature is linked to itself, for man is a part of nature.'

Extracted from 'Estranged Labour', Marx (1844)

In the period of Marx's writing (1815-1880), food production, with increasingly vast areas of land cleared to supply expanding urban populations, resulted in a decrease in soil fertility. Following von Liebig's (1840) work on the soil cycle, this was recognised as an environmental issue of great concern. Britain imported guano and bone, and patented and produced the first artificial chemical fertiliser by 1842 (Dixon, 2018), and the US passed the Guano Islands Act (1856) allowing possession of any island with large deposits of guano (United States Code, n.d.). Marx's use of the term 'metabolic' equates broadly to 'ecology' today (with 'ecology' first used by Haeckel in 1869). Foster (1997, 1999, 2000) identifies that Marx perceived capitalist extraction as impacting on previously stable earth cycles. Thus, Foster's use of the term 'metabolic rift' encompasses Marx's understanding of environmental disruption following human activities. 'Socio-economic metabolism' is a corresponding term now used to describe the human-controlled exchange of materials and energy between human societies and the rest of nature in service of capitalist production as a concept in ecological economics (Gabriel et al., 2020), as is the 'ecosystem services' concept. White et al. (2017: 34) argue that 'rift theories' and rift scholars have made 'important contributions' to the 'development of critical environmental theory (and ecosocialism more specifically)' yet its inherent binarism often means that it is limited on its own in 'theorizing in the age of the Anthropocene'. The authors (White et al., 2017: 34: original emphasis), agreeing with Moore (2015), observe 'that the dualist imaginary of the rift finds it difficult to grasp how capitalism develops through the web of life rather than on nature'. Moore's (2015: 1) argument is that 'since 2008, the flood of instability and change manifest in the allegedly separate domains of "Nature" and "Society" has become impossible to ignore'. In Moore's analysis of the 'metabolic rift', the limits of the rest of nature are assessed only according to the ever-changing demands of capitalism. For Moore (2015: 2), in contrast, capitalism moves from the concept of a world economy to a world ecology, whereby capitalism and nature, or the web of life, are mutually constitutive.

Accordingly, it can be argued that the separation of nature and culture ontologically and epistemologically continues to render a foundational schism in contemporary knowledge production within societies classified as 'western'. Jones (2009: 310) observes that 'modern knowledge systems like to divide, define, classify, and explain'. This thesis, with reference to Hulme (2011, 2017), identifies a resultant overreliance on quantitative climate change data as one outcome, as outlined in Chapter 1. It is evident in how the sciences are separated into the natural and the social, and particularly striking in Geography which recognises both yet institutionalises a division of the 'physical' and the 'human'. This can

contribute to widening the divide (Jones, 2009) though Tadaki *et al.* (2012: 547) discuss a 'cultural turn' in physical geography and climatology identified by Thornes and McGregor (2003) as *cultural climatology*. In Anthropology, increasing nature-culture analysis has necessitated development of disciplinary subfields including biological, environmental and political ecology anthropologies. Snow (1959: 11) in *The Two Cultures and the Scientific Revolution* decries the human/social and physical/natural division (the two cultures) as resulting in 'creative chances' being missed. Berkes (2017) advocates for '[elimination] of artificial disciplinary divides'. Dove and Barnes (2015: 39) propose that a consequence of the separation of nature and culture has been the exclusion of the environment by historians and social scientists through much of the twentieth century. Crate (2011) calls for social and natural scientists to recognise existing limitations and imagine new ways to work together.

This separation underpinning western societal function and knowledge enquiry is based on the dominant conceptualisation that *Homo sapiens* is not a part *of* nature. Williams (1980: 84) states: 'if we alienate the living processes of which we are a part, we end, though unequally, by alienating ourselves'. Thus, humans cannot be apart *from* nature. We cannot, for instance, be excluded from the microbiota inhabiting our 'human' bodies at a ratio of bacteria to human cells of ~1:1 (Sender *et al.*, 2016), or from the principles 'governing' the planet, including weather and climate. The issue, to paraphrase Wolfe (2020) and identify a process of this research, is not *what* we think about but *how* we think about it. Within ecofeminism, the nature-culture separation is responded to as a Cartesian masculinism. As a reductionist position enabling control and manipulation of not only (the rest of) nature and other animals, but humans too, it authenticates an 'impoverished and subordinated conception of the object of knowledge' (Plumwood, 1994: 121).

Moore (2011: 109) develops a 'unified theory of historical capitalism' that understands the accumulation of capital and the production of nature including humans as 'dialectically constituted'. Rather than *Anthropocene*, Moore (2016: 177) proposes the term *Capitalocene* to reject the Eurocentrism of climate change 'carbon fetishism' and industrialisation as the only source of the entangled environmental challenges currently experienced. Hulme (2011: 247) identifies a 'neoenvironmental determinism' and 'climate reductionism' resulting from a reliance on quantitative data that cannot 'measure' the human. Hulme (2017) further argues that to understand today's cultural politics of climate change, we must understand past perspectives. Climate change is 'a story about the meeting of Nature and Culture, about how humans are central actors in both of these

realms' that includes how the ideas of nature and culture are being constantly changed (Hulme, 2009: xxviii). For Moore (2016: 79), the separation of Nature and Humanity is 'deeply violent' as the 'humanity' of this separation excluded most humans including 'indigenous peoples, enslaved Africans, nearly all women, and even many white skinned men (Slavs, Jews, the Irish)'.

3.2.3 Socio-ecological Systems (SES)

Socio/social-ecological systems (SES), dynamics, mechanisms or relationships refer to the interdependent, complex and 'integrated systems of humans and environment' (Berkes, 2017). Rather than a discrete component being the focus, the system is examined as a complex structure with integrated sociocultural and ecological dynamics across human societies, climate, biodiversity and ecosystems that are constantly changing across time and scales (Berkes and Folke, 1998). Accordingly, history and local context are central to any such enquiry (Berkes, Colding and Folke, 2002). Increasingly, the IPCC is recognising this interdependence with its *Sixth Assessment Report: Impacts, Adaptation and Vulnerability* (2022) stating that it 'integrates knowledge more strongly across the natural, ecological, social and economic sciences than earlier IPCC assessments'. Thus, SES is a conceptual approach that considers both social and ecological conditions, and changes in any aspects of these conditions through time.

A theoretical approach aiming to reunite the realms of nature and culture by highlighting how they are constructed, Actor-Network Theory (ANT) develops a 'symmetrical' view across nature, culture and technology. Its development (Callon, 1986; Callon and Law, 1995; Latour, 1987, 1996; Latour and Woolgar, 1986; and others) contributed to a shift in theoretical focus towards the idea of agency based on the *relational*, whereby individual actors are less important than how all actors together form assemblages. Latour (1987) also develops the idea of 'technoscience', a neologism that combines society, science and technology to counteract the nature-culture divide. In ANT, therefore, all the network elements have agency (or actancy), or the capacity to act creatively, and so all are actors or actants whose identities are not innate but relational (Jones, 2009). Latour (1993) argues that 'we have never been modern' because the nature-culture divide is a modern conceptualisation discounting the relationality of all elements that make up life. Ergo, if the divide upon which modernity is founded has never truly existed, then neither has modernity.

Meshwork is the term proposed by Ingold (2011: 65) for what he describes as the 'entangled lines of life, growth and movement' of the world we live in 'behind the conventional image of a network of interacting entities'. Moving away from ANT, then, rather than the connected points of a network, it is interwoven lines of a meshwork that are emphasised (Ingold, 2011: 63). In contrast to an assemblage of heterogeneous components, the meshwork is conceived as a 'tangle of threads and pathways', and action is a result of the interplay of the forces along the threads and pathways. For Ingold, there are no individual components that can comprise actants within a network, therefore nothing can be an entity. This is because everything is a 'living tissue of lines' and so action does not result from agency distributed across a network but 'emerges from the interplay of forces that are conducted along the lines of the meshwork' (Ingold, 2011: 91, 92).

Material media describes the spaces occupied by living things—for instance, water as occupied by fish, or air by butterflies—and while material media do not contain agency, they are experienced through their 'currents, forces and pressure gradients' (Ingold, 2011: 92). Interaction occurs in these media which are necessary for such interactions; these are therefore conditions of agency yet not agents. Agency and intelligence are to be distinguished, which means that the *symmetry* of ANT is questionable as it does not fully incorporate the 'real complexity of living organisms' compared to 'inert matter' (Ingold, 2011: 93). Thus, what Ingold (2011: 94) describes as 'the essence of action' is not in aforethought but in the 'coupling' of bodily movement and perception, meaning that all action is skilled. Skill develops within an environment through dwelling and movement. Thus, Ingold breaks down a number of binaries including nature-culture and mind-body. Ingold's conception of becoming in the world differs from Latour's very clearly in their departure points. For Ingold, it is the living organism within a meshed environment, and for Latour, the actant in a network.

Ingold's conceptualisation is applied in this research, as outlined in Chapter 4. It is compatible with the perspective that the age of humanism, formulated on the nature-culture dichotomy, has reached an end while simultaneously recognising that humanism and its socio-cultural structures still dominate. Herbrechter (2022: 1) outlines critical posthumanism as a 'rigorous' and 'philosophical' undertaking 'concerned with the 'ongoing deconstruction of humanism' including 'anthropocentricism, essentialism, exceptionalism and speciesism'. As posthumanism is 'itself very much implicated in the paradigm change and the emerging new worldviews it describes', and potentially transformative, it necessitates new dialogue across the disciplines (Herbrechter, 2022: 2). This means that it

offers possibilities to try new hypotheses 'that may lead to greater political and ethical awareness of the place of the human, the nonhuman and their entanglement' which is essential to address climate and ecological issues according to Herbrechter (2022: 12) who argues for 'new forms of social, political, ethical, and ecological ways of thinking'.

Braidotti (2018) proposes that new fields of transdisciplinary knowledge constituted through a posthumanism framework are within two primary categories. The first is a critique of the 'humanist ideal of 'Man' conceptualised as the allegedly universal measure of all things', and as 'the universal powers of reason, self-regulating moral inclinations and a set of preferred discursive and spiritual values' combining a belief in the uniqueness of humans with a teleological worldview (Braidotti and Gilroy, 2016: 2). The second is a critique of species hierarchy and human exceptionalism. This is illustrative of how different knowledges are being constructed during a time of 'posthuman predicament' (Braidotti, 2018). Haraway has moved through different knowledge production from 'cyborg thinking' to 'companion thinking' (1991, 2008). Braidotti, Haraway, and Hayles (1999, 2005, 2012) whose work concerns cybernetics, gender and disembodiment, write through an ecofeminist perspective. In alignment with these ideas, this thesis aims to incorporate a 'flat' ontology. Marston et al. (2005: 51) describe flat ontology as dismantling the prioritisation of creating classification systems that lead to hierarchical (or vertical) and binary scale thinking, including global/local. The authors (2005: 51) propose that it opposes 'the deployment of forms or categories that operate by carving up the world into a delimited set of manageable object-types' to consider an 'unfolding state of affairs within which situations or sites ... as a collectivity of bodies or things, orders and events, and doings and sayings ... hang together'. The concept of collectivity is also pertinent in examination of how resilience forms and reforms, and in socio-ecological systems (SES).

Carpenter *et al.* (2001), recognising the diversity of meanings associated with the term, define resilience as 'the magnitude of disturbance that can be tolerated before a socioecological system (SES) moves to a different region of state space controlled by a different set of processes' while also highlighting the importance of simultaneous consideration of resistance. They define resistance as 'the amount of external pressure needed to bring about a given amount of disturbance in the system'. In 2002, Gunderson and Holling proposed their interdisciplinary theory of *panarchy* as a framework for examining transformative changes in adaptive systems that organises 'understanding of economic, ecological, and institutional systems' and the 'situations where all three types of systems interact', centring ideas of predictable and unpredictable change occurring over a diversity

of rates, scales and hierarchies. These ideas are pertinent to the ongoing population decline experienced by Island communities, examined in Section 2.4 and including discussion on the depopulation of Inishark of a confluence of spatial and temporal pressures—social, political, meteorological, oceanographic and the characteristics of islands, or islandness—that led eventually to the community's resettlement in 1960. In applying these perspectives, analysis in Chapter 7 aims to assess the current state of both resilience and resistance as pertaining to key infrastructures in Inishbofin to identify if this component of its socio-ecological system holds a level of resistance sufficient to withstand the increasing pressures associated with maintaining population stability and climate change adaptation, particularly when an effective framework to comprehensively gather or incorporate local knowledge systems into policy and practice is lacking across local, regional or national governance processes and structures.

Similarly, Olsson and Folke (2001) analyse multiple scalar links between ecosystems, practices and institutions, including a local fishing association, to examine crayfish and watershed management at Lake Racken in Sweden. Their focus on local knowledge yields interesting findings. Recognising the breath and importance of local ecological knowledge, yet also that its existence does not necessarily lead to sustainable ecosystem practices, they argue that new institutional arrangements and processes are required for local knowledge to be effective. Here, they identify a key challenge: the need for these processes, organised across multiple scales, to be aligned with ecosystem dynamics so that socio-ecological systems become more resilient to change (Olsson and Folke, 2001). They additionally identify 'a "perception gap" between conventional policy making and management by local communities in the real world' which, were it to be addressed so that scientific knowledge is combined with local knowledge at multiple governance scales, could lead to development of management processes for socio-ecological systems to more effectively strengthen their resilience (Olsson and Folke, 2001).

In a complementary approach to managing resilience, Walker *et al.* (2002) propose that it is challenging to meaningful project the future of any socio-ecological system, given their inherent complexities and the realisation that 'even the uncertainties are uncertain'. Thus, the challenge they are interested in is how resilience can be formed through the 'process of co-discovery' involving diverse stakeholders including community members, scientists and policy makers while incorporating SES, to forge new 'resilience pathways' (Walker *et al.*, 2002). Their proposed framework is underpinned by four solution-focussed steps which start with defining and understanding the system including its spatial boundaries,

stakeholders, institutional arrangements, history, ecosystem services, and controllable and non-controllable variables. The next step is examination of future scenarios and visions incorporating development processes and the often diverse interests of stakeholders. This is followed by analysis of the future states of the system including uncertainties, and finally, step four focuses on evaluation and analysis leading to a management approach that accounts for multi-states of resilience (Walker *et al.*, 2002). They also highlight the challenge in identifying thresholds with a socio-ecological system.

The concept of resilience in examination of complex socio-ecological systems and how they may be sustainably managed is, however, variously defined according to Meerow et al. (2016). Thus, they analyse current conceptualisations to argue that there are six contradictions, or tensions, in the literature on resilience, with a specific focus on cities: '(1) equilibrium vs. non-equilibrium resilience; (2) positive vs. neutral (or negative) conceptualisations of resilience; (3) mechanism of system change (i.e., persistence, transitional, or transformative); (4) adaptation vs. general adaptability; (5) timescale of action; and (6) how 'urban' is defined and characterised' (Meerow et al., 2016). This sixth tension corresponds with the debates in islands studies discussed in Section 2.2.3. Arguing that resilience 'serves an important function as a boundary object', though the term boundary object is itself 'malleable', and that cities as complex systems necessitate engagement across disciplines and stakeholders, Meerow et al. (2016), establish that this is a 'contested process' whereby 'motivations, power dynamics, and trade-offs play out across spatial and temporal scales'. Corresponding with Walker et al. (2002), Meerow et al.'s (2016) contentions, though founded on urban studies, contain application for other distinct places such as smaller islands too, including their call for the 'five Ws of urban resilience' to underpin examination of these issues: resilience for whom, what, when, where, and why.

Folke (2006) also recognises that resilience is a challenging concept to apply in analysis of SES and additionally proposes that disturbance resulting from pressures can potentially result in innovation and development. This is an outcome arguably evident in the initial development of Inishbofin's tourism sector from the 1960s without external supports, and in advance of infrastructures being provided through external governance, thus creating local employment opportunities that contributed to some reduction in the rate of population decline (Sections 2.4.3 and 7.10.3). It also evidences the community's intrinsic adaptive capacity, aligning with Folke's (2006) contention that a resilient SES is capable of 'doing new things'. Expanding on these ideas, Folke (2006) draws from Holling (1986) and

Gunderson and Holling (2002) to discuss the Adaptive Renewal Cycle model whereby these complex systems go through cycles of change over time with a pattern of growth, collapse, and renewal across four stages: 'periods of exponential change (the exploitation or r phase), periods of growing stasis and rigidity (the conservation or K phase), periods of readjustments and collapse (the release or omega phase) and periods of re-organisation and renewal (the α phase)'. This model, applied conceptually and/or analytically, proposes that incremental change is followed by rapid change in response to disturbance, meaning that instability and stability equally contribute to behavioural patterns within any system. These conceptual and theoretical approaches are prevalent in studies of risk, vulnerability, resilience and adaptive capacity with island communities.

Past and present adaptive cycles for the island of Rodrigues, east of Mauritius, are investigated by Bunce et al. (2009) who, focussing on the collapse and recovery phases, propose that these lack clear delineation in practical application. While their findings suggest that socio-ecological systems 'may get stuck in a post-collapse recovery, in which no structure emerges', they question if the Adaptive Renewal Cycle model may lose some of its application 'as rapid global change redefines temporal and spatial scales' or if a 'more onerous parable of regional up to global unsustainability' (Bunce et al., 2009) prevails. Delgado, Marin and Pérez-Orellana (2020) apply the adaptive cycle to conceptualise socialecological system changes for Chiloé Island, Chile. They identify six primary 'society-nature events (drivers)' over the last 190 years: the Tantatuco Treaty that incorporated the island to Chile in 1826; the 1960 earthquake; the development of a mussel farming industry in 1967; the onset of Chile's neoliberal economy in early 1974; and development of the export salmon farming industry in the early 1990s, and its collapse with an outbreak of infectious salmon anemia in 2007 (Delgado, Marin and Pérez-Orellana, 2020). Examination of these processes, historical and more recent, across scales leads to understanding of how socio-ecological behaviours change. They find that the system is at a 'critical moment' and that 'traditional culture has been disintegrated by external, global pressures' (Delgado, Marin and Pérez-Orellana, 2020). Connell (2013: vii, 120), analysing contemporary exposure to risk in a selection of Caribbean, Indian and Pacific oceans smaller islands, examines 'how the interactions between economics and environment play out' to argue that, despite varying outcomes, 'a poverty of opportunity pervades social and economic life'. Abel (2003) examines the Caribbean island of Bonaire to propose that ecotourism can be 'understood as a perturbation of a complex human ecosystem' that is now approaching a stable state on this particular island, having been driven by external/internal energy flows

that impact on population density. Becken (2005), analysing interactions between climate change and tourism in Fiji, finds that tourism operators focus on adaptation to typically projected risk like cyclones or storm surges rather than recognising 'accumulative impacts or more abstract impacts'.

For Ireland's islands, with long and varied histories of being inhabited and abandoned possibly connected at times to shorter-term climactic change (though relevant available data is lacking on this point)—these approaches to socio-ecological systems and resilience in the literature are applicable. In more recent centuries, island socio-ecological systems including their human populations were influenced by seasonal migratory patterns (people, marine animals, birds), the imperatives of sustenance living and livelihoods, raids, sometimes massacre or mass eviction during colonisation when traditional socio-cultural systems were restructured, and during the post-independence 1900s, government policies of resettlement. In the present, tourism, livelihoods, housing, technology, population decline, biodiversity loss and climate change are all of challenge. Thus, while cycles of vulnerability and resilience through growth, collapse and renewal are persistently evident, the issue of contemporary climate change demands a systematic approach to resilience management for island communities. While this thesis does not specifically apply any one of the resilience management frameworks discussed, it is indebted to and draws from all in its attempt to describe and understand the socio-ecological system in Inishbofin, and the interlinked yet changing patterns of resilience and resistance attributed to by its many components, with the aim of enhancing learnings for successful climate change adaptation. It also identifies and begins to address a gap in the literature for this kind of conceptual approach applied to a smaller Irish island.

3.3 Place and People

3.3.1 Dwelling and Relationality

Zapata *et al.* (2018: 479) state that 'posthumanist scholarship is rooted in a relational ontology, meaning that we come to know through our being with and in the world'. For Cresswell (2014: 22-23), with reference to Agnew (1987), place 'is a meaningful site that combines location, locale, and sense of place', with location its 'specific set of coordinates', locale the 'material setting for social relations ... visible and tangible aspects', and sense of place 'the more nebulous meanings associated with a place: the feelings and emotions a place evokes', yet additionally, place should be thought about in relation to 'space' and 'landscape'. Massey (1995: 182-185), with reference to Schiller, discusses an increasing 'felt

dislocation between the past and the present' with examples of national identity and globalisation processes that require a reconceptualisation of what 'place' is. Places are constructed from 'articulations of social relations' including trade, thoughts of home and the 'unequal links of colonialism' which are an internality of that place that simultaneously connect it to everywhere (Massey, 1995: 183). Additionally, Massey (1995: 183) proposes that construction of a place whereby only the past is accounted for in contributing to the implicit and explicit meaning of that place, discounts the 'history of the global construction of the local' and also 'presuppose[s] a particular relationship between the assumed identity of a place and its history'.

Massey (1995: 183) argues that while tradition can be seen to stymie change, there are alternative ways to think about it. Traditions exist both in the past and through being 'actively built' in the present. There is a dynamism from this ongoing interlinkedness, as discussed in Chapters 5 and 8. Different interpretations of place arise from 'competing histories of the present', 'wielded as arguments' over what the future should be which are constructed to 'confirm the views and convictions of the present', as Trouillot ([1995] 2015) examines. The past, then, is present in ways that are material and resonant, multi-vocal, and in the 'unembodied memories of people' through the 'conscious and unconscious constructions of the histories of the place' (Massey, 1995: 184). Along with Massey's (1995: 186, 191) discussion of the 'space-time' of place identity, as place is temporal as well as spatial, 'set in time as well as space' as places 'stretch through time', these ideas inform how this research considers place and identity within an islandness framing as a 'conjunction of many histories and many spaces', under the proposed process of hybrid memory actionality in Chapter 5.

Correspondingly, the 'scape' conceptualised in this research is the *islandscape*. This is an assemblage of oceanscape and landscape and place and time with the relationality of all in the environment contributing to localised socio-ecological relations. Yet 'islandscape' is a somewhat inadequate metonym as it can suggest a separation of humans and the rest of nature. In the conceptualisation here, it represents 'conjoined intimacy, locality and tactile inhabitation' perhaps containing 'a tension between proximity and distance, body and mind, sensuous immersion and detached observation' (Wylie, 2007: 1, 167) that is ultimately released through Ingold's perception of the environment as simultaneously being, inhabiting, merging, and sensing. Tuan's ([1974] 1990) concept of topophilia, 'the affective bond between people and place or setting', is also relevant. Tuan considers culture and environment, and topophilia (love) and environment as distinct, yet it is how all

these mesh that creates relationality with place. Buttimer's (1976) idea of the 'lifeworld' contains parallels, through the culturally routine socio-ecological patterns people live within that typically define their everyday experience of the rest of nature, space and time. As 'a concept describing the level of connection that individuals have with the people and environments in which they live' (Adger *et al.*, 2012: 113), place attachment is amplified within an island.

Sauer's ([1925] 1963) idea of the landscape is that humans, as agents of the landscape, are dictated by culture rather than by the environment, while for Hoskins ([1954] 1985), it is primarily 'the domain of history rather than geography', 'built up over time' in vertical layers in what Wylie describes as a localist conception (Wylie, 2007: 32, 33). Hoskins and Sauer shared a 'vision of the landscape ... rooted in empiricism', resonant with nostalgia and melancholy (Wylie, 2007; 33). In contrast, Jackson ([1960] 1997: 2) states that 'far from being spectators of the world we are participants in it'. Wylie (2007: 41, 42) describes this as articulating and advocating the view of the 'insider' or inhabitant, and valuing the everyday or 'vernacular' landscape. This demonstrates the tension between how an inhabitant understands their landscape compared to how it is represented in art or viewed by the non-inhabitant. Jackson rejected the state, its discourse, and the economic and technological prioritisations via centralised planning that abstracted landscape and discounted ordinary citizens (Wylie, 2007: 44). Jackson also responds to landscape as 'a source and repository of myth, imagination, symbolic value and cultural meaning' (Wylie, 2007: 45), ideas explored in Chapter 5. Jackson evidences a 'phenomenological current' with regard to his focus on inhabitation, with dwelling activities centred and also incorporating recognition of mobility and movement (Wylie, 2007: 51).

For Ingold, phenomenology, ecological psychology and anthropology combine to offer a way of viewing the landscape that challenges Cartesian binaries to argue that worlds exist before being lived in (Ingold, 2011: 179, 189, 191). Ingold describes previous ways of responding to landscape as the *building perspective*, including ideas of culture. The building perspective propagates distinction between human and nature in a hierarchical ordering as it lays meaning 'over the world by the mind' (Ingold, 2011: 156). Ingold's alternative is the *dwelling perspective*. Dwelling is also explored by other scholars (Cloke and Jones, 2001; Harrison, 2007) including Heidegger ([1951] 1993) who critiques Cartesian thinking as the *destruktion* (destruction) of Western philosophical tradition (Wheeler, 2020). Ingold (2011: 172, 173) proposes that actors' engagement with the material world through the practicalities of inhabitation are what make the world become a 'meaningful environment'.

Accordingly, Ingold's (2011: 173) being-in-the-world (my emphasis) rather than it being 'out there', creates the dwelling perspective. Another of Ingold's ideas is that there is 'indissolubility' (original emphasis) between humans and the landscape and environment. Living through this, through what the author refers to as the 'taskscape' or a pattern and unfolding of dwelling activities, is associated with temporality. Taskscape is the assemblage of activities of 'doing'. This breaks down prevalent ideas of 'a mind detached from the world' because the human is a 'being immersed from the start', constantly evolving and interacting with a constantly evolving and interacting environment (Ingold, 2011: 42). The cultural and the body, and nature and environment, are reunited with the human through relational associations where all are equal actants (Ingold, 2011: 133).

Assemblage theory, like dwelling, is relational. It is in widespread use with no 'single 'correct way to deploy the term' (Anderson and McFarlane, 2011: 124). Challenging earlier structures of relations between parts and whole, it emphasises 'emergence, multiplicity and indeterminacy' and is deeply concerned with time, place and space as Anderson and McFarlane (2011) discuss with reference to Deleuze and Guattari (1983, 1987). DeLanda (2006: 26) proposes assemblage as apt to frame examination of 'the problem of the relationships between the micro- and macro-levels of social phenomena'. Assemblages in motion are portrayed by Patel and Moore (2018) and by Tsing (2015: 61) who 'tackle[s] capitalism with a theory that stresses ephemeral assemblages and multidirectional histories'. Assemblage theory particularly contains a focus on potential relations, compared to the meshwork or ANT, for instance, where actual relations are of more concern. Similarly, affect theory considers that something becomes altered because of potentiality compared to actuality, with the relationship of potentiality defining outcomes (Thrift, 2004: 64). Thus, affective encounters mean that entities form through these encounters. This, Wilson (2017: 455) argues, places encounter 'firmly within the remit of difference and surprise'. Overall, while diverse, a commonality of these theories of relationality is that they take a posthumanism perspective in countering the dominant 'disassemblage' and reject the nature-culture binary.

3.3.2 Justice and Coloniality

Building on what Massey (1994: 250) refers to as 'the politics of location', an aim of this thesis is to illustrate how islandness and the specificities of place are interlinked and interdependent on wider processes through the spatial, temporal, historical and political, including conceptions of marginalisation. In the 1970s, theoretical consideration arose from the idea that 'space is socially constructed' which was added to in the 1980s with

recognition that 'the social is spatially constructed too' meaning that space and the spatial are 'also implicated ... in the production of history' and 'potentially, in politics' (Massey, 1994: 254). Thus, space is affective. It is 'a significant force shaping social action' (Soja, 2010: 2). Spatial and spatial justice thinking also centre the 'on their own terms' of nissology and islandness. Said (1994) states that seeking spatial justice is a 'struggle over geography'. In Ireland, a diversity of recent literature evidencing this perspective includes analysis after the 2008 financial crisis (Kearns (ed.), 2014), the spatiality of housing (Kitchin, Hearne and O'Callaghan, 2015), water supply (Bresnihan and Hesse, 2021), and climate justice (Banerjee and Schuitema, 2023; Davies and Kirwan, 2010).

Soja (2010: 1) describes the idea of justice as having a 'consequential geography' which is spatially expressed as 'more than just a background reflection or set of physical attributes to be descriptively mapped' yet observes that the term spatial justice is not yet widely used. The author proposes a 'socio-spatial dialectic' (Soja, 2010: 4) whereby spatiality is equated with social processes in a cojoined shaping of social relations and societal trajectories. Soja (2010: 9) proposes three levels where spatial justice is situated: the 'external creation of unjust geographies through boundary making and the political organisation of space', 'distributional inequalities created through discriminatory decision making by individuals, firms, and institutions', and 'uneven development and... globalisation of injustice'. The built environment physically represents spatial justice. Critical infrastructures are foundational to a functional society (Anand, 2017; Forzieri et al., 2018; Gandy, 2014; Stewart et al., 2009). Larkin (2013) examines infrastructures through the 'anthropological literature that seeks to theorize infrastructure by drawing on biopolitics, science and technology studies, and theories of technopolitics' as 'built networks that facilitate the flow of goods, people, or ideas and allow for their exchange over space' in alignment with Latour's theories. Road infrastructure development under European Union (EU) funding is a core project for consecutive Irish governments though Islanders say that 'the road stops at Galway [city]'. Challenges associated with key island infrastructures are examined in Chapters 7 and 8. Spatial injustice, then, is entwined with slow violence. Slow violence is described by Nixon (2011: 2) as:

'... a violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all.'

Galtung (1969: 171, 173) refers to how the silence of structural violence is such that it 'may be seen as about as natural as the air around us' yet results in the 'unequal life chances' of marginalised peoples. 'Structural and slow violence are inextricably linked' (Davies, 2019). An increasingly diverse scholarship is recently engaging with the concept of slow violence (Ahmann, 2018; Davies et al., 2017; Dehm, 2020; Till, 2012; Zhou, 2017). Spatial justice and slow violence can also be linked with socio-cultural conceptions of fairness. Fairness is examined by Adger et al. (2016: 1080) as 'an element of social and environmental justice' as it 'affects intentions, behaviour, and the legitimacy of state-society relations'. Royle and Scott (1996: 118) identify 'a possible unfairness here which is keenly felt by some islanders' in their examination of access and infrastructures for Ireland's islands, which is also a finding of this research. Nixon (2011: 7) argues that slow violence is often characterised by 'attritional catastrophes ... marked above all by displacements'. Inishbofin's experience is of slow violence through displacements resulting from colonialism, contemporary governance, the depopulation and resettlement of Inishark discussed in Chapter 2, population decline, migration, tourism, housing scarcity, and infrastructural damage, destruction and neglect.

Because of the dearth of study relevant to the island, and all the offshore islands, this research wrestles with questions arising, in part, from an interweaving of colonial and postcolonial events. These span from Cromwellian occupation of Inishbofin in 1653 (Chapter 2) to the repatriation of human remains in 2023 (Chapter 7), and are ongoing. They form a legacy contributing to socio-cultural realities including the threats of depopulation and climate change, and are intricately linked with the mainland of Ireland, colonisation, and contemporary governance. Postcolonial theory is considered as it is 'a way of addressing the cultural production of those societies affected by the historical phenomenon of colonialism' (Ashcroft, 2001: 7). Until recently, Ireland has not featured in wider scholarship on post-colonial experience, including in the work just referenced which its abstract describes as the 'most comprehensive analysis of major features of post-colonial studies ever compiled'. In recent decades, there has been a shift. Connolly (1999: 260) addresses the question—is Ireland post-colonial?—to surmise that 'where Ireland belongs has yet to settle into a single answer or set of answers'. McDonough (2005) asks 'was Ireland a Colony?' His answer, as with the majority of contributors to this edited volume, is 'yes'. Montaño (2011: 49) analyses the threat to the 'customary openness of the landscape and the mobility of a society accustomed to transhumance and large herds of animals' with the building of fixed dwellings, walls, hedges, ditches and fences as English settlers lay claim to

land, creating 'physical boundaries between the cultivated and the wild, between civilised and savage'. Communities continually adapted 'not only to local circumstances, but to the demands and influences of a ruling elite' (Taylor, 1980: 169). Flaherty (2015: 3) proposes the Rundale System as 'an agricultural system based not on competition, but on reciprocity and cooperation' 'characterised by share allocation through collective governance'. While there is no 'singular Rundale system' as it varies 'according to place and time', Flaherty (2015: 4) describes:

"... a distinct, yet diverse set of rural settlement features, such as openfield agrarian systems based on infield and outfield, nucleated village clusters or 'clacháns', joint holding and partnership tenure, systems of share allocation based on usufruct, subdivision, partible inheritance, and local institutions of resource governance."

Taylor (1980: 170-173) observes that the 'political cohesion of the clachan, both in reference to its relations with larger polities and its internal relations, was destroyed, leaving the isolated and impoverished tenant of the 19th century, and finally the citizenfarmer of the 1930s' ... resulting in adaptation of 'an 'individuating' and 'alienating' nature'. High migration followed these displacements and became 'a function of the demise of "traditional life" (Taylor, 1980: 173). Slater and Flaherty (2023: 620, 621), drawing on Marx's writings on Ireland, consider the 'degradation of both the reproductive capacities of the soil, and of the human populations it sustained', 'both physically and socially' as a 'corporeal metabolic rift'. Flaherty (2015: 30) proposes that changing 'patterns and interactions over time ... may have pushed individual systems into crossing into an identity-loss threshold'. Lash (2019: 424) proposes that maintenance of *turas* (ritual circuit of prayer) monuments was associated with the collective action of Rundale. Subsequent landlord reforms in Inishbofin and Inishark 'sought to dissolve collective holdings since the mid-19th century', while implementations of the Congested Districts Board (CDB) 'made Islanders into smallholders' in the early 20th century (Lash, 2019: 424).

Notwithstanding an expansion of post-colonial study specific to Ireland in recent decades (Horning, 2013, 2018; Morrissey, 2004; Smith, 1999; and others), investigation of coloniality of power and knowledge as a potential legacy of colonisation within state and other institutions of cultural authority and societal structures in Ireland does not yet seem to be a focus of the literature. Coloniality theories, which recognise the continuance of the nature-culture binary, are increasingly incorporated into studies of contemporary societal structures (Adebisi, Jivraj and Tzouvala (eds.), 2024; Grosfoguel and Georas, 2010; Kramer and Panepinto, 2024; Ndlovu-Gatschen, 2013; Stingl, 2016). Gardiner (2011: 714, 715)

observes that historical archaeology was able to 'flourish' when there was 'sufficient confidence within Ireland to allow acceptance of a past' that included the remains of colonisation. Lloyd's scholarship is relevant to the findings of this research. Lloyd (2001: 13) argues that the reason Ireland has often not been studied as post-colonial is a combination of official history, the state and nation being formed, and the discourse of state apparatuses and political institutions in the modernisation of Ireland, obscuring social processes. Lloyd (2001: 13) calls for established academic and public narratives that embed 'the rationalities of history' to be open to 'suggestiveness' and being critically challenged. Among Lloyd's (2001: 21) arguments is that the 'interface between the state formation and subaltern formations' is a space of violence. The new states wishes to enforce laws, rules and regularities on 'an unformed population' and therefore claims a 'monopoly of violence' (Lloyd, 2001: 21). Simultaneously, the new state is attempting to establish itself as modern, enlightened and civilised, the opposite of how it was represented by the coloniser, creating contradictions and recurrent displacements. These result from 'cultural hybridity' being formed, and 'continual transmission of memories both of resistance and containment into new institutional and quasi-institutional forms' (Lloyd, 2001: 24). Thus, a state institution may sometimes not dismantle the 'effects of the colonial discriminations it considers atavistic' (Lloyd, 2001: 24).

Aligned with consideration of the concept of slow violence, as earlier discussed, these theories lead to consideration of coloniality of power. Coloniality of power refers to the identification by Aníbal Quijano in the 1970s that the legacies of colonialism continue in societal structures and cultural identities, and as the epistemic foundations of knowledge production (Vegliò, 2021). Ahmed (2000: 11) rethinks 'how colonialism operated in different times in ways that permeate all aspects of social life ...' and Mignolo (2007) proposes that there 'is no modernity without coloniality' as 'coloniality is constitutive of modernity' with its roots in the hierarchies of classification of peoples in the sixteenth century. It then 'found its primary legitimacy with the use of physiocratic and biological models in the eighteenth and nineteenth centuries, respectively' (Castro-Gómez, 2008: 280) as evidenced in global locations. Quijano proposes that a hierarchy of knowledge classification is an 'epistemic strategy of domination' (Castro-Gómez, 2008: 283). Local forms of knowledge became 'deprived of their ideological legitimacy and subsequently subalterned' (Castro-Gómez, 2008: 282). Establishing the concurrent founding of humanistic sciences and modern colonialism, Said (1979: III) suggests that the conception of 'true' knowledge being non-political simply obscures the political circumstances that have created knowledge production, described as the geopolitics of knowledge (Castro-Gómez, 2008; Mignolo, 2008).

Repatriation is the most complicated post-colonialism issue, causing great distress for contemporary communities (Feld, 2022; Gulliford, 1996; Jenkins, 2011; Scarre, 2009). The repatriation of the human remains taken from the island's graveyard under colonisation in 1890, discussed in Chapters 6 and 7, is unprecedented in Irish history. Tension between communities and the institutions holding the remains of their ancestors is often analysed as representative of the Cartesian science-culture binary. Krmpotich (2010) argues that repatriation is about how kinship, collective memory and identity are co-produced as it 'builds on a shared history of embodied experiences across generations'. Ermine (2007), drawing on Poole, proposes the concept of an 'ethical space' whereby two societies with 'disparate worldviews'—descendent communities and institutions—centre engagement in a 'field of convergence for disparate systems' that acknowledges and addresses how the nature-culture binary is understood and responded to as part of a process of reconciliation.

3.3.3 Memory and Identity

To effectively explore ideas of Islander identity which are associated with resilience and vulnerability, though with differences in Islander and mainlander perspectives, this research draws on Breakwell's ([1986] 2015) conceptualisation of 'social psychological identity'. Breakwell ([1986] 2015: 10, 11) links 'intrapsychic and socio-political processes' as both contribute to identity making as a 'dynamic social product' understood 'in relation to its social context and historical perspective'. It incorporates Berenskoetter's (2011: 648) idea of identity as a process to 'establish a sense of Self in time', individually or collectively. Tajfel and Turner's (2004) theories of social group identity including in-group identification with outcomes of belonging, purpose and self-worth are considered too. Thus, concepts of spatially, temporality, and historical and socio-political influence underpin consideration of memory and identity herein, and their meaning for collective vulnerability and/or resilience. Social, or collective, memory theory analyses how societies remember, construct and sustain the past, how identity is shaped by these memories, and its socio-political implications. Individual memory co-exists with social memory and derives meaning within the interplay of both. Social or collective memory is not necessarily shared, agreed or the same memory. It describes the 'relations between history and commemorative symbols' and 'individual beliefs, sentiments and judgments of the past' (Schwartz et al., 2005: 254). Experience of the present 'very largely depends upon our knowledge of the past' and references 'events and objects which we are not experiencing when we are experiencing

the present' (Connerton, 1989: 2). Every recollection 'exists in relationship with a whole assemble ... the whole material and moral life of the societies of which we are part of or of which we have been part' (Connerton, 1989: 36). Social memory is 'conveyed and sustained by (more or less ritual) performances' (Connerton, 1989: 4, 7). Memory is therefore thoughts, and the act/s of thinking and writing, but also of practicing and rendering, such as through commemorative ceremonies. Memory is 'meaning-making', providing a 'narrative sequence' to how people live so that a sense of 'a common past' is essential to engender collectiveness as part of a society (Haripriya, 2020). Identities and memories are not things we think *about*, but things we think *with* (Gillis, 1994: 5; original emphasis). Marshall *et al.* (2022) write about 'engaging with weather agencies, presences and communications, such as winds and seasons' 'to wake up this memory in [our]selves, of how to live in balance from a place of connection, of wholeness'.

Giddens' (1984) opposition to the individual-society binary forms from the concept that speech and everyday practice continuously (re)create social structure, with ideas about how language enables individuals and societies to have form interesting to consider in relation to the native language loss in Inishbofin. Conceptually, this is reminiscent of Trouillot's (2015: 30) contention that 'words are not concepts and concepts are not words: between the two are the layers of theory accumulated throughout the ages'. Thus, human engagement with the world shifts between the discursive and the practical, responded to here as the realm where assemblage, dwelling and association occur. Bourdieu's ([1984] 2020: 13, 128) theory of the field of power is also interesting to consider. This is a space of positions that can only be occupied by an individual if capital (resources) is held, and from which power is exerted. Capital can be cultural, social, economic and symbolic. Forms of power co-exist as various fields (law, economy, education, art, religion, military etc.), or sub-spaces, within the space of positions. Ongoing power struggles reproduce the ruling class or elite and the mechanisms which produce it and a process of differentiation. The 'objective relations' between fields and how humans absorb their dispositions, or habitus, are through lived realities formed by socio-cultural interactions influenced by history (Bourdieu, [1984] 2020: 156, 169).

3.4 Weather and Climate

3.4.1 The Weather World

The relationship between weather, climate and culture examined in this thesis draws on the concept of the *weather world*. Response to the land and the sea results from a constant

shifting and reforming of the islandscape. This is influenced by immersion in patterns of weather associated with a deep knowledge of place that includes socio-cultural and socio-ecological understandings, as analysed in Chapter 5. This is the weather world. A weather world existence contrasts to Cartesian derived perspectives that humans are 'exhabitants' living only on the external surface of the globe (Ingold, 2011: 96, 111). Humans are 'indissolubly mind and body' and 'whole organic beings', as much biological as cultural, meaning that feeling the air and walking on the ground is more than simply 'making contact' with our surroundings: it means 'to mingle with them' (Ingold, 2000: 5; 2011: 115). Ingold posits that human cultural knowledge therefore develops in response to the particular meshed environments in which dwelling occurs. Similarly, Hulme's (2017: 29) argument is that knowledge of climate is 'bound up with places, bodies and practices', 'collective and cultural processes' and memory, as to "weather" the climate' means to 'dwell in a place fully'. Hulme (2017: 56) argues that 'social practices, cultural norms and material technologies' influence diverse experiences of climate yet as cultures are always in flux, so too is climate. Equally, as climates change, so do cultures.

An important distinction between weather and climate, for Hulme (2017), is in how they are experienced. Weather is 'instantaneous atmospheric conditions', inhabited, 'seen, heard and felt' (Hulme, 2017: 3). Climate, however, '[hints] at a physical reality that is both more stable and durable than the weather' as 'an enduring' and 'powerful' 'idea of the human mind' created by 'the cultures within which the idea takes shape' (Hulme, 2017: 2, xii). Within the dominant discourse, climate has a 'statistical existence', 'exist[ing] abstractedly as numbers' and 'virtually as numerical models' (Hulme, 2017: 1). Weather is 'ephemeral' and climate, in contrast, is an abstracted construction that contributes to societal stability. This means that climate is 'an *idea* invented by people to help stabilise one form of physical chaos – the weather – in order for them to live stably and creatively amidst this uncertainty' (Hulme, 2017: 91, original emphasis).

Hulme's contention of climate as an idea, and more specifically as a culturally stabilising idea, resonates with concepts discussed in Section 2.2 regarding the endurance of ideas (Glacken, 1967). Hulme (2017: 134) argues that climate became 'problematised' through the theories of political philosophers including Hume, Bodin and Montesquieu, and 'objectified' in the 18th and 19th centuries in western Europe with 'new scientific instrumentation'. From climate ideas associated with a deity, or the supernatural, a new iteration formed as a result of increasing understandings about time and glacial cycles, aligned in the following decades with new computational technologies (Hulme, 2017: 44-

48). Climate still holds 'prevalence and power' in its 'role in stabilising relationships between changeable weather and cultural life' so that humans and the rest of nature can inhabit a stable 'cosmic order' within a diversity of worldviews (Hulme, 2017: 41). Theoretically, then, embodied experience—individually and collectively—that forms within the weather world influences how the world is understood, and certain of these experiences are themselves abstracted into ideas, including climate. This distinction between climate as abstracted idea and weather as embodied experience is highly relevant to the weatherworld of Inishbofin. While the idea of cultural stability is engendered partly through the idea of climate stability, as Hulme illustrates, neither conceptualisation is reflective of the reality that both are in constant flux. This represents the continuing influence of the nature-culture binary as an imperative of cultural control over an 'out there' nature executed through epigrammatic human time.

In contrast, cultural stability and adaptive capacities in Inishbofin are partially founded on socio-ecological understandings that are not dependent on absolute climate stability as they incorporate an acknowledgment of the unknown. There is a clear ongoing causal relationship between weather and socio-cultural practice. Thus, climate is responded to as both a concrete and an abstract notion. It takes form through embodied ongoing negotiation within the 'rules' of socio-ecological systems which form over time, and is simultaneously abstracted as known patterns of predictable unpredictability within place. To live here requires at least some level of commitment to the socio-ecological relationships of the islandscape. Furthermore, as these understandings of the meaning of the inherent instability of culture, weather and climate are incorporated into identity making (Chapter 5), they contribute as an element of transformation to resilience and futuring processes (Chapter 8). This is a meshed environment where mingling occurs (Ingold, 2000, 2011). The weather world encapsulates how weather, climate, people and the rest of nature, through geo-physical and socio-cultural processes including the external and internal historical and political forces that contribute to shaping these, together constitute the dynamics of this place at this time.

3.4.2 Vulnerability and Resilience

Vulnerability, resilience and adaptation within the context of climate change are variously interpreted. Vulnerability can be responded to differently within disciplinary perspectives, and socio-cultural vulnerability and biophysical vulnerability are often distinguished from each other. However, 'people and environment need to be considered together' as social and ecological 'subsystems are linked by mutual feedbacks, and are interdependent and

co-evolutionary' (Berkes, 2017). The Intergovernmental Panel on Climate Change (IPCC) defined vulnerability as a function of exposure, sensitivity, and adaptive capacity in its Third (TAR, 2001) and Fourth (AR4, 2007) Assessment Reports, but this definition was redrawn in its Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX, 2012) and in the Fifth Assessment Report (AR5, 2014) (Estoque *et al.*, 2023). The IPCC has now separated exposure, and vulnerability is conceived as a function of sensitivity and capacity to cope and adapt (Estoque *et al.*, 2023).

This research refers to the chapter 'Small Islands' in the IPCC's Sixth Assessment Report (Mycoo *et al.*, 2022). Of note is that this chapter features an 'enchanted island' image of Anantara Kihavah Villas in the Maldives, an exclusive private island resort. This illustrates a paradox of islands considered throughout this thesis: policy originates from centres far removed from the reality of island living and islandness, and mainland perspectives are often of the 'magical' island. Although this 'Small Islands' chapter does not focus on North East Atlantic islands, Ireland's islands are arguably already experiencing similar vulnerabilities and impacts as SIDS and the other islands included, as examined in Chapter 8 with reference to Inishbofin Islanders' observations of changes. Research by colleagues in the Irish Climate Analysis and Research Institute (ICARUS) at Maynooth University, and by the Centre for Climate and Air Pollution Studies (CCAPS) at Galway University, Copernicus, Environmental Protection Agency (EPA), MaREI, the SFI Research Centre for Energy, Climate and Marine at University College Cork, and Met Éireann (MÉ) is also drawn on.

There are three significant gaps in the literature. The first is the lack of historical and contemporary weather and climate data for the islands. The second is the dearth of qualitative climate change research with communities projected to be most impacted by climate change in Ireland including island and coastal communities. A third is recognition of the importance of the wind as a *persistent* socio-cultural driver, as examined in Chapter 5. Linked to historical famine for islands, today it continues to strongly affect socio-cultural practice including accessibility. However, there is a recent upsurge in rich historical climate data (including Barber *et al.*, 2003; Blundell *et al.*, 2008; Caseldine *et al.*, 2005; Feeser, 2009; Jones, 2021; Murphy *et al.*, 2018; Murphy *et al.*, 2020; and Plunkett, 2006). Another study focuses on historical farming in the Aran Islands (O'Connell and Molloy, 2019). Correspondingly, scholarship aligning historical climate data with social data from geographers and historians has increased, sometimes from within cross-disciplinary perspectives, for instance, *Climate and Society in Ireland: From prehistory to the present* (Kelly and Carragáin (eds.), 2021).

Conceptualising and defining vulnerability, however, is challenging as it incorporates social, environmental, population, political and economic processes that are entwined in a complexity of ways (Thywissen, 2006). Vulnerability, according to Berkes (2007: 284), 'is registered not by exposure to hazards alone; it also resides in the resilience of the system experiencing the hazard'. Berkes (2007: 283) identifies 'four clusters of factors relevant to building resilience'. These are: (1) 'learning to live with change and uncertainty', (2) 'nurturing various types of ecological, social and political diversity for increasing options and reducing risks', (3) 'increasing the range of knowledge for learning and problemsolving', and (4) 'creating opportunities for self-organization, including strengthening of local institutions and building cross-scale linkages and problem-solving networks' (Berkes, 2007: 283). These factors highlight the relationality of social resilience to ecological resilience. Adger (2000: 347) defines social resilience as 'the ability of groups or communities to cope with external stresses and disturbances as a result of social, political and environmental change'. Adger et al. (2012: 114) argue that when culture 'is able to change during times of flux', including development of 'new narratives, alternative meanings or strategies to lead meaningful lives', then it can be 'an important enabler of change'. These ideas are explored in relation to how the identity of the Islander is associated with resilience, and with reference to specific events and processes. Findings discussed in Chapter 8 correspond with Massey's (1996) argument that communities of locality may share a place-based identity that is constantly changing, and it is this capacity for transformation and adaptation that is associated with resilience.

The risks associated with climate change are 'place-specific and path-dependent', meaning that some places will carry a higher level of risk compared to others, which is also contributed to by community resilience, risk management, and availability of public services including health, according to Hess *et al.* (2008). In Inishbofin, the community already experiences what Ferriter (2018) describes as official neglect. Water supply issues have been experienced in 2022 and 2023. A health centre identified as a priority in 2003 has not been delivered. Quinn *et al.* (2020: 577) identify two key community resilience narratives in climate change literature that are relevant here: (1) 'as a key bulwark against imposed harm or risk, with its promotion as an aspirational social or policy goal attributed to these positive implications', and (2) 'its alignment to neoliberal discourses and its appeal as a mode of governing that facilitates retraction of the state and the shifting of responsibility onto citizens'.

Burrows and Gnad (2018: 7) contend that socio-cultural realities can be examined under the term 'VUCA-world' representing increasing volatility, uncertainty, complexity and ambiguity, and acknowledging that today's world 'is not prone to one-dimensional explanations, simplistic answers or quick fixes'. Korosteleva and Petrova (2022: 138) argue that societies have moved from 'knowing the knowns' whereby it is conceptualised that everything has a solution, through 'knowing the unknowns' or the recognition that there are uncertainties, to the current realisation that complete 'knowing' is impossible because of the complexity of the world, including 'long-term forecasting and control'. Traditional 'top-down' governance has become 'less relevant or effective' even while western-centric resilience narratives prioritise 'bottom-up', 'outside-in' incorporation of local knowledge in problem solving through processes of neoliberal governmentality (Korosteleva and Petrova, 2022: 138).

The reality of the complex world is 'semi-turbulent and turbulent environments where change is imminent and frequent' (Dooley, 1997: 92). 'Complexity-thinking accounts for *self-reliance*, and collective *self-organisation* in the face of adversity, which in turn draw on 'a *shared vision*' of *becoming with* and 'individual's readiness for change' (Korosteleva and Petrova, 2022: 139-142: original emphasis). It also accounts for '*inherent* communal resources, processes and *capacities*, because all fundamental forces and structures' 'arise from *local processes* and not by means of action at a distance' (Korosteleva and Petrova, 2022: original emphasis). 'Appeals to the importance of place are limited in the adaptation literature', however, according to Shockley (2023: 1) who states that although place is acknowledged as contributing to individual and collective identity, its role in the importance of the connection 'between people and location has not been sufficiently developed or acknowledged in this literature' and it is 'largely absent from key IPCC documents'.

Recent resilience thinking shifts from identifying vulnerabilities that can be addressed by 'capacity-building' and 'empowerment' based on the idea of the 'neoliberal subject' (Chandler and Reid, 2016) 'by reflect[ing] upon the problems of actually existing neoliberalism, rearticulating complex life as the positive promise of transformative possibilities' (Chandler, 2014: 48). In so doing, it is critical of neoliberalism 'on the basis of its 'humanist legacies' and its inability to rethink governance on the basis of unknowability' in response to the 'apparent conundrum of governing without assumptions of Cartesian certainty or Newtonian necessity' (Chandler, 2014: 63). Correspondingly, Korosteleva and Petrova (2022: 139: original emphasis) define resilience in two ways: (1) it is 'a quality of a

complex adaptive system', fundamentally a way of self-organisation and self-governance, and (2) it is a 'new *analytic of governance*'. 'Local' resilience forms from 'identity shaped and driven by a sense of a 'good life', infrastructures of communal support, philosophy and traditions of neighbourliness, and solidarity and convocation of the peoplehood' (Korosteleva and Petrova, 2022: 139). *Peoplehood* is an inclusive, involuntary, group identity formed from a shared history and the distinctiveness of a way of life: as well as 'common descent—a shared sense of genealogy and geography—contemporary commonality, such as language, religion, culture, or consciousness, characterizes the group' (Lie, 2004: 1).

Resilience, then, is viewed as a 'process that makes communities endure and transform in the face of adversity' (Korosteleva and Petrova, 2022: 139: original emphasis) with complexity-thinking at its core. Korosteleva and Petrova (2022: 145) contend that 'in the context of anxiety about the unknowable future, the identity of Self (singular or collective) is to a significant degree future-oriented'. 'Uncertainty plays a crucial role in identity formation' (Korosteleva and Petrova, 2022: 145). Rather than the term resilience and its often narrow interpretations, Folke (2016) argues for the 'resilience approach of resilience thinking' as a 'much richer' conceptualisation that 'deals with complex adaptive system dynamics and true uncertainty and how to learn to live with change and make use of it'. These ideas are drawn on in Chapter's 8's discussion of the weatherworld, resilience and vulnerability, including with reference to the 'empowerment' objective of the *Our Living Islands* policy.

3.4.3 Adaptation and Climate Justice

'Adaptation' is defined by the IPCC (2014: 1758) as 'the process of adjustment to actual or expected climate and its effects'. Socio-cultural and geophysical systems are differentiated: 'In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities' and '[i]n some natural systems, human intervention may facilitate adjustment'. Adaptive capacity is defined as 'the ability of systems, institutions, humans, and other organisms to adjust to potential damage, to take advantage of opportunities, or to respond to consequences' (IPCC, 2014: 1758). Orlove (2009: 131) draws attention to the importance of reflecting on the meaning of the term adaptation, as it often holds different meaning for communities and institutions, and it cannot measure or communicate values. Therefore, adaptation does not capture the complexity of how humans perceive, understand, and respond within the range of alternatives open to them (Orlove, 2009).

Similarly, Pelling (2010: 163) argues that to understand adaptive capacity and actions 'requires a lens that can examine organisational behaviour and governance regimes, as well as the feelings, values and actions of individuals'. Pelling questions if adaptation is a coping strategy that discounts the realities of the central issue which is that systemic vulnerabilities result from societal structures that create inequality. Examining 'processes of social identity', Barnett et al. (2021), with reference to Breakwell, propose three ways these processes influence climate change adaptation: (1) how perceptions of climate change risk or threat change social identities, (2) that a changed identity may be an objective of adaptation, and (3) that adaptation can be either constrained or enabled by identity. Identifying the 'value of understanding climate change adaptation through a social identity lens', Barnett et al. (2021) argue that place identities 'are important for climate change adaptation' and also that 'multiple constructions of social difference combine to create forms of identity that enable or impede adaptation practices'. Therefore, as capacity for change is linked to existing vulnerabilities and identities that have been formed through societal structures, climate change adaptation is a climate justice issue.

Climate change is 'a human rights and a human security issue' (Crate, 2011: 182). Climate justice recognises that 'climate change impacts people differently, unevenly, and disproportionately, as well as redressing the resultant injustices in fair and equitable ways' (Sultana, 2022). Participatory approaches in policy and planning are suggested as a way to approach these injustices (Williams et al., 2020). They are described by Liebenberg (2018) as 'respect for people's human dignity and autonomy in the face of the power of government to confer, withhold, or reduce vital social benefits' which 'recognises people's deep need to be treated as bearers of rights entitled to agency in decisions which have a fundamental impact on their lives and wellbeing'. The right of individuals to climate change adaptation 'can be found in well-established human rights norms, including the right to health, life, food, water, and culture' (Bordner, Barnett and Waters, 2023). As 'the human rights of marginalised and vulnerable groups are already more compromised', States are obliged to protect them yet 'the most vulnerable groups often receive lower levels of support from the State, including in the context of climate adaptation' (Bordner, Barnett and Waters, 2023), as is currently evident in Inishbofin with regard, for example, to repair and completion of infrastructures including the sea wall and Rusheen Pier, or the ten year delay on production of an island coastal erosion survey and flood risk analysis (Chapter 8).

In September 2022, the United Nations Human Rights Committee (UNHRC) ruled that Australia, in failing to address the impacts of climate change, had breached the rights of

Torres Strait Islanders (Human Rights Law Centre, 2022). Islanders argued that Australia had not implemented mitigation and adaptation measures including upgrades to a seawall meaning that the long-term habitability of the islands was affected. On 29th March 2023, the United Nations General Assembly adopted Resolution A/RES/77/276 requesting that the International Court of Justice (ICJ) 'give an advisory opinion' on the 'obligations of States in respect of climate change' (ICJ, 2023). In Ireland, in November 2017, the environmental organisation Friends of the Irish Environment (FIE) and a group of local residents challenged a planning permission granted for a new runway at Dublin Airport. Although the case was dismissed, an outcome was the High Court recognition of a constitutional right to environmental protection 'that is consistent with the human dignity and well-being of citizens at large' and 'that it would be difficult to assure an individual's dignity and freedom if their natural environment, on which their well-being depended, was being progressively diminished' under Article 40.3.1 of the Irish Constitution (Human Rights Law Centre, 2018). The Court also held that this right is 'not so "utopian" that it can never be enforced, as it can be represented as specific duties and obligations' (Human Rights Law Centre, 2018).

Ireland's Climate Action and Low Carbon Development Act 2015 required an 80% cut in emissions by 2050 compared to 1990 levels. The National Mitigation Plan published in 2017 specified actions to achieve this. FIE, in an action that became known as 'Climate Case Ireland', argued that the National Mitigation Plan was not fit for purpose. Initially dismissed by the High Court, the Supreme Court ruled in FIE's favour in June 2020 (FIE, 2020). Subsequently, a community law centre in Coolock, Dublin established Ireland's first centre for environmental justice. Among the issues it consults on are 'health concerns arising from air or water pollution', 'flooding or lack of flooding infrastructure in high-risk areas', 'dereliction' and 'loss of biodiversity' (Community Law & Mediation, 2023). Currently it is representing FIE in a legal challenge against the Irish Government 'over its failure to show with a sufficient level of specificity that the Climate Action Plan 2023 (CAP 23) and its Annex of Actions will reduce greenhouse gas emissions in line with Ireland's legally binding carbon budget' which is argued as 'a breach of the Government's legal duties under the Climate Action and Low Carbon Development Act 2015 (as amended)' (Community Law & Mediation, 2023).

The outcome of these cases in an Irish context is that an avenue has been opened for individuals or groups to legally hold the Irish Government and State accountable for actions, inactions, and/or non-addressed detrimental impacts of experienced climate and/or environmental change, with similarities to the Torres Strait Islanders' case in 2022.

For communities to successfully mitigate and/or adapt to climate change requires effective, appropriate, transparent action from the state and local authorities with responsibility for their services and infrastructures. The ongoing neglect of services and infrastructure experienced in Inishbofin, plus deferrals and delays following the destruction of the 2013/2014 storms (discussed in Chapter 8), could suggest that authorities are failing to meet their duties and obligations despite the constitutional right of the community to environmental protection. If adaptative capacity, thus reduced, contributes to increased climate change vulnerability for Inishbofin, adaptation is a matter of justice.

3.5 IPCC Small Islands Chapters

The Third Assessment Report by the International Panel on Climate Change's (IPCC) in 2001 included a chapter on 'Small Island States', with the Fourth Assessment Report (AR4) in 2007 being the first iteration to include a specific 'Small Islands' chapter. This section will consider some of the studies of islands and climate change underlying the IPCC'S two most recent 'Small Islands' chapters, from the 2014 and 2022 report cycles. Chapter 29, 'Small Islands', in the Fifth Assessment Report (AR5) (Nurse et al., 2014: 1613) considers sovereign states and territories located within the tropics of the southern and western Pacific Ocean, central and western Indian Ocean, the Caribbean Sea, and the eastern Atlantic off the coast of West Africa, and the Mediterranean Sea. Acknowledging that the existence of some islands nations is threatened and that the negative impacts of climate change and sea level rise (SLR) for all islands are 'very real', it states its aim to move away from any generalisation regarding potential impacts or the adaptive capacities of island communities as these are not homogenous places (Nurse et al., 2014: 1619). It lists variations in air and ocean temperatures; ocean chemistry; rainfall; wind strength and direction; sea levels and wave climate; and particularly the extremes such as tropical cyclones, drought, and distant storm swell events' as being notably impactful for small islands (Nurse et al., 2014: 1619).

Chapter 15, 'Small Islands', in the IPCC's Sixth Assessment Report (AR6), Mycoo *et al.* (2022), focuses on islands in the tropics of the southern, northern, and western Pacific Ocean, the central, eastern and western Indian Ocean, the Caribbean Sea, the eastern Atlantic off the coast of West Africa, and in the Mediterranean Sea. It includes non-sovereign island states and territories dependent on continental states and islands of semi-autonomous, sub-national island jurisdictions, and the 39 Small Island Developing States (SIDS). It does not include islands in the polar and sub-polar regions, North Atlantic Ocean, the Baltic Sea, the North Sea, the Black Sea and the Arctic Ocean. The chapter argues that

'place-specific and culturally specific adaptation responses' are required in smaller islands (Mycoo *et al.*, 2022: 2048). This is attributed to the diversity of their socio-ecological systems, while also a result of the commonalities of islandness that contribute to particular vulnerabilities under a changing climate. The report (Mycoo *et al.*, 2022: 2048) highlights the following shared characteristics of small islands as drivers of climate change vulnerability: 'geographical remoteness, isolation, narrow resource bases, heavy dependency on external trade, vulnerability to exogenous economic shocks, economic volatility, and limited access to development finance'.

In AR5, Nurse *et al.* (2014: 1618) note that 'the literature on small islands and climate change has increased substantially' since AR4. The purpose of this review is to determine if, and/or how, this thesis contributes to the literature on islands underpinning the IPCC AR5 and AR6 reports through analysis under several relevant headings used in these reports and with reference to a representative selection of the literature cited. The studies listed as examples in the Table below are not included in the list of references in this thesis. However, these papers are directly linked from the two IPCC reports which are included.

Table 3.1: IPCC AR5 and AR6 Reports

#	AR # / Page #	Examples	Study	Findings from	Inishbofin Study
				Reports	
1.	5/1619: Observed Impacts on Island Coasts and Marine Biophysical Systems	AR5 1. Cazenave and Llovel (2010) 2. Nicholls and Cazenave (2010) 3. Church and White (2011) 4. Woodroffe (2008) 5. Yamano et al. (2007)	AR5 1. Sea level observations: tide gauges, satellite altimetry. 2. Tide gauges, satellite altimetry. 3. Est. projections from satellite data and island sea-level measurements. 4. Reviews morphology and substrate characteristics Indo-Pacific atolls reef islands. 5. Data spanning 108 yrs analysed to reconstruct topography, land use/cover, population, and distribution of buildings changes.	AR5 "SLR poses one of the most widely recognised threats to low-lying coastal areas."	Contradicts: N/a. Corroborates: There is no long-term sea level record available for Inishbofin or the other Irish islands. Lack of specific quantitative data available. No locally sited gauges in Inishbofin. Reported floodings and other impacts are associated with transient events. Opportunities to relocate within the island are restricted and limited. Expands: Local SLR and erosion observations and perspectives. Analysis of ongoing impacts, and extreme event impacts, and how these are interlinked with governance and other processes. Identifies low lying centre of island vulnerable to potential inundation under varying scenarios. Highlights that Lough Bofin salinity and tidal rates/levels, or biodiversity impacts, have not been analysed following the Atlantic breach in February 2014. Highlights need for development of specific quantitative SLR and climate datasets. Assesses resilience and vulnerability of island infrastructures.

Table 3.1: IPCC AR5 and AR6 Reports, cont.

2. 5/1622: AR5 AR5 AR5 AR5 Climate change impacts on et al. (2010) the ecological effects Systems: Island Biodiversity and Water Resources AR5 (2012) 3. White and Projected Risks on Natural Systems AR6 AR6 (2007) AR6 AR6 AR6 (2007) AR6	# AR # / Page #	/ Page # Examples	Study	Findings from Reports	Inishbofin Study
Seneviratine (2021) 6/2065: Water Security 6/2065: Water Security 6/2065: Water Security 7. Butchart et al. (20198. 8. Masterson et al. (2014) 9. AR6 ETCs, depressions. 6. Examines 6/2065: ESL events associated with compound effects, e.g., SLR, TCs, ETCs, depressions. 6. Examines 6/2065: Water Systems on small islands are exposed to dynamic climate impacts and are considered to be among the most threatened on the planet." 9. SEDL events associated with compound effects, e.g., SLR, TCs, ETCs, depressions. 6. Examines 1. Expands: Intelland's islands. 1. Examines 1. Expands: Inishbofin is experiencing a new freshwater source challenge. Recent Inish Water/EPA assessments re we quality and elevated manganese lever at source do not account for climate change. Study is required. 2. Expands: Inishbofin is experiencing a new freshwater source challenge. Recent usually environments where demand for resources related to socioeconomic factors such as population growth, urbanisation and tourism already place increasing pressure on limited interlinkedness of water supply failt in Inishbofin with SES approach. 1. Examines 1. Expands: Inishbofin is experiencing a new freshwater source challenge. Recent Inishbofin is experiencing a new freshwater source do not account for climate change. Study is required. 2. Expands: Inishbofin is experiencing a new freshwater source do not account for climate change. Study is required. 2. Expands: Inishbofin is experiencing a new freshwater source do not account for climate change. Study is required. 3. Expands: Inishbofin is experiencing a new freshwater source may be challenge. Recent intrible and to dynamic climate considered to be among the most threatened on the planet." 2. Expands: Inishbofin is experiencing a new freshwater source do not account for climate change. Study is required. 2. Expands: Inishbofin is experiencing a new freshwater source on the planet." 3. Expands: Inishbofin is experiencing a new freshwater source challenge. Recent intrible and provision in I	2. 5/1622: Observed Impacts on Terrestrial Systems: Island Biodiversity and Water Resources 6/2053: Observed Impacts and Projected Risks on Natural Systems 6/2058: Impacts on Freshwater Systems 6/2065: Water	2: AR5 ved 1. Greaver et al. (2010) ms: 2. Goodman et al. (2012) Goodman et al. (2012) 3. White and Falkland (2010); 4. Mycoo (2007) 4. Mycoo (2007) 4. Mycoo (2007) 5. Water ms AR6 5. Seneviratne (2021) 6. Hoeke et al. (2015) 7. Butchart et al. (20198. 8. Masterson et al. (2014)	AR5 1. Examined how precipitation alters the ecological effects of ocean water intrusion to coastal dunes. 2. Examined soil salinity, elevation, canopy cover, and habitat structure re Key tree cactus. 3. Steady-state approximation used to provide insight into climatic, hydro, physiographic, management factors that influence saline intrusion into freshwater lenses. 4. Diagnoses policy failures that hampered water provision in Trinidad. AR6 5. ESL events associated with compound effects, e.g., SLR, TCs, ETCs, depressions. 6. Examines stochastically generated TCs with numerical simulations of wind waves, storm-surge, and wave setup to find a difference of ESL of 1 m within spatial scale of less than 1 km in Samoa. 7. Examines relationships between SDGs, nature and contributions of Indigenous Peoples and Local Communities (IPLCs). Finds poor progress expected towards targets on water security, water quality, ocean pollution and acidification in 20 Aichi Biodiversity Targets. 7. Numerical model applied to find interdependence of groundwater resource of morphology at 3	AR5 "Climate change impacts on terrestrial biodiversity on islands, frequently interact[s] with several other drivers." "Freshwater supply in small island environments has always presented challenges." AR6 "Freshwater systems on small islands are exposed to dynamic climate impacts and are considered to be among the most threatened on the planet." "Small islands are usually environments where demand for resources related to socioeconomic factors such as population growth, urbanisation and tourism already place increasing pressure on limited freshwater	Contradicts: N/a. Corroborates: There is no current, comprehensive ecological/biodiversity assessment available for Inishbofin. Notable exception is national programme to reinstate corncrake population. Several of Ireland's islands do not have a freshwater source and are reliant on rainwater collection. Changing precipitation patterns may have already impacted with drought experienced on many including the Aran Islands in recent years. Further study is required regarding water supply, access and security for all of Ireland's islands. Expands: Inishbofin is experiencing a new freshwater source challenge. Recent Irish Water/EPA assessments re water quality and elevated manganese levels at source do not account for climate change. Study is required. Diagnoses recent water supply failures in Inishbofin with SES approach. Proposes the possibility that chemical composition of Inishbofin's fresh water source may be changing as a result of climate change (notably wind and temperature changes), based on review of case studies at other lakes, including in Europe. Further study required to ascertain possible interlinkedness of water supply issues

Table 3.1: IPCC AR5 and AR6 Reports, cont.

#	AR # / Page #	Examples	Study	Findings from Reports	Inishbofin Study
3.	5/1623: Observed Impacts on Island Settlements and Tourism 6/2063 Observed Impacts and Projected Risks on Human Systems 6/2063 Island Settlements and Infrastructure	AR5 1. Fish et al. (2008) 2. Gero et al. (2011) 3. Mycoo, (2011) 4. Scott et al., (2012) 5. Forster et al., (2012) AR6 6. Kumar and Taylor (2015)	AR5 1. Models SLR scenarios for sea turtle nesting beaches in Barbados. 2. Examines three DRR and CCA case studies of community projects in Pacific region. 3. Examines natural hazard risk reduction measures with St. Lucia as a case study. 4. Outlines interrelationships between climate change and multiple components of international tourism system. 5. Investigates implications of climate-induced variations in Atlantic hurricane activity for tourism-dependent island of Anguilla. 6. Analyses exposure of infrastructures located along coastlines in Pacific island counties.	AR5 "The issue of "coastal squeeze" remains a concern for many small islands as there is a constant struggle to manage the requirements for physical development against the need to maintain ecological balance." AR6 "TC intensification in the future is likely to cause severe damage to human settlements and infrastructure in small islands. Additionally, SLR is expected to cause significant losses and damages." "Even islands of higher elevation are expected to be threatened, given the high amount of infrastructure located near the coast" AR5 "Tourism is an important weather and climate-sensitive sector on many small islands."	Contradicts: Costal squeeze does not apply in the same manner in Inishbofin. Population density is low, with a persistent overall decline. There is higher ground, particularly in the centre of the island, with settlements. Corroborates: Infrastructures, one settlement and individual properties are at risk, even though Inishbofin has areas of higher elevation. Expands: Investigates perceptions regarding one settlement, Cloonamore Village in the East End, that is highly vulnerable to SLR. Identifies that existing key infrastructures and services are in a relatively concentrated area in Middle Quarter exposed to flooding, erosion, SLR and have been previously inundated. Future development is likely to be concentrated in this area owing to piers access. Examines how ecological balance is under other pressures, notably tourism, waste management, fossil fuels, biodiversity loss and land use change including loss of bog cover. Provides analysis of the airstrip process including its observed ecological impacts. Local history and perspectives on resettlement patterns during colonisation examined. Examines livelihoods/economic dependence and local development of tourism sector. Analysis of tourism impacts on infrastructures and traditional livelihoods. Identifies through policy and discourse analysis that 'value' seems to be placed on island sites based on tourist engagement, by local and national governing bodies. Highlights that study is required regarding reduced/altered scheduled ferry sailings to investigate if parallels with weather patterns assoc. with climate change. Also study required to assess impacts on tourism economy as predominant income source with future climate change/SLR.

Table 3.1: IPCC AR5 and AR6 Reports, cont.

#	AR # / Page #	Examples	Study	Findings from Reports	Inishbofin Study
4.	5/1624: Observed Impacts on Human Health 6/2064: Human Health and Well-Being	AR5 1. Lovell (2011) AR6 2. Schewe et al. (2014) 3. Holding et al. (2016) 4. Gibson et al. (2020)	AR5 1. Draws on preliminary findings from interviews undertaken with experts across Pacific SIDS and global health literature on its governance to relate current scientific understanding of health impacts of climate change to health sector action. AR6 2. Uses GHMs and RCPs to examine uncertainties and links between water scarcity, food security and economic prosperity. 3. Compiles available aquifer system characteristics and water-use data for 43 small island developing states; finds that 44% experience water stress, with varying potential impacts on groundwater recharge. 4. Found that, in Tuvalu through structured interviews with 100 participants, mental health is affected by background climate change, notably for those simultaneously ecologically and economically vulnerable to its impacts.	AR5 "Extreme weather and climate events such as tropical cyclones, storm surges, flooding, and drought can have both short and long-term effects on human health, including drowning, injuries, increased disease transmission, and health problems associated with deterioration of water quality and quantity." AR6 "Small islands face disproportionate health risks associated with changes in temperature and precipitation, climate variability, and extremes."	Contradicts: N/a. Corroborates: In interviews, several participants expressed worry and concern over potential local climate change and SLR impacts. Indirect health impacts may be present, connected to increased stress through experience of increased storms destruction, on top of long being a "threatened community". Specific health study is required. Expands: Evaluates decades long deferral of local health centre. Identifies access to health services on the mainland as a climate change issue. Potential interlinked impacts on food supply which relies on import. Also to freshwater supply should preexisting water source issues reoccur/worsen, or should incidence of drought increase.
5.	5/1625: Observed Impacts of Climate Change on Relocation and Migration 6/2067: Migration	AR5 1. Mortreux and Barnett (2009) 2. Barnett and Webber (2010) AR6 3. Birk and Rasmussen (2014)	AR5 1. Collects evidence in Funafuti, Tuvalu, regarding migration in response to climate change. 2. Explains how climate change may increase future migration, and negatives/positives are associated with such migration; finds that many risks arising from climatemotivated migration can be avoided	AR5 "Several authors highlight the lack of empirical studies of the effect of climate-related factors, such as SLR, on island migration." AR6 "Climate events and conditions strongly interact with other environmental	Contradicts: N/a. Corroborates: Data is also lacking in an Irish islands context. Corroborates Mortreux and Barnett's (2009) findings in Tuvalu that climate change is not a motivator for migration in Inishbofin. Expands: Finds that climate change is a motivator for where on the island many local people will live.

Table 3.1: IPCC AR5 and AR6 Reports, cont.

# AR #	/ Page #	Examples	Study	Findings from Reports	Inishbofin Study
			through careful policy. AR6 3. Outlines current migration patterns in Reef Islands and Ontong Java; discusses how some migration may contribute to adaptation to climate change and other stresses. Argues for efforts to stimulate migrant income opportunities by improving migrant living conditions and by improving transport services to the islands.	stressors and economic, social, political and cultural reasons for migrating (robust evidence, high agreement)."	Population trends analysed from first to most recent census for all permanently populated, non-linked, non-privately owned islands in Ireland. This analysis is aligned with national and regional governance and policies. Inishark depopulation in 1960 analysed on SES framework. Evaluates how policy currently impacts on migration patterns. Identifies how colonial legacies continue to contribute to migration. Systemic creation of early onset migration pattern. Identifies that many Irish islands are potentially nearing a population tipping point. Considers discourse of new adaptation policy resettlement narrative in Ireland.
Island Econd 6/206 Fishe Agric 6/206	rved cts on d omies 55: ries and culture	AR5 1. Prasad (2008) 2. Briguglio et al. (2009) 3. Winters and Martin (2004) AR6 4. Ticktin et al. (2018) 5. Campbell (2021) 6. Nunn and Kumar (2018)	AR5 1. Provides overview of main institutional and governance issues facing the Pacific Island countries (PIC) and how they affect their economic performance. 2. Proposes framework for formulation of policies aimed at overcoming adverse consequences of economic vulnerability. 3. Investigates empirically whether small and remote economies are inherently uncompetitive. AR6 4. Devises a new approach to identify social–ecological linkages that affect conservation outcomes in agroecosystems and in social-ecological systems with focus on coastal agroforests in Fiji. 5. Examines socioecological changes transforming coffee production systems causing hardship and	AR5 " on the one hand climate change adaptation is integral to social stability and economic vitality but that government adaptation efforts are constrained because of the high cost on the other.' AR6 " the lack of diversity that characterises most small island economies means they are especially vulnerable to global (climate-driven) shocks"	Contradicts: N/a. Corroborates: Examines higher costs associated with islandness and compounded by policy. Evaluates dependency on import plus challenges in export. Expands: Social stability is not considered affected by climate change by the community. Social and community aspects often separated from the economic in analysis but are pertinent. Analysis of external governance and policy, aligned with narratives of nationalism and identity, which led to islands including Inishbofin being the last to receive essential infrastructures as contributing to lack of economic opportunity and population decline, with other drivers. Identifies its continuance. Identifies injustice connected to colonial legacies and non-Gaeltacht status, impacting on economy. Proposes tension between islandness and mainlandness concepts that are more than only economic. Mainlandness controls access to resources and dominates knowledge

Table 3.1: IPCC AR5 and AR6 Reports, cont.

#	AR #/ Page #	Examples	Study	Findings from Reports	Inishbofin Study
			uncertainty among farmers in Jamacia using survey data. 6. Examines past livelihood impacts from climate change in SIDS to support future interventions.		and culture hierarchies. SES, local knowledge, identities, islandness are not fully understood/accounted for in policy. Finds that constraint is not just based on balance sheets and characteristics of islands.
7.	5/1626: Projected Integrated Climate Change Impacts 5/1627: Projected Impacts for Islands Based on Scenario Projections	AR5 1. Keener et al. (2012) 2. Nicholls and Tol (2006)	AR5 1. Report on technical inputs to the National Climate Assessment (NCA) 2013. 2. Explores potential impacts of SLR through twenty-first century using complementary impact and economic analysis methods at global scale.	AR5 "In most small islands long-term quality-controlled climate data are generally sparse"	Contradicts: N/a. Corroborates: Lack of available technical data on current and projected impacts for Ireland's islands. Lack of historical meteorological and oceanographic event data. Scale issue. Lack of policy/governance initiatives in addressing this lack of climate data for the islands. Lack of sufficient policy/practice responses to the particular issues and challenges associated with island living under climate change. Lack of information for policy makers and for island communities. Expands: Lack of evidence recognising importance of local knowledge. No development of effective platform/s where all stakeholders can equitably contribute. No specific fund for adaptation available to Ireland's islands. Proposes policy and practice recommendations based on findings of the study. Produces first qualitative climate change study with an Irish island community, with SES framework. Also identifies lack of specific quantitative climate data. Establishes climate change as a challenge piling on top of existing issues that have not yet been effectively responded to in governance/policy/practice, including past weather/SLR extreme event impacts, in Inishbofin. Highlights that data available for the island of Ireland is not necessarily directly transferable to off-shore islands. Furthermore, it does not account for the roles of SES and identity in adaptation.

Table 3.1: IPCC AR5 and AR6 Reports, cont.

#	AR # / Page #	Examples	Study	Findings from Reports	Inishbofin Study
8.	5/1634: Adaptation and Management of Risks 5/1635: Addressing Current Vulnerabilities on Small Islands	AR5 1. Park et al. (2012)	AR5 1. Produces Adaptation Action Cycles concept and applied framework.	AR5 "Islands are heterogeneous in geomorphology, culture, ecosystems, populations, and hence also in their vulnerability to climate change." "Recent moves toward participatory approaches that link scientific knowledge with local visions of vulnerability offer an important way forward to understanding island vulnerability in the absence of certainty in model-based scenarios."	Contradicts: N/a. Corroborates: E.g. Park et al. (2012) identify that the "lack of an understanding of the social, economic and environmental conditions prevailing at the time of transformative change, the complexity of the associated decision-making processes, and the relevance of temporal and spatial scale in enabling adaptation, highlights a knowledge gap in the information needs and policy support required by stakeholders in the primary industries." Argues that in Inishbofin these issues are amplified by a lack of understanding of, and engagement with, the realities of island living in governance and policy. Spatial scales are of impact. Finds that institutional relationships primarily flow in one direction; hierarchies of knowledge prevail ("top-down"). Finds that Islanders often have lack of clarity and transparency over which state institution has responsibility for their infrastructures/services/future management owing to pattern of delay and deferral on the part of these institutions. Finds that impacts on levels of community trust and engagement as a result of previous and present experiences across various state institutions are not acknowledged/addressed, meaning that new initiatives receive low response. Argues for development and integration of participatory engagement frameworks.
9.	5/1636: Practical Experiences of Adaptation on Small Islands 5/1637: Building Adaptive Capacity with Traditional Knowledge, Technologies, and Skills on	AR5 1. Adger and Brown (2009) 2. Kuruppu and Liverman, (2011) 3. Tompkins et al. (2009) 4. Le	AR5 1. Finds that despite high levels of vulnerability, farmers in Jamacia achieve successful coping and adaptation at farm level. Ethnographic research with mixed methods approach including survey of 282 households.	AR5 "Resilience appears to come from both a belief in their own capacity and a familiarity with their environment and understanding of what is needed to adapt."	Contradicts: N/a. Corroborates: These statements from AR5 align with the Inishbofin study, as does the literature noted here in this review. Expands: Provides a detailed study of how resilience forms and its interpretation as being itself a tradition and marker of identity, and of its enactment

Table 3.1: IPCC AR5 and AR6 Reports, cont.

#	AR #/ Page #	Examples	Study	Findings from Reports	Inishbofin Study
	Small Islands	Masson and Kelman (2011) 5. Campbell (2009)	Recognises how traditional approaches have been abandoned owing to globalisation, colonialism, development with possible impacts for adaptation.	"Traditional technologies and skills can be effective for current disaster risk management but there is currently a lack of supporting evidence to suggest that they will be equally appropriate under changing cultural conditions and future climate changes on islands."	through SES during past and recent extreme weather/sea/socio-cultural events and ongoing challenges including access, housing, livelihoods, population decline and migration. Consolidates the first such study for an Irish island community. Identifies the importance of local knowledge and SES in resilience formation. Examines their formation and continuance. Deploys Ingold's dwelling theories as a method to attempt to understand local SES. Examines local history and how it is understood today. Argues that local knowledge non-inclusion/inequity in governance/policy counteracts resilience structures along with practices of deferral. Argues that this becomes a barrier to adaptation. Evaluates how flows between community and state/governance/cultural institutions are unequal. Analyses folklore and traditions, how these change, how elements remain and why these are locally important, and how these contribute to identities and resilience/vulnerability. Finds that traditional technologies and practices are valued externally but attached to external ideas of islands and island communities that remain incompatible with lived realities. These ideas have contributed to some island communities, e.g. funding, infrastructures, education, access etc., notably associated with Gaeltacht designations and islandess—varying distances to mainland and access possibilities. Inconsistency and injustice results from mainland projections and varying local/regional governance imperatives. Identifies colonial legacies as important to consider in contributing to contemporary inconsistencies in supports/resources/policy provisions. Additionally assesses how these have contributed to population decline and migration.

Table 3.1: IPCC AR5 and AR6 Reports, cont.

#	AR #/ Page #	Examples	Study	Findings from Reports	Inishbofin Study
11.	5/1637: Addressing Risks on Small Islands 5/1638: Working Collectively to Address Climate Impacts on Small Islands 6/2069: Key Risks in Small Islands	AR5 1. Anthoff et al. (2010) 2. Heger et al. (2008) AR6 3. Townhill et al. (2021) 4. Lichtveld (2018) 5. Kim and Bui (2019)	AR5 1. FUND model impact assessment conducted over 21st century for rises in sea level of up to 2-m/century and range of socio-economic scenarios downscaled to the national level, including the four SRES. 2. Analyses economic impact of natural disasters in the Caribbean. Argues that interruption of production of goods and services can be particularly impactful when few large sectors, e.g., tourism, farming, dominate economic landscape. AR6 3. Examines how climate change is already affecting the distributions of marine fish, particularly tuna in South Atlantic. 4. Argues that precyclone high exposure and vulnerability of 29 Caribbean SIDS and their populations has caused a 'cumulative community vulnerability'. 5. Examines resilience of supply chain operations and island ports as critical to disaster recovery in Puerto Rico and Hawai'i.	AR5 "Relative to other areas, small islands are disproportionately affected by current hydrometeorologi cal extreme events, both in terms of the percentage of the population affected and losses as a percentage of GDP." AR6 "Slow-onset climate and ocean changes, and changes in extreme events, are expected to cause and/or to amplify nine KRs in small islands, through both direct (e.g., decrease in rainfall will increase water insecurity) and indirect, that is, cascading effects."	Contradicts: N/a. Corroborates: Findings on the drivers of resilience and vulnerability align with AR reports. Expands: Full assessment of island infrastructures and services to determine levels of exposure, risk, resilience and/or vulnerability across societal structures. Deploys SES framework. Identifies the interlinked drivers of both resilience and vulnerability that are currently impacting. Analyses includes impacts of local, regional and national governance practices, structures and policies. Identifies colonial legacies as a driver that is not typically recognised in an Irish islands context.
12.	5/1639: Addressing Long-Term Climate Impacts and Migration on Small Islands	AR5 1. McNamara and Gibson (2009) 2. Nicholls et al. (2011) 3. Afifi et al. (2013)	AR5 1. Explores how people living in the Pacific who are most at risk of being made landless by climate change are portrayed in policy discourse; how high-level international representatives of Pacific nations have responded to these	AR5 "More research is needed to produce robust agreement on the impact of SLR on small islands, and on the range of adaptation strategies that could be appropriate for different island types under those	Contradicts: N/a. Corroborates: External projections of Islander identities and islandness contested by Islanders. All islands are distinct, even though they share certain characteristics. Expands: Comprehensive analysis of Island

Table 3.1: IPCC AR5 and AR6 Reports, cont.

#	AR # / Page #	Examples	Study	Findings from Reports	Inishbofin Study
			portrayals; and contention over portrayal as 'climate refugees'. 2. Indicative analysis showing real risk of the forced displacement of up to 187 million people to 2100 under 4C temperature rise scenario. 3. Examines theoretical and methodological research challenges in environmentally induced migration.	scenarios." "Owing to the high costs of adapting on islands, it has been suggested that there will be a need for migration."	identities, how they form, their meaning, and how they matter for climate change. Analysis of population decline and migration impacts.
	5/1640: Barriers and Limits to Adaptation in Small Island Settings 6/2087: Enablers, Limits and Barriers to Adaptation - Governance - Culture	AR5 1. Sovacool (2012) 2. Barnett (2011) 3. Gero et al. (2011) AR6 4. Robinson (2018) 5. Baldacchin o (2018)	induced migration. AR5 1. Assesses Maldives adaptation project and types of challenges that arise in utilising international development assistance to adapt to climate change, through semi-structured interviews with local experts. 2. Examines how assessments of social vulnerability to climate change, adaptation potential, or resilience for island communities that centres societies separates human dimensions from science and policy. 3. Argues for strategically developing multistakeholder and multi-sector approach, with community projects that will benefit the community, in DRR and CCA, referencing case studies. AR6 4. Argues for capitalising on the value of the distinctiveness of different theories and approaches without having to integrate them into one paradigm. Identifies significance of place-based socio-	AR5 "Barriers include inadequate access to financial, technological, and human resources; issues related to cultural and social acceptability of measures; constraints imposed by the existing political and legal framework; the emphasis on island development as opposed to sustainability; a tendency to focus on addressing short-term climate variability rather than long-term climate change; and community preferences for "hard" adaptation measures such as seawalls instead of "soft" measures such as seawalls instead of "culture is often overlooked in adaptation policies and plans." " in many contexts, most land And knowledge are embedded in traditional governance and culture	Contradicts: N/a. Corroborates: See also section 9. Expands: Identifies mainlandness and islandness tension as a primary barrier. Examines and evaluates history of delay and deferral of essential infrastructures services leading to a current place of distrust of external governance and priority given to self-/community trust in dealing with 'problems'. Community is also an enabler. Analyses local culture and the SES of place. Sets out an argument for the importance of local place knowledge, SES and islandness understandings to be incorporated into policy and practice, including but not limited to, climate change adaptation. Argues that other challenges faced by island communities must be addressed if climate change adaptation can be successful.

Table 3.1: IPCC AR5 and AR6 Reports, cont.

# AR # / I	Page #	Examples	Study	Findings from Reports	Inishbofin Study
			cultural systems in development of adaptation. 5. Reviews climate change related initiatives in small island states to argue that they can be "ontological traps" if the specific sociocultural contexts of islands are discounted, and if they redirect investment away from other urgent local objectives.	while adaptation plans and decisions are made elsewhere on how that land should be used and what knowledge is used (high agreement)."	
14. 5/1641: Adaptati Mitigatic Interacti Assump ncertaint Associat with Ad and Miti Respons Potentia Synergic Conflict 6/ Clima Resilien Develop Pathway Future Solution Small Is	tions/U ties ted aptation gation es I es and s tte tt ment s and s in	AR5 1. Chen et al. (2007) 2. Praene et al. (2012) 3. Stuart (2006) 4. Dornan (2009) AR6 5. Weir and Kumar (2020) 6. Ferdinand (2018) 7. Look et al. (2019)	AR5 1. Examines EU's "Renewislands— Renewable Energy Solutions for Islands" programme. 2. Examines deployment of renewable energy in Reunion Island. 3. Reviews range of conventional and renewable energy options available to small island policy-makers, arguing for their energy futures. 4. Assesses renewable energy in Fiji, proposes method for assessing contribution. AR6 5. Summarises how renewable energy can reduce vulnerability to disasters in small island countries of the Pacific. 6. Examines France's relation to climate change from the perspectives of the Outre-mer postcolonial politics. 7. Investigates how colonial legacies impact DRR in Antigua and Barbuda.	AR5 " there is relatively little research on the emissions reduction potential of small islands, and far less on the interlinkages between climate change adaptation and emissions reduction in small islands." "Renewable energy resources on small islands have only recently been considered within the context of long-term energy security." AR6 "In the context of small islands, climate justice research is expanding beyond initial debates about nation-states responsibilities for the causes and responses to climate change, to demonstrate complex and dynamic intergenerational and multiscalar dilemmas of climate justice."	Contradicts: N/a. Corroborates: Inishbofin is an ideal location for investment by government/state institutions in renewable energies, given its size and population, with the potential to become a leader within Ireland. Expands: Analysis of recent local initiatives in developing renewable energy projects. Examines a variety of climate change vulnerability and resilience drivers though an SES approach. Conducts a critical discourse review, pre- and post-independence narratives. Diagnoses multi-scalar, multi-temporal factors. Identifies state/governance continued lack of investment and recognition. Evaluates and assesses this as an injustice. Establishes continued connection to, and impacts of, colonial legacies. Identifies that policy/governance contribute to formation of climate change vulnerability in Inishbofin. Advocates for a shift in policy/practice approaches. Outlines policy and practice recommendations.

In summary, the research establishes that while islands may historically evidence patterns of growth, collapse and renewal, climate change is contributing to new uncertainties. What is certain, is that increased risk for smaller islands is unambiguously evident across the literature. Smaller islands are particularly vulnerable under a changing climate as it impacts or is potentially impactful across the majority of the elements that compose their distinct socio-ecological systems. Additionally, climate change vulnerabilities are often compounded by pre-existing vulnerabilities. Vulnerabilities result from rising sea levels, extreme weather events, limited resources, economic dependence on tourism and/or traditional nature-livelihoods, biodiversity loss, policies, historical inheritances, and migration and displacement, and their interlinkedness. Studies also show that local knowledge systems are important for resilience, but with complexity, as these can variously enable or hinder adaptation if trust between external institutions and communities is precarious. Identities, cultures and histories must be understood as significant in adaptation, including colonial inheritances, as must the structures and hierarchies in external governance which often evidence a 'distance' from islands that is beyond the spatial. Multiple studies have pointed to what is needed to ensure effective adaptation, including recognition of the distinctiveness of island identities, communities, places, cultures and histories that equally shape and are shaped by their ecological, geophysical and oceanographic constituents. These may form resilience as well as contributing to vulnerabilities, yet it is the interplay of external factors across temporal scales with islandness that often dictates their dynamic patterns, and that will be of most consequence in climate adaptation.

3.6 Conclusion

This chapter has reviewed and consolidated the key literature and theories that, alongside those drawn from island studies and discussed in Chapter 2, underpin investigation of the research objective and questions. Acknowledging the relationality of the concepts applied, categories were formed to facilitate analysis and discussion. These are *Nature and Culture*, *Place and People*, *Weather and Climate*, and *IPCC Small Islands Chapters*. Analysis of the literature underlying the 'Small Islands' chapters in IPCC AR5 and AR6 report cycles additionally shapes the proposed contribution of this thesis to expand understandings of climate change resilience and vulnerability by investigating the relationships between culture, identities and socio-ecological dynamics on Inishbofin Island, as it raises several questions:

- 1. What climate, including oceanographic, datasets are available for Ireland's islands, and Inishbofin in particular, whether historical, current, and/or projections?
- 2. Are recently experienced extreme events perceived as transient events by the community, or are they associated with climate change impacts?
- 3. Could Inishbofin's freshwater system be threatened by climate change?
- 4. Is climate change impacting on migration?
- 5. Are barriers to adaptation discernible?
- 6. Does external governance contribute to formation of resilience and/or vulnerability?

Thus, the intention of this thesis is to contribute to this body of research to hopefully expand the knowledge domain of vulnerability of islands, and specifically to begin to address the gaps in research on Ireland's islands and climate change.

These are:

- The availability of past, recent and projected climate data specific to Ireland's islands, including the wind as a persistent socio-cultural driver, which is a significant gap in contributing understandings of climate change impacts and climate change projections for the islands. More study could buttress climate change resilience for the islands.
- Sustained climate change research with Irish island and other communities that
 prioritises qualitative/ethnographic engagement. Island communities live, by
 necessity, in tandem with the weather and sea. Their knowledge and experience
 should be recognised as a vital resource for both island and mainland communities.
- 3. Climate change risk assessment for Ireland's populated and non-human populated islands, with potential to lead to disaster risk response (DRR) strategies.
- 4. Governance theory specific to smaller, off-shore, non-state islands, as the majority of the theory applies to island states.
- 5. Chronological Irish islands histories from an islandness perspective, building on Ferriter's work and some earlier individual island studies, in collaboration with island communities and valuing local, place-based knowledge in addition to the archival record.
- 6. Examination of the potential socio-cultural, including psychological, impacts of the pre-existing threat of depopulation and population decline with climate change for Ireland's island communities, and other affected rural communities in Ireland.
- 7. A body of postcolonial scholarship in Ireland considering a coloniality of power and knowledge theoretical approach in analysis of post-Independence and contemporary governance structures. If policy is to be effective, the structures upon which governance and policies are derived must be interrogated on an ongoing basis.
- 8. Irish islands study of impacts for island communities that experienced colonialism under a residential landlord. The impacts of a residential landlord within the amplification of islandness, and how this may have contributed to migration, population decline and/or depopulation and post-Independence impacts compared to island communities that did not have a residential landlord, is yet to be examined.
- 9. This may align with study following island categorisation as either non-Gaeltacht or Gaeltacht, and experiences in the various local authority jurisdictions under spatial

justice approaches. Island communities were differently treated after Independence. Drivers and outcomes of this discrimination have not been systematically analysed, nor redressed.

Theoretically, this chapter has drawn largely from the literature in geography and anthropology to prioritise islandness, along with a posthumanism and critical geographies approach, and a dwelling phenomenology. Conceptually, it also incorporates ideas, data and processes from the literature in climate change, climatology, colonialism, coloniality, environmental psychology, history and political ecologies. Thus, while drawing from an interdisciplinary knowledge base, it also attempts to *synthesise* this knowledge and to 'bridge' connections in a way similar to the meshwork in that it is multi-dimensional, thus requiring a careful and cogent approach that simultaneously enables space for recognition of associations that may not be immediately apparent. In response to the research objective and questions outlined in Chapter 1, this literature review therefore underpins the methods and theoretical framework discussed in Chapter 4.

4. METHODOLOGY

4.1 Introduction

This thesis draws largely from geography, anthropology and nissology/island studies to prioritise a posthumanism and critical geographies approach, and a dwelling phenomenology, as discussed in Chapter 3. It builds on this interdisciplinary knowledge base in response to the issues identified through fieldwork. The literature and theories examined in the previous chapters are consolidated here in design of a framework that aims to avoid essentialist, hierarchical or binary modes of thought to optimise the unfolding of research findings throughout the text. Correspondingly, this chapter will outline the research framework and the process that led to its design, examine positionality, describe the setting and participants contributing to the research, detail the data collection and analysis methods employed, and consider the challenges and limitations of this work throughout the narrative.

4.2 Research Design

4.2.1 Interdisciplinarity Framework

To examine the questions identified in Chapter 1, this research aims to integrate disciplinary perspectives from geography, anthropology and nissology/island studies into a sound yet flexible scaffolding (Figure 4.1). Interdisciplinary research or interdisciplinarity (ID) is the term 'most commonly used as a portmanteau word for all more-than-disciplinary approaches to knowledge, with the overall implication of increased societal relevance' (Frodeman, 2017: 4). In this study, interdisciplinarity is understood as a research approach that sites the research problem at the centre of the study rather than any one particular discipline, with the aim to effectively interpret and position relevant elements—including theories, concepts and methods—from more than one discipline towards the production of integrated, new knowledge. Proposing that academia has produced 'objects of great subtlety and beauty' yet often has 'not tried to make [this] research relevant to anyone beyond a disciplinary cohort', Frodeman (2017: 2) contends that 'subdivision' has been the early way of 'dealing with disciplinary overabundance' even while problems are 'increasingly integrative in nature'. Interdisciplinarity, as applied in this thesis, is a rejection of 'the Cartesian impulse to endlessly decompose subjects into ever finer analytical domains' (Easton, 1991: 12) in our 'age of radical pluralism and differentiation' (Winter,

1996: 345) when 'the magnitude of achieving synthesis has been underestimated' (Klein, 1990: 116). It is highly suited, therefore, to addressing the wicked problem of climate change, and interlinked challenges in understanding formation of vulnerability, resilience and adaptive capacity in a 'VUCA-world' of increasing volatility, uncertainty, complexity and ambiguity, (Burrows and Gnad, 2018) and complication (Korosteleva and Petrova, 2022).

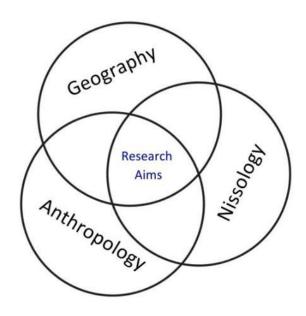


Figure 4.1: Interdisciplinarity Scaffold.

There is 'widespread belief' that 'science today is increasingly interdisciplinary' (Klein, 2022: 32) and 'the movement for interdisciplinary research in both natural and social science has been one of the most prominent in recent science and academic policy' (MacLeod, 2018: 698). This increase results from awareness of the 'multidimensional complexity' of research problems and 'societal issues that require the greater synergization of institutionalized disciplinary skills' (Darbellay, 2015). As it is problem focussed research, ID has been recognised as essential to examination of 'real-world problems' for decades, including in consideration of university teaching (Apostel, 1972; Hadorn *et al.*, 2010; Harris, Brown and Russell, 2010; Klein, 1990). However, knowledge is often produced and taught through disciplinary perspectives within the predominant culture. A challenge experienced in developing the interdisciplinary framework in this research is that ID was not taught or directly modelled.

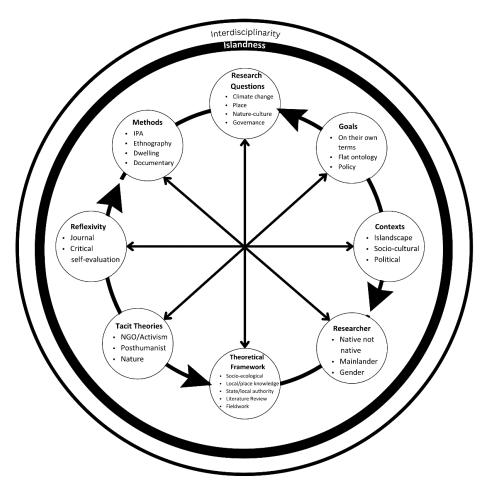


Figure 4.2: Conceptual Framework Design (adapted from Ravitch & Carl, 2021).

Thus, interdisciplinarity, in the early stages, at times seemed a 'process of bewildering complexity' (Winter, 1996: 343), resonating as offering 'promise for grappling with wicked problems, but also entail[ing] significant challenges to researchers' (Wohlgezogen *et al.*, 2020: 1048). Disciplinary 'rules' and 'norms' in the form of a trajectory that, with some differences, often provide a guiding 'research roadmap' could not be followed. This research also required commitment to the possibilities of emergent design as defining a highly structured framework before fieldwork could have driven preconceptions, potentially limiting ethnographic engagement, findings and analysis. As fieldwork was greatly delayed as a result of Covid-19 restrictions, development of the framework was correspondingly delayed. However, knowledge deepened with each revisit to the fieldwork setting so that the unifying themes and theories gradually came into sharper focus. The conceptual framework, illustrated at Figure 4.2, formed during 'lock-down' in 2020 on the island as an emergent realisation and understanding of *islandness* and its constituent components including its socio-ecological system (examined in Chapter 5). Therefore, the

process leading to the conceptualisation of the research design was incremental. It incorporated analysis of conversations with Islanders, reflexivity, requestioning and retracing of steps in an overarching continuum through fieldwork aligned with review of the literature, previous experience, and discussions with Supervisors. The conceptual framework also incorporates the potentiality of constant refinement and adaptation. However, an ongoing consideration that may prove to be a limitation is the development of a new interdisciplinary framework for this research. Arguing that restrictions in knowledge production are 'ineffectual, anachronistic, and defunct', Frodeman (2017: 2) also acknowledges that 'it remains to be seen if interdisciplinarity can be any more successful'.

While originating through a largely constructivist approach, the framework shifted towards a transformative perspective in response to fieldwork and reflexivity in correspondence with increasing knowledge of the historic and ongoing marginalisation of the island, the attempt to understand the structures upon which this marginalisation is founded and reproduced, and the realisation of how significant these factors are in determining climate change vulnerability and resilience today. According to Mertens *et al.* (1994), characteristics of the transformative paradigm distinguishing it from others include that the central importance of the research is placed on the lives and experiences of the diverse group/s that, traditionally, have been marginalised. This incorporates examination of how their lives are individually and collectively constrained; of how they 'resist, challenge, and subvert' the means of dominance; and how and why 'inequities based on gender, race or ethnicity, disability, sexual orientation, and socioeconomic classes are reflected in asymmetric power relationships' (Mertens, 2019: 25). The conceptual framework, literature review, fieldwork, and reflexivity are therefore consolidated in the research framework illustrated at Figure 4.3.

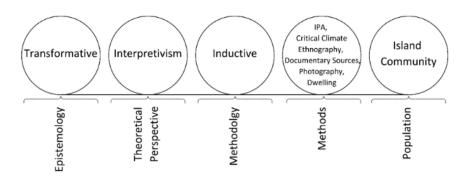


Figure 4.3: Research Framework.

4.2.2 Climate Change Narratives

Climate change narratives tend to be framed in specific ways. The first is the impact of climate change on how we will live in the future. The second is the impact of climate and climate change on how we have lived in the past. Each of these narratives is primarily informed by quantitative data and climate modelling, with historical climatology also sometimes drawing quantitatively from socio-cultural sources. A third climate change narrative has a focus on impacts to 'others' now, to the challenges being experienced by peoples and/or the rest of nature in places that are 'not here'. A fourth investigates what we think now. This may consist of surveys to ascertain levels of awareness and/or concerns which are generally formed on climate change projections rather than experiences attributed to climate change, or examination of response after an environmental change or extreme weather event occurs which may or may not be attributed to climate change impacts. Both seem to be primarily statistical or mixed-methods research. There is, however, a prevalent theme throughout this variety of discourse. This is that the marker of climate change is the tangible way or ways landscape-society interaction becomes altered.

This research, trying to understand the abstracted meaning of climate change, hopes also to contribute to a fifth climate change narrative: how experience of place through a continuum of participation in the 'material world of ordinary life' (Jackson, [1960] 1997), including weather and the rest of nature in ongoing social and environmental change, influences climate change resilience, vulnerability and adaptive capacity during a time when this response now incorporates local impacts of extreme events and climate change projections. Hulme (2009: 9-11) states that the 'dominant popular understanding of climate ... remains this numerical and statistical one', distinguished from weather only by 'a filter of time' yet it has 'always carried a deeper and more ambiguous meaning for humans'. It may be argued that all life exists in this shared metaphysical place today. However, in Inishbofin, a lived awareness and resilience through transformation, movement and meaning within an intimately known islandscape incorporates processes of uncertainty changed because of contemporary weather and ocean experiences, and amplified by the historical and contemporary (in)actions of state and county authorities. As discussed in Chapter 3, the islandscape is conceptualised as an assemblage of oceanscape, landscape, place and time with human-environment interplay contributing to a mesh of socio-ecological dynamics. Combined with ethnography, ideas about landscape and islandscape, and engagement through dwelling, are also a response to Jackson's ([1960] 1997) understanding of humans as participants in landscape and Massey's (1995) of the 'space-time' of place identity.

4.2.3 Scale

The issue of scale is relevant in Inishbofin in several ways. The first is that the island's size, referring to the land component, is considered small. Land is scarce. Smallness is identified as a physical characteristic of islandness within island studies though 'how small' remains a disciplinary debate, as mentioned in Chapter 2, and Baldacchino (2008b: 38) rejects use of the descriptor 'small' because of how large is equated with 'normal'. 'Small' is often aligned with limitation and marginalisation within neoliberalist narratives. The second is that the consolidation of power and control of resources wielded by local (county, regional) and state authorities, and how these are influenced by the national, EU and global economy, is widely underpinned by 'development' drivers that prioritise economic considerations. A third relates to knowledge. In considering the importance of local, place-based knowledge, 'bottom-up' and 'top-down' terminology is typically used which this research proposes maintains the hierarchal thinking that it is attempting to dislodge. The continued importance of scale, therefore, is that it currently permeates social, cultural, political and economic structures, narratives and policies. Marston, Jones and Woodward (2005) argue that scale is both socially structured and endemic within social structures: the term is pervasive with particular implications in reinforcement of the notions of micro and macro. They contend that social practice 'takes a lower rung on the hierarchy' compared to 'broader forces' including globalisation (Marston, Jones and Woodward, 2005: 427). They state, referencing Gibson-Graham (2002, 365-6: original emphasis), that 'we are subjected to the discourses of globalisation and the identities (and narratives) it dictates to us'.

Building on this idea of scale as a damaging concept influencing identities and narratives, this thesis proposes that the ongoing conceptualisation of the margin and the marginalised reinforces *margins thinking*, thus continuing the social processes of marginalisation. This is considered with reference to the new national islands strategy in Chapter 6. Margins thinking results from being subjected to a discourse that originates partly in perceptions and actions of scale connected to colonialism, governance, and globalisation. Additionally, scale, as currently enacted through climate change and other policy, is devoid of mechanisms that can account for the place and local knowledge based drivers that form meaning and response. This is a challenge for policy makers yet to be resolved. Therefore, in thinking about the question of scale and how to value the local knowledge that exists autonomously of bottom up/top down, macro/micro or global/local narratives, yet acknowledging that scale is pervasive and cannot be ignored, this research attempts to implement a 'flat ontology' (Jones, Woodward and Marston, 2007; Marston, Jones and

Woodward, 2005, 2013). Through a flat ontology approach, the island is responded to 'on its own terms' (McCall, 1994, 1996) and the dominant hierarchies of knowledge and power explored throughout this thesis are evidenced as detrimental to island communities and also as contributors to increasing climate change vulnerabilities. This conceptual position aligns with dwelling and the meshwork in examination of differences as relational rather than hierarchal, and also with the posthumanism perspective carried through this thesis in an attempt to move beyond Cartesian binaries.

4.2.4 Ethics

Researchers at Maynooth University are required to adhere to the highest ethical standards. A rigorous process is enforced whereby research design must fully consider the ethical implications of the research. This research received ethical approval from the University Ethics Committee under Tier 2 of this process. Approval was applied for and granted to engage with adults over the age of 18 years through ethnographic research in Inishbofin. Initially granted to 28th February 2022, it was extended to 31st October 2022 as adaptations were required in response to the Covid-19 pandemic.

4.3 Interview Processes

4.3.1 Positionality

I am a mainlander, naïve, unknowing, told with shake of head, 'You must be mad, no one comes here for winter.' And months later: 'Well, you stuck it, fair play to you, you know what it's really like here now.'

I am a woman, alone. Women I talk with—will become friendly with—sometimes point out husbands and boundaries. Flirtatious advances, rare, are received (not from husbands) and rejected.

I am from a university. I meet a few people for lunch in the Beach Bar one afternoon; two island friends who hold master's degrees, and a long-term island researcher and now regular visitor with a doctorate. An Islander joins us, commenting, 'So this is the brain table.'

I am a cultural authority. Here authorities do not listen, they impose. The first day of my second winter, minutes off the ferry, I am told, 'Word's gone round you're back ... everyone will be watching themselves'. I ask why. 'You're a brainbox, aren't you? You're here looking at everything.'

I am powerful, with a funded project. One late pub night, an Islander, drunk and irate, accuses, 'Everything with you is a story, isn't it?' Soon I will leave with notebooks full of their story.

I am a stranger, strange. An Islander observes with some sympathy that I 'never switch off that researcher brain'.

I am a person of privilege. Who I am perceived to be and who I think I am become interchangeable.

I am 'your one with the red hair, the researcher'.

'Qualitative researchers are enmeshed in their projects' (Leavy: 2020, 1). Critical ethnography necessitates a critique of both the 'notion of objectivity' and the 'notion of subjectivity' (Madison, 2020: 9). Objectivity in ethnographic research is described as 'a sensitive and controversial topic' by Cardano (2014: 1, 14) who analyses objectivity as the concept of academic 'truth' based on 'inter-subjective agreement, constructed discursively, defended by a clear and well-formed argumentation'. Cardano (2014: 2) adopts Altheide and Johnson's (1994) idea of reflexivity as 'an account of the way research was carried out and of the characteristics of the observer' to examine the concepts of objectivity and reflexivity. Cardano (2014: 1, 8) also proposes that a 'reflexive account' provides 'important (though not conclusive) tools for assessing the plausibility of (some or all of) the assertions made' and therefore contributes to the 'robustness of results gained through an ethnographic research' for reasons including that reflexive practices 'encourage methodological creativity'. Ethnography is simultaneously emotive and cognitive because relationality creates feeling as well as data and analysis. Living with people as a researcher means living with a constant questioning, concern, doubt and guilt, because it is living with the purpose of addressing a research question while creating and attending to relationships, as part of the 'messiness' and 'nerve-wracking' aspect of fieldwork identified by Ravitch and Carl (2016).

Mathur (2018: 120), recognising the 'dialectical relationship that obtains between ethnographers and their research participants, where each is trying to make sense of the other', proposes that it can 'take quite a while to see how an ethnographer herself/himself appears to these interlocutors'. Early in this research, to greater or lesser degrees, I recognised that I was embodying the projected *perception* of who I was as a researcher to Islanders (as I understood it) and so I was sometimes restricted, or reverted, to topics considered appropriate for discussion with 'a researcher'. This occurrence, though it illustrates that relationality in the field is often contingent on the capacity to adapt to varied encounters and world views, was resolved through gaining experience and knowledge of fieldwork praxis and ongoing evaluation through reflexivity. With increased

awareness and discipline, it reformed as an effective research tool. Mathur (2018: 125) also describes how 'certain kinds of knowledge are shared only with outsiders and pariahs'. This was an outcome of this research which created complexity in analysis and writing because this private knowledge was sometimes provided only on agreement that it could not be written about. Thus, research is an enactment of trust. Trust resides and is found in the work, in the place and the people, in the researcher, in Supervisors, in relations and importantly, in time. The experience of this research is that the relationality central to successful ethnography is dependent equally on trust and on time. Time is the recognition by participants of commitment and continuity of presence, yet simultaneously there is an inherent temporality to this presence because the ethnographer always leaves. The research, then, is conditional on the specificity of time in the history of the people and the place, and of the researcher.

The writing, importantly, is not after ethnography, it remains part of it. Experiences during fieldwork are reinhabited with concurrent re-examination of positionality and responsibility, at times synchronising with analysis yet sometimes pulling and pushing against. Therefore, if the research and ethnography, including this writing, are to provide value and hold meaning, vulnerability as a researcher must be accepted. Identity flexes and shifts yet who I am as a researcher is informed by my background including ruralness, being working class, understandings of relationality and connection with the rest of nature, professional experience in the NGO sector including working with and for socioeconomically marginalised groupings and in environmental advocacy, and in this research, some commonality of the cultural heritage associated with being Irish. However, though we may share socio-cultural familiarities that can positively and negatively impact on rapport and relationality, this does not distract from the bilateral understanding that I am not an Islander nor can I experience or know the islandscape in the same way, as 'something seen and a particular 'way of seeing' (Wylie, 2007: 55; original emphasis), and more. As discussed in the following sections, an initial period of undergraduate research in Inishbofin in November 2017 also informed my positionality in the field. Examination of positionality, with reflexivity through critical self-evaluation, is the acknowledgment that the experiences I have had and continue to have influence the questions I ask. Ergo, the potential influence of positionality is recognised as part of this research.

4.3.2 Setting and Dates

In Chapter 1, Section 1.2.3, the process leading to selection of Inishbofin Island, County Galway as an appropriate location for this study is detailed. The setting of Inishbofin Island

is not masked nor otherwise anonymised. The settings of the pre-arranged, semi-structured and informal interviews include people's homes and the Beach Bar. The settings of the emergent, non-structured and informal interviews include the same locations in addition to the shop, the community centre, along the roadside, and the beach. The ethnographic research was conducted between 2017 and 2022 on the island. The initial visit was from the 1st to 6th November 2017 to conduct undergraduate research. This thesis, however, while influenced by that experience, is primarily a result of field visits in July 2019 (three days), from October 2020 to January 2021 (residential), in April 2021 (ten days), January to May 2022 (residential), July-August 2022 (fifteen days), and October 2022 (three days). All interviews were conducted in-person between 2017 and 2022 on the island. All were conducted in English, the first language of the researcher and that primarily spoken in Inishbofin Island.

4.3.3 Terminology

A commonality that became quickly apparent during the 2017 interviews is that people who live here are highly knowledgeable of, and responsive to, weather and ocean processes. Another early learning was the reluctance of many people to engage with terminology including the term 'climate change'. One older Islander, visibly recoiling and crossing her arms on hearing these words in 2017, strongly stated, 'I wouldn't know anything about that'. This and similar interactions revealed how older Islanders in particular can be discomforted when 'outside' representatives of cultural authorities propose conversation on a locally important topic, and how climate change, and weather in particular, are not considered as distinct to other elements of lived experience. As my understanding of Islander identity, local governance and the continuum of marginalisation was later expanded through subsequent ethnography, and through more in-depth discussions with Islanders, I identified a likely combination of contributing factors. Of these, mainland schooling experiences including identity prejudice (discussed in Chapter 5, Section 5.4.2), historical and contemporary enforcements by external authorities that dismiss islandness (discussed in Chapters 6, 7 and 8) and residual distrust of residential writers since Tall's 1986 memoir (Chapter 2, Section 2.2.4) are significant. Island life is 'emphatically' framed by 'living within a set of parameters, defined by water' which includes the island trope of the 'insider/outsider dynamic' (Royle and Brinklow, 2018: 12) and some 'suspicion of outsiders' (Péron, 2004: 330). Combined, these drivers can, or can be perceived to, misunderstand, subjugate, negate or betray local, place-based knowledge and voices. Adapting the approach used as appropriate during subsequent visits, and ongoing reflexivity and consideration of positionality, reduced this barrier. Rather than 'climate change impacts', for instance, I would instead sometimes ask about 'changes in patterns of weather (or sea) over the years'. Everyone talks about the weather and the sea, and through an understanding of the 'typical' or predictable patterns which are imbued with cultural meaning as 'an idea of the human mind' (Hulme, 2017), holds deep knowledge of if and how these are changing. Additionally, through dwelling and time, my personal experience of island weather, 'sticking it out' over winter, and increased understanding of its meaning led to recognition that I had 'earned' some knowledge of a realm generally occupied only by Islanders, contributing to development of some shared experience and a common 'weatherworld' language. This also provides an example of how I became, for a time, part of the socio-cultural world of participants, and again highlights the importance of ongoing examination of positionality and ethics.

4.3.4 Snowball Methodology

Noy (2006; original emphasis) observes that 'snowball sampling relies on and partakes in the dynamics of natural and organic social networks'. Arguing that it is a 'tactic' deserving of merit and prioritisation in studies, rather than one perhaps deployed as a type of backup plan, Noy (2006) suggests that snowballing accounts for the social, the emergent, and the dynamic inherent in socio-cultural knowledge production, in contrast to 'Cartesianpositivist worldviews' of social knowledge. Parker et al. (2019) identify that this method is notably suited for research with hard-to-reach populations who may, for instance, be low in numbers, experience stigmatisation or be unwilling to participate without the establishment of trust, and also that it is suited to understanding 'the everyday' of experience. A primary limitation, however, is that it can result in a selection bias which could potentially skew the research findings (Parker et al., 2019). This limitation is fully acknowledged in this research, yet the findings herein suggest that the setting, the time, and a relationality quickly formed, are potentially of more significant influence. In 2017, the snowball methodology led to interviews and conversations with people of a diversity of ages, genders, livelihoods, levels of acceptance of climate change as an issue, permanent and part-time residents, and with Islanders and non-Islanders. These interviews remain of influence on subsequent research periods.

4.3.5 Interviews and Participants

I had not visited Inishbofin and did not have any contacts there before September 2017. In the weeks leading up to the November 2017 undergraduate research, I emailed island individuals and companies whose contact details were publicised online as they were involved in tourism. Three businesses and individuals thus contacted did not respond. Of those that did, one person who did not wish to participate introduced me by email to a retired marine biologist with over forty years lived knowledge of the island. This respondent, who encouraged and contributed greatly to my undergraduate study, sadly died in 2018 as I was finalising the early projects. However, the knowledge and insights he shared remain influential on subsequent research, with several considered in the chapters that follow. Thus, in 2017, six loosely-, or semi-, structured interviews were arranged by email in advance. Through the snowball methodology while in Inishbofin, another twelve people agreed to be interviewed, and so the original contacts influenced that research. While contacting those whose details were already publicly available may have resulted in connecting initially with people perhaps more experienced or comfortable in engaging with visitors to the island, and to sharing local history and heritage, no specific participant selection criteria were applied. The aim in 2017 was to meet all of the people who had expressed interest in being interviewed, within the short timeframe available. In 2017, a total of eighteen interviews were conducted: six pre-arranged, and another twelve arranged while on the island. Females and males aged from their mid-20s to their mid-70s participated. They were Islanders and full-time residents, and two very long-term part-time residents and island home owners (or as one described it, 'two-thirds-time').

There were two main purposes of the July 2019 visit: (1) to reconnect in person with as many initial interviewees as possible to ascertain their potential interest in contributing to the PhD study; and (2), to attempt to source accommodation for residential fieldwork during 2020. I met with four of the original interviewees: three at their places of work, all connected to tourism, and one in the Beach Bar. An advance email agreement to meet with a fifth for tea in Murray's Hotel was prevented by lack of mobile network coverage while I was there. Furthermore, I conversed with several other Islanders and residents whom I had briefly met or been introduced to in 2017 but not then interviewed, and shared information about the research project including my plan to relocate to the island the following spring. Several indicated their interest in being interviewed on my return. The four successful "reconnections" were also positive. These meetings, though not planned as interviews, did at times veer towards the research objectives, influencing formation of the research questions. Notes were made in the evenings on return to my B&B accommodation. Additionally, an informal verbal agreement was made with one of these contacts for rental of a cottage starting in mid-April 2020 for approximately eight months. However, community implementation of the voluntary closure of the island on 15th March, followed by the first national Covid-19 'stay at home' order on 27th March and ongoing restrictions, required that this fieldwork period be indefinitely postponed. Maintenance of contact with a small network of Islanders and long-term residents since 2017, and the 2019 visit, did enable reengagement and recognition on relocation to the island in October 2020.

Mason (2004) describes the semi-structured interview as reflecting 'an ontological position that is concerned with people's knowledge, understandings, interpretations, experiences, and interactions'. Thus, this approach was appropriate in achieving the objectives in 2017 and during subsequent research periods, and aligns with my responsibility towards those who choose to participate in this work. In 2017, the pre-arranged interviewees received printed information about the research and consent forms (Appendices B and C). These interviews were recorded with permission, later transcribed, and any extracts used were attributed to these interviewees in my undergraduate projects in both Geography and Anthropology. The pre-arranged interviews were initially scheduled for one hour each but ranged in duration from approximately one and a half to over five hours. They were semistructured and fluid, beginning with researcher-led enquiry about local weather and sea observations which led into discussion of the impacts of the 2013/14 storms, and then moving across a diversity of topics including climate change, biodiversity, pollution, impacts of policy and authorities at local and national levels including for provision and maintenance of services and infrastructures, population decline and contemporary community composition, and practices in fishing and farming and how these are changed. Five were conducted in people's homes and one in Day's Pub/The Beach Bar.

The twelve additional interviews were coordinated while on the island through the snowball methodology. I did not ask the initial participants to recommend other potential interviewees. Rather, these suggestions were voluntarily offered and introductions made with no prompting on my part. These twelve interviews were more informal in execution and generally shorter, ranging from thirty minutes to approximately one hour, and focused on weather and environmental issues. These interviews were not recorded. Notes were taken which were later transcribed. Interviewees were provided with the same printed forms. Several but not all opted to keep the documents provided and none wished to sign a consent form, largely opposed to what they described as excessive 'formality'. Instead, they choose to provide verbal confirmation of their agreement to be interviewed. Their knowledge contributed to the undergraduate findings though direct attribution was not included in those theses. One 2017 interviewee drove me to the North Beach and Lough Bofin, where we examined the impacts of the Atlantic breach here during the storms of

winter 2013/2014 (discussed in Chapter 8). Another drove me around the island as we discussed its history, local governance, infrastructures, topography, biodiversity, and environmental changes he had observed over decades. Additionally, other informal, unscheduled engagements arose in the shop, pub or while walking. All of these experiences—pre-arranged, snowball methodology arranged interviews, impromptu conversations, being shown various locations and participant observation—contributed to my learning and influenced the PhD study. Of the 2017 interviews, five of the recorded interviews are directly drawn from in this thesis: two Islanders, one full-time resident, and two part-time residents, all connected to the island over many years.

In contrast to the 2017 undergraduate projects, when all primary data were gathered during a research visit spanning just six days, learnings gained incrementally across longer timeframes during the ethnographic periods from 2020 onwards have predominately shaped this research, and led to unanticipated findings such as the impacts of colonial legacies on climate change vulnerability today (Chapter 6) through being open to, and actively making time for, engaging in the conversations people wanted to have. Thus, this process moved from interviews into an ongoing dialogue that was fluid, picked up again over time, sometimes with days or weeks between or with different people joining and leaving the conversation. Apart from twelve pre-arranged, semi-structured interviews post-2017, the majority of dialogue occurred in informal situations: very often in the shop, community centre or pub as these are the hubs of community life. On one occasion, I prearranged an interview on a specific topic (farming and gender). Neither the pre-arranged interviews nor this dialogue were recorded, though notes were taken either during the conversations or later in fieldnotes. The majority of conversations were with female and male Islanders and full-time residents aged from their early twenties to early sixties, and I had occasional shorter conversations with people in older age groups. As caution regarding Covid-19 prevailed with the intent to protect older and vulnerable Islanders, accessing the small number of older Islanders was limited from 2020 to 2022, and localised migratory patterns impact on access to younger people who are away attending university or working on the mainland. I engaged with approximately 30% of the population, with approximately 15% of the population becoming regular contributors. I now consider several of these contributors to be friends, with very close friendship also forming.

While the disciplines employ different epistemologies which impact on understandings of what constitutes knowledge, and its production and communication (Nielsen and D'haen, 2014; Rescher, 2003; Miller *et al.*, 2008), in ethnography the focus and design of the

research are not pre-determined because they materialise during it in response to insights gained in the setting (Murphy and Dingwall, 2007). Thus, it becomes more challenging to quantify the number of participants or their varying levels of involvement as the research shifts over time along with participants who travel in and out and/or may migrate weekly or seasonally between the island and the mainland, their varying levels of engagement, the in-situ development of the researcher's knowledge (including identification of emergent knowledge gaps), networks and relationships of trust, and because something is learned through every encounter and observation. Encounters often leading to conversations, insights and observations that contributed to the research are regularly organic; for instance, occurring on a walk to the shop or during a chat over lunch in the pub. Ethnographic practice, including participative observation, forms on immersion to gain deep understanding, meaning that the researcher is never fully 'shut off' while conducting fieldwork. In every instance, my priority was to achieve the principles of ethical research by respecting human dignity and maintaining my commitment to research integrity.

This process can raise a dilemma in communication of the research design and methods, however, and later in communication of findings. Nielsen and D'haen (2014), in reviewing 622 papers on research on socio-cultural and climate change dimensions deploying qualitative methods, find that none contain a description of what the researchers understood participant observation to be. Its application in this research is described in Section 4.4.1. They call for researchers to identify 'what needs to be explained about the how and the why of the research', stating that is essential for interdisciplinary collaboration. They state that this is of particular relevance for qualitative researchers because quantitative researchers may not have knowledge of 'what "asking about climate change" actually implies in terms of, for example, time and variety of methods' (Nielsen and D'haen, 2014). Additionally, they argue that researchers must be particularly aware of how they are perceived by their participants, including any associated impacts on their data collection, which is examined in Section 4.3.1. A substantial ethical dilemma also rests on the issue of consent: specifically, on how to ensure ongoing informed consent throughout the various, changing, research periods from 2017 to 2022.

In their analysis of practices of informed consent in research, Murphy and Dingwall (2007) argue that prevalent research practices in obtaining informed consent are more suited to 'discrete episodic interventions' than to long-term ethnographic engagement based on trust developing between the researcher and participants who, they contend, 'exercise ongoing judgement'. Further to the example in Section 4.3.1, and while centring

commitment to the research and critical analysis, active participant observation through residency, as in the ethnographic research from 2020 onwards, means that the 'remove' of the researcher is itself removed. Therefore, where does the researcher end or begin? Complexities from a blurring of boundary between 'researcher' and 'person', and that this effectively means that both are always engaged, arose at academic integrity and personal integrity levels. Acceptance that the kind of knowledge creation the research aspires towards required in-depth relationality, as did the particular setting, somewhat conceptually resolved these complexities yet the question of how to maintain with participants, who often become friends over time, an awareness of the research function and imperative was challenging to resolve. It was further contributed to by many participants' disclination to sign any type of forms; both those who had previously done so as they felt once was enough to engage with 'bureaucracy', and those who verbally expressed consent and stated that this would suffice.

By publicising the research locally in print through placing posters in the shop, community centre and my accommodation, and online via the community Facebook page; ensuring that the participant information and consent forms were available (Appendices D and E) by always carrying these with me; through regularly describing the research purpose when informal conversations veered towards research topics as well as when meetings had been pre-arranged; and through inclusion of interjected verbal reminders during discussions, for instance, 'you know I am researching ...', or 'I'm asking you this because my research is about ...' as verbal consent proved more feasible than written, I ensured that participants remained informed of my status as a researcher and the purpose of the research. Also during fieldwork, it was often Islanders who expressed their awareness of my positionality and the research through observations such as 'you're here looking at everything' or that I could 'never switch off that researcher brain'. Such expressions confirmed awareness of the research and suggested acceptance of my amalgamated 'researcher person' role. Thus, although I was not 'local', I was not a stranger nor an intruder for any of the participants. I held a presence of relationality, meaning that I became part of the social fabric of island life. Cîrstea and Pescinski (2024) describe this 'intimacy as a method' as an outcome of longer-term, situated ethnographic research. They argue that emotion and intimacy should not be left out of research or in its reporting simply to maintain 'an image of objectivity and rigour' (Cîrstea and Pescinski, 2024). This is not to suggest that the complexities of relational research, including ensuring consent, can or should be ignored in any way. Clearly research should be conducted only with consenting participants. Thus, this thesis

prioritises reflexivity over an unattainable objectivity, and acknowledges and responds to emotional and ethical complexities. It centres a moral responsibility to participants, the community and the island that exceeds the framing of researcher. It recognises the value of friendships formed during fieldwork and also the value of their contributions to this work.

All of these learnings combined in contributing to ethnographic processes from 2020 to 2022. I learned how to renegotiate consent over time, and particularly because this is a smaller community with deep connections, to work to protect anonymity. This led to the 2017 interviews and all subsequent contributions by the original interviewees, and by additional community members, being anonymised in this thesis. The small size of the population and increased understanding of island law and the public-private life of Islanders, and the pattern of island experiences with external authorities, influenced this decision. Anonymisation also facilitated participants in freely engaging with the research. Contributors were thus enabled to explore complex understandings concerning identity, history, marginalisation, governance, socio-ecological dynamics, weather and climate in confidence, should they choose to.

4.3.6 Covid-19 Impacts

Between October 2020 to October 2022, data were gathered through the methods described in Section 4.4. There are distinct differences in fieldwork experiences and outcomes resulting from the impacts of Covid-19. Inishbofin went into 'lockdown' on 19th March 2020 in advance of the nationwide Covid-19 restrictions being implemented. The ferry ceased operation and all non-essential travel was prohibited. Thus, a fieldwork residency which had been scheduled to commence in April 2020 was postponed. In September 2020, the Irish Government announced a 'Living with Covid-19' five-level plan. Domestic travel was at this time under Level 3 permitted for work, education and essential purposes, though working at home was otherwise mandated, household visits were restricted to one other, and further restrictions were also enforced. Therefore, the rules at Level 3 meant that I would now be able to return to Inishbofin and conduct one-to-one interviews indoors. Through a 'seeking accommodation' post on the community Facebook page, I secured rental accommodation on the island and relocated in October. The cottage, one of two on the island accessible on foot or by four-wheel drive only, was in a remote location approximately 40 minutes' walk from the shop. On the 21st of October, Level 5 of the Covid-19 plan was again implemented. This included 'stay at home' and 'no visitors' mandates. In tandem with weather conditions preventing outdoors interviews, and that meetings or plans are typically arranged in-person or by word of mouth when there, the

possibility of conducting scheduled interviews was restricted along with greatly reduced opportunities for informal encounters.

Maintenance of contact with a small network of Islanders and long-term residents since 2017, and the 2019 visit, did enable reengagement and recognition, as mentioned. That community members were aware of my identity and the purpose of my stay was evident when conversations outside arose, and these provided an opportunity to explain the research in more detail and receive valued contributions. However, access to the people who live in Inishbofin, and particularly to older community members, was certainly limited between October to December. This limitation of the first period of research continued during revisits with regard to establishing connection with older Islanders, when regulations were less restrictive but still enacted to protect vulnerable community members. Yet this became a highly valuable period as reduced opportunity for social interaction, and more isolation than had been anticipated, enabled absolute immersion in experience and analysis of the weatherworld of the island through dwelling, that perhaps could not otherwise have occurred. Correspondingly, my understanding of the importance and influence of the human-environment, or socio-ecological, systems of place was greatly increased. The whole island provided opportunities for rich encounter.

During winter, it is often challenging to stop to talk outside. In the 2020 fieldwork, public spaces were closed apart from the shop which had restricted access (3 people at any time) and the church which is always unlocked. The church was empty whenever I entered it during the highest level restrictions, but the shop often had small, socially distanced queues outside when it opened for three hours on three days per week. Impromptu conversations, though brief, occurred in this queue and also along the roads, piers, beaches and trails. These interactions offered facts, insights, opinions and ideas that were often surprising. Attempting to understand why such brief conversations outside were regularly particularly revealing, I hypothesise that the immediacy of the weather and response to this immediacy—words are whipped away as they form—denudes talk. Communication must be concise and effective. Additionally, though it is physically challenging to move about, there is a kind of exhilaration generated by being in the weather as it is experienced at the height of winter, through dwelling as praxis. The facemasks of Covid also potentially assuaged private identity. It must be considered too that I was something of an oddity in the islandscape at that time, when travel was not possible and only Islanders and residents were otherwise present, which likely stimulated some curiosity or interest. The outcome was encounters of abundance, in part ameliorating the challenges of ethnography during a

pandemic 'lockdown' within a remote island during winter and a small in number population with a higher than average ageing demographic. Although limited as described, this period proved to be highly valuable and revealing overall, because of the richness of social encounters when they occurred and for acute learning about the entangled meshwork of the islandscape. I had to learn to live with it. This required inhabiting, or rather beginning to inhabit, the socio-ecological relationships that have enabled Islanders to remain here. As mentioned, this contributed to recognition and to development of shared experience which benefited subsequent periods of research.

I returned home for Christmas and New Year with the intention of returning to the island in mid-January but adaptation was required due to a combination of restricted personal mobility and the continuance of Covid-19 regulations impacting access. The ten days spent in Inishbofin in April 2021 were focussed on practical endeavours including packing the belongings I had left behind, interspersed with two pre-arranged semi-structured interviews with previous participants, another that arose outside as an easement of Covid restrictions began, and a social visit. By this point, the island had recorded only two individual cases of the Covid virus. It opened to tourists for the season and accommodation was not possible to secure across summer. In September 2021, I was required to undergo surgery which necessitated a two-month suspension from research for medical leave. Covid-19 restrictions were lifted in Ireland on 22nd January 2022. Through a friendship established in 2017, I secured island accommodation until the first week of May in a house more centrally located in Middlequarter, and returned on 28th January. As I was still reliant on crutches for walking longer distances, I brought a car in on the cargo ferry for this residency. While I did not use it for shorter journeys, the car changed how I interacted with the environment. I accessed areas of the island previously unvisited. As my mobility improved, I could drive to the ends of roads and tracks, and progress from there on foot. Until the early 1990s, there were very few cars on the island and after their numbers increased, cars were owned by Islanders only. The increasing number of cars because of tourism and second home ownership is controversial. An unknown car here during winter signified a displacement and a few Islanders questioned my bringing it in. Covid-19 impacted again with an Omicron outbreak during March 2022 infecting over 40 people including myself. This resulted in the suspension of most social and cultural activities for almost one month including a seminar I had organised in collaboration with the Island Development Company. I spent an additional two weeks on the island in July-August 2022,

and attended the first post-Covid all-community event there in October 2022. These periods informed this research in ways distinct to the 2020 ethnography.

4.4 Methods

4.4.1 Climate Ethnography

Ethnography is acknowledged as a time-consuming method, and an indeterminable amount of time must be initially invested before findings start to emerge, yet qualitative research is highly suited to the enquiry and the setting detailed in the previous sections. The broad definition of qualitative research understood herein is research that 'involves systematic and contextualized research processes to interpret the ways that humans view, approach, and make meaning of their experiences and the world' (Ravitch and Carl, 2016: 2010). I add to this an acknowledgment of the rest of nature, weather and climate in socioecological and dwelling relationships. 'We all return from [fieldwork] changed, troubled, respectful of those whom we have met' (Bonnemaison, 1993). Qualitative research is recursive and multidirectional rather than linear; it is equally 'exciting, nerve-wracking, and messy' (Ravitch and Carl, 2016: 2009). It focuses on 'context, interpretation, subjectivity, representation, and non-neutrality of the researcher' (Ravitch and Carl, 2016: 2010), as 'a way of understanding, describing, explaining, unravelling, illuminating, chronicling and documenting social life', including 'attention to the everyday ... as much as the extraordinary' (Leavy: 2020, 1).

Arguing for the adoption of 'critical collaborative ethnography' in climate change research, Crate (2011: 177) states that ethnography has the 'methodological power to bridge local understandings beyond the local to the multitude of stakeholders and on a multitude of scales' while capitalising on the ethnographer's 'skills in "being there". With reference to longitudinal ethnographic studies, Crate examines how climate change impacts on the ability of people to live in their homeland as well as maintenance of 'their cultural orientations and symbolic frameworks that ground their specific adaptation' (Crate, 2011: 179). The importance of place-based study is its ability to generate 'thick description' of the specific practices necessary for a community to survive and thrive in a particular place, and to 'highlight the moral and ethical implications' inherent in the possibility of a diversity of the worlds' peoples losing what is central to 'their spiritual orientation', 'cultural identity and meaning' (Crate, 2011: 179). Recognising the 'power and promise' of ethnography in climate change research, Crate (2011) calls for a new ethnographic approach: 'climate ethnography'. Climate ethnography recognises that the 'climate science world and the

social world are not separate but integral' (Crate, 2011: 185) through a multi-sited ethnography across local-global connections, traditional multi-sited fieldwork, and the interdependencies of the local population with other places and populations. It includes a 'critical collaborative ethnographic method' which also holds a moral imperative in 'grounding' globalisation by examining the impacts of external forces to 'local cultures rooted in history, tradition and place' (Crate, 2011: 186).

Goodman (2018: 345) notes that recent ethnographic engagement with the issue of climate change 'bears-out the struggle to bridge abstracted climate science and 'lived' sociocultural contexts'. The critical ethnography as field research proposed by Madison (2020) with reference to Foucault's thinking on critique, is aligned with Crate's (2011) climate ethnography in this research as critical climate ethnography. The distinctiveness of critical ethnography is that it contains the 'ethical responsibility to address processes of unfairness or injustice within a particular lived domain', unsettling 'both neutrality and taken-forgranted assumptions by bringing to light underlying and obscure operations of power and control' (Madison, 2020: 5, 6). This research is, therefore, a critical climate ethnography whereby place-based climate study incorporates processes and influences that are 'multiscalar, multitemporal and multistakeholder' (Crate, 2011: 188) to examine the impact of injustices in alignment with climate change projections. Participant observation is understood in this research as the attempt to actively participate in the daily life of the community by engaging in the same everyday activities and interactions, and interpreting observations in alignment with interview analysis through this lived experience. Notes were taken during conversations and participant observation, or as soon as possible afterwards. An aspect of interpretive research that Baker (2018) describes is pivoting. To address the research questions, examination of and response to unanticipated factors (local, national and global) were required. A transformative, critical, phenomenological and posthumanism approach incorporates ongoing responsiveness to the emergent concerns of the community and the place, in a constant exchange between internal and external forces.

4.4.2 Dwelling

Ingold's *dwelling perspective* informs the ethnography. Theories of dwelling by Ingold, Haraway, Latour and others 'defy the idealism that dominates western thought' and the 'ontological separations' of binary divisions (Obrador Pons, 1995: 957). The relation between humans and the environment drives cultures and thus anthropogenic climate change and the courses it can take, originating in how humans know the world in which we live. The concept of dwelling is therefore prioritised theoretically and as a method to

support understanding of islandness. Thus, dwelling became an embodied technique for observing, collecting and analysing fieldwork data. Understanding how cultures respond to their surroundings is what Hulme (2009) identifies when he observes that climate 'always carried a deeper and more ambiguous meaning for humans'. Jones (2009: 266, 267) states that 'dwelling approaches life as a process of being-in-the-world which is open to the world' as a '(re)shaping [of] ontologies of life'. Dwelling as theory and as method was particularly relevant in increasing understanding of the complex socio-ecological relationships analysed in Chapter 5, and how they are negotiated and formed over time, and the uncertainties inherent in how they are being reformed. This understanding enabled increased relationality. In turn, this contributed to the approach to the ethnography discussed in Sections 4.3 and 4.4.1. Therefore, dwelling contributed to an actively focussed personal experience of the islandscape as well as illuminating how Islanders engage within its taskscape. Thus, dwelling and critical climate ethnography supported a symbiotic analysis of relationality and experience in place.

4.4.3 Photographic Ethnography

Photographic ethnography as part of this research was not planned in advance. It became an aspect of the work as it progressed. As Pink (2007: 21) argues, 'images are everywhere' and 'inextricably interwoven' with identities, cultures and societies, and with how 'history, space and truth' are defined. Within a research project, they become part of the researcher's ethnographic knowledge, bearing 'relation to other senses and discourses' (Pink, 2007: 21). Images are constructed, however, as are texts. Concurring with Edwards' (1995: 131, 133) contention (in analysis of ethnographic photography collections in museums) that photographic representation is itself underscored by 'the very ambiguities which characterise the photographic medium', the intention of its inclusion is descriptive so that it may complement analysis contained throughout the text as an additional 'documenting tool'. Photography became part of my own process of knowledge creation and is therefore presented as such rather than as a version of reality claiming truth or objectivity. Thus, the aim is to adhere as much as is possible to the 'context, negotiations and intersubjectivities through which the knowledge was produced' (Pink, 2007: 22).

Previous use of ethnographic photography in Inishbofin is described in Chapter 2. Browne's 'scientific-realist' photographic catalogue from the 1800s is a record valued by today's Islanders for a tangibility it creates. It enables Islanders to 'see' their distant ancestors in a way most cannot, engendering a sense of intimate connection and contributing to understanding of identities, past and present, and to creating the shared vision of the

future considered in Chapter 8. Simultaneously this catalogue embodies the power relations that subjugated their ancestors and so these images are also disturbing. Islanders are often represented in similar ways. For instance, the 1934 (Flaherty) film, Man of Aran, centres primitivism tropes of an unchanged existence at the margins of Europe, with several scenes portraying practices that had declined decades previously. A recent photographic account (Carlos, 2014), which sets out to capture their 'spirit of perseverance in the face of adversity', is both a valued record and a continuance of stereotypical portrayal of 'The Islander'. These and other uses of ethnographic photography, including as a tool to create authenticity in research or as an imposition of colonial or state control of identity, are extensively analysed (for instance, Azoulay, 2021; Buckley, 2014; Edwards, 1992; Pink, 2007; Strassler, 2010). In this thesis, images of Islanders are rarely included. Instead, the lens maintains a focus on the islandscape, including its human-built infrastructures. While they are not identifiably represented in these images as individuals, Islanders are in each one. They and their ancestors have, in conjunction with more than or non-human entities, shaped the islandscape for generations, as have external authorities. Correspondingly, human-environment relationships are apparent in every image. When people are bodily included in photographs, these images are curated to maintain their anonymity, such as being photographed in shadow or not showing facial features. In Chapter 7, images of musicians performing in public are included, and the images of the repatriation of human remains in July 2023 were broadcast in global news media.

The majority of the images curated in Appendix A were taken as I began to experience and become intimate with the islandscape in application of Ingold's (2010) theories of dwelling as a method. Edwards (1995: 133) recognises that the 'two categories of compelling narrative (the expressive) and rigorous analysis (of which photography is the documenting tool) need not necessarily be mutually exclusive, but rather complementary ways of interrogating the same issues'. In proposing the use of 'expressive photography to convey the subjective and affective knowledge that is generally not communicated by more conventional, 'realist' documentary visual techniques', Kroon (2016) contends that expressive photography is 'an intentional academic, creative practice'. Through extended daily walks after beginning, in October 2020, the first of two fieldwork residencies, walking—finding and creating paths of movement—as a simple necessity for travel to the shop or pier, was additionally a phenomenological practice. The weather was changeable during the first six weeks in particular, before the island became dominated by rain and high winds. Overall in 2020, Ireland experienced higher than average sunshine totals (Met

Éireann, 2020). This is arguably visually represented through what *is* pictured and what *is not* pictured, as are several practicalities of island living. At this time, I had use of a borrowed Canon camera but no protective cover. The Islander who documented the storms of winter 2013/2014 had previously told me of the damage to her cameras because of high winds and rain. Hence, I regularly could not take this camera outdoors. Often it is not possible to be outdoors at all during these conditions, but when it was, photographs in more extreme weather were taken on my mobile phone. Some of these phone images are included in Appendix A, though most were taken with the camera.

The curation of these images is thus a response to a combination of phenomenological, creative, and practical effects, namely: (1) an effort to visually interpret the physicality of journeying by foot, how it interplays with the materiality of the diverse surfaces traversed and the geography of infrastructures as discovered routes through a place being incrementally learned; (2) photography without specialist equipment being often impossible in weatherworld conditions, or being unable to leave the house during extreme weather, sometimes for periods of many days; (3) the resolution of the images actually available, affecting quality for print; (4) creative choices in juxtaposition of islandscape patterns revealed, or visible to me, through shape, line, texture, light, form and colour; (5) the attempt to represent the rest of nature, more than human inhabitants and humanislandscape interactions over time; (6) the effects of seasonality and Covid-19 regulations on population numbers and composition contributing to environmental immersion at the same time as engagement with other people was limited, and; (7) attempting to represent an affective, sensory yet 'invisible' personal experience of the force of wind, weight of sunshine, cold, rain or fog, and of sound, taste and scent in a newly inhabited weatherworld. While aligning with Kroon's (2016) argument that subjective images of this kind 'can create a distinct knowledge that deepens our understanding of places and phenomena', I recognise that this personal photographic representation may be inadequate to comprehensively communicate aspects of my lived experience, yet as visual perception is one sense of dwelling, it may reach some way towards this aim. Accordingly, I acknowledge my presence in every photo too: on the 'other side' of the lens, in framing or selection choices, and in my positionality and gaze. Overall, the photographs included throughout this thesis, documentary and expressive, may elicit response to islandness, socio-ecological relationships, interactions and associations, and temporality and spatiality, in conjunction with the text.

4.4.4 Documentary Sources

A diversity of documentary sources is drawn on throughout this thesis, in addition to the academic literature. Extracts from these documents were selected for representativeness and typicalness, with the purpose of identifying dominant narratives of islands, Islanders and islandness at various times. They include historical and contemporary records; historic and contemporary Dáil (Irish Parliament) debates; historic House of Commons UK papers; census records; local, state and national policies and reports; news media; online sources including Inishbofin social media pages; poetry and literature. At the outset, the intention was to seek interviews with key representatives from organisations that hold responsibility for services and infrastructures on the island such as Galway County Council (GCC), the Office of Public Works (OPW), the Principal Officer of the Islands Unit which is now part of the Department of Rural and Community Development, and others. However, as the research evolved, the decision was taken not to do so. Rather, this research prioritises Islanders and islandness as their contemporary stories are usually undocumented.

There are two exceptions. I contacted Galway County Council (GCC) by telephone in June 2023. The receptionist did not know where to connect the call when I asked to speak with 'whomever is responsible for the islands'. A second contact was made with GCC by email in September 2023 with a request for information on: previous conservation efforts on Dumhach Beach; any available climate change, environmental or ecological surveys or reports specific to the island; when the coastal erosion study (mentioned in Chapters 7 and 8) might be released; and updates pertaining to the Rusheen Pier which was almost completely destroyed in a storm in February 2014. Notwithstanding a prompt and pleasant reply, and a brief exchange of emails, no information was provided that the community had not already shared with me or that was not already publicly available. If there are any climate change, environmental or ecological assessments available or planned was not clarified, and no information was provided on the coastal erosion survey or on if a decision had yet been taken to repair the Rusheen Pier.

The contemporary policies, records and documents published by national and local authorities that are primarily drawn on in this thesis are listed in Table 4.1, and the bodies advocating on behalf of islands that are most often referred to are shown in Table 4.2.

Table 4.1: Governance Documents

Year	Body	Title	Description
1946	Department of Industry and	Aran Islands	Provides for
	Commerce	Transport Act	promotion,
			maintenance and
			payment of subsidies
			for an 'efficient
			shipping service'
			between Galway City
			and the Aran Islands.
1996	Government of Ireland:	A strategic framework	First national all
1990	Interdepartmental Committee on	for developing the	islands strategy.
	Island Development	offshore islands of	isialius strategy.
	Island Development	Ireland	
2009	Calway County Council (CCC)		Environmental report
2009	Galway County Council (GCC)	Galway County	Environmental report
		Development Plan	by CAAS for county
		2009-2015: Strategic	development plan.
		Environmental	
	<u> </u>	Assessment	
2015	Environmental Protection Agency	Drinking Water Audit	Report in respect of
	(EPA)	Report	audit carried out in
			Inishbofin's water
			treatment plant on
			21/08/2015.
2015:	Galway County Council (GCC);	Coastal Protection	Survey of Inishbofin's
Pending	Office of Public Works (OPW)	and Flood Risk	coast and analysis of
		Management Study	flood risk. Funding
		for Inishbofin Island	allocated in 2015,
			survey conducted
			during spring 2022.
			Draft print version
			produced in 2023.
			Unpublished at time
			of writing.
2017	Government of Ireland	Island Fisheries	On Committee Stage,
		(Heritage Licence) Bill	the third of an eleven-
		,	part legislative
			process.
2018	Department of Culture, Heritage	Spending Review	Analysis of costs
	and the Gaeltacht (DCHG)	2018: Subsidised Ferry	associated with
	. ,	Services to Offshore	provision of subsidies
		Islands	to island ferry
			services.
2019	Department of Culture, Heritage	Islands Policy	Discussion document
_	and the Gaeltacht (DCHG)	Consultation Paper	as part of the
			development of
			second national
			islands strategy.
2019	Department of the Environment,	National Broadband	Government initiative
(2012)	Climate and Communications	Plan	to deliver high speed
()	(DECC)		broadband services
	(5200)		nationally to all
			premises.
			premises.
		1	

Table 4.1: Governance Documents cont.

Year	Body	Title	Description
2020	Galway County Council (GCC)	Galway County Digital Strategy 2020-2023	County strategy to roll out broadband access and promote the digital economy.
2020	Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media (DTCAGSM)	Islands Briefing 2020	Lays out cross- governmental department approach as part of development of the second national island strategy.
2020	Department of Culture, Heritage and the Gaeltacht (DCHG); Department of Rural and Community Development (DRCD)	Statutory Order No. 379	Transfer of Islands Unit, based in Furbo, Co Galway, to Department of Rural and Community Development.
2020	Central Statistics Office (CSO)	Census of Agriculture	Farming and farms census.
2020	Government of Ireland	Our Shared Future	Programme for Government.
2021	Government of Ireland	Our Rural Future: Rural Development Policy 2021-2025 (notably Chapter 10, Supporting the Sustainability of our Islands and Coastal Communities)	National rural areas strategy.
2021	Department of the Environment, Climate and Communications (DECC); Department of the Taoiseach	Climate Action Plan 2021	Sets out how 51% reduction in overall greenhouse gas emissions by 2030 and path to reach netzero emissions by no later than 2050 will be achieved.
2022	Central Statistics Office (CSO)	Census of the Population	National census.
2022	Galway County Council (GCC)	County Development Plan (notably Chapter 13, The Galway Gaeltacht and Islands)	County development strategy from 2022-2028.
2022	European Union (EU) Committee on Regional Development	Report on EU islands and cohesion policy: current situation and future challenges	Post-Covid analysis of state of EU islands that calls for implementation of a European strategy for islands.

Table 4.1: Governance Documents cont.

Year	Body	Title	Description
2022	Úisce Éireann / Irish Water	Draft Regional Water	Development of the
		Resources Plan –	first collective
		North West: Strategic	drinking water review
		Environmental	for the entire North
		Assessment	West region with a
			focus on risk.
2022	Department of Agriculture and	Eco-Scheme/Agri-	Agri-environment
	Food (DAFM)	Climate Rural	climate scheme to
		Environment Scheme	address biodiversity
		(ACRES)	decline and deliver
			income support for
			farm families.
2023	Government of Ireland	Our Living Islands:	Second national
		National Islands Policy	islands strategy.
		2023-2033	
2023	Government of Ireland	Our Living Islands:	First action plan of
		Action Plan 2023-	second national
		2026	islands strategy.
2023	Department of Housing, Local	Report of the Inter-	Initial findings and
	Government and Heritage	Departmental Group	recommendations of
	(DHLGH); Office of Public Works	on National Coastal	inter-departmental
	(OPW)	Change Management	group.
		Strategy	

Table 4.2: Island Organisations/Reports

Year Founded or Published	Body	Title/Description
1980	EU Islands Commission (CPMR)	Developed as part of the Northern and Western Regional Assembly (NWRA).
1993	Comhdháil Oileáin na hÉireann / Irish Islands Federation	Founded by island communities to address regional and national policy issues.
2001	European Small Islands Federation	Regional cooperation and advocacy.
2006	Irish Islands Marine Resources Organisation (IIMRO)	Fishing community led: representing the fishers of the islands of Counties Donegal, Cork, Galway and Mayo.
2008	Comhar na nOileán / Islands Partnership	Manages LEADER and other programmes for Department of Community, Rural and Gaeltacht Affairs on islands.
2016	EU Smart Islands Initiative	Islands community led initiative promoting the potential of islands as laboratories for innovation.
2017	European Commission (European Union): Clean Energy for EU Islands Initiative	Part of 'Clean energy for all Europeans', supports the 2,200 inhabited EU islands in generating sustainable energy.
2022	Comhdháil Oileáin na hÉireann; O'Sullivan and Desmond (UCC)	Housing survey of Cork's offshore islands.
2023	Comhdháil Oileáin na hÉireann; O'Sullivan and Desmond (UCC)	Housing survey of Ireland's offshore islands.

4.4.5 Analytical Strategy

The island and the people are not objects of study. Rather, the phenomenon of the place and people at this time are the research focus. The people who live in Inishbofin are therefore participants in, and contributors to, this research. Additionally, in attempting not to impose conceptualisations of mainlandness, the aim is always to achieve 'the study of islands on their own terms' (McCall, 1994) as previously discussed. The 2017 undergraduate research, and the short visit in July 2019 after post-graduate research commenced, contributed to the approaches discussed in this chapter in subsequent ethnographic, interview and dialogue processes during fieldwork and analysis. Three of the 2017 interviewees in particular must be noted as of continuing influence on analysis. The first, as mentioned, was a retired marine biologist and part-time resident. The others are two Islanders who have committed to learning, preserving and promoting their heritage through the tourism industry and other endeavours. Both are from families who also still farm in Bofin, with one being a full-time farmer. This study is indebted to their knowledge and openness which facilitated my early recognition of the significance of historical legacies in shaping contemporary life for Inishbofin's community today in alignment with humanenvironment, or socio-ecological, systems also formed over time.

Notes were taken during conversations and participant observation, or as soon as possible afterwards. In the 2017 fieldwork, some reluctance by many interviewees to engage with official documentation emerged as a finding. Responses to the consent form ranged from mistrust at being asked to sign the form, to dismissal of a need for any form or 'official stuff'. Also during that first fieldwork, three interviewees laughed when I thanked them for 'the interview', with two commenting similarly that they didn't 'do interviews', they 'had conversations'. Official documents and interviews are largely associated with the impositions of external authorities, and can generate some awkwardness, resistance or distrust. Therefore, during the ethnographic fieldwork from 2020 onwards, instead of forms (though these were offered and available), I employed the methods described in Section 4.3 to ensure that participants had full knowledge. Interview, dialogue and participant observation notes were later analysed according to the theoretical framework discussed in the following section, and I took photographs almost every day. The post-2017 data and direct quotes included herein are therefore drawn from a combination of one-toone interviews, loosely structured pre-arranged interviews, ongoing dialogue, individual and group engagement and participant observation while attending to the practicalities of island life and events, and unplanned encounters. Initially concerned that I was not gathering 'enough' weather and climate change 'specific' data, I recognised that everything shared was intrinsically woven into climate change understandings and responses, because these responses form through the practices I analyse as hybrid memory actionality and strategic remembering (proposed in Chapter 5) to contribute to *Island Identity Dynamics* (Chapter 9, section 9.3.3). Thus, they drive formation of resilience, resistance, vulnerability and transformative adaptation in combination with often contesting external drivers. Conversation, what is perceived as *honest* conversation, is highly valued (as are humour and wit) and I learned the importance of being open to this without attempting to overly impose structure, and with time, how to actively, generously listen to participants. Meaning unfurled slowly, through rapport, relations and dwelling as the deeply embodied understandings of participants responded to by the situated researcher.

Accommodation, considered an 'existential crisis' for island populations (O'Sullivan and Desmond, 2022) as examined in Chapter 7, led to challenges for several reasons: (1) extreme scarcity of housing stock; (2) high cost of rent; (3) reduced availability and increased unaffordability of housing in the summer season; (4) budgetary challenges as funding did not allow for fieldwork accommodation costs, and; (5) additional budgetary challenges as necessary expenses—for instance, internet connection costs while on fieldwork—were not permissible expenditure (while concurrently meeting costs to maintain my full-time home as an independent PhD researcher). My lived experience of the island is of eight months in various tranches. It has been primarily outside of peak tourism, during autumn/winter and winter/spring, with three weeks during summer at the height of tourism. Island population shifts are seasonally extreme, as examined in Chapter 2. University students, for instance, are away during the academic year. Winter is a time of 'cocooning' for many Islanders, irrespective of pandemics, as it is a response to islandscape weather, when indoors work is conducted. Yet Islanders are constantly busy during peak season so winter residency was advantageous in other ways as more time and space is available for conversation. As the focal point of socio-cultural engagement during winter is the bar, this creates limitations in access too.

From January to the end of April 2022, I did not leave the island even to go to Clifden. During this period, I interacted with a core group of approximately 40 residents. Opportunities for participant observation were high. I was connected to the community. Yet by mid-April, a kind of unease began to set in. Mentioning this to a long-term resident, they advised that I was experiencing 'island fever'. I responded to this as a psychological expression of the physical boundedness, isolation and smallness often identified as

characteristics of islands in island studies, enforced by challenging weather and several incidences of being 'shut off' as the ferry could not sail (Figure 7.16). It abated following a day trip to the mainland. However, being *in* over winter, seeing the same people, and participating in island patterns, overall engendered a sense of *becoming* in place, and an increasing understanding of the fluidity of the island. Hence, the longest fieldwork durations were very distinct and though differing types of ethnographic experience, contributed equally to the research. In the first, I learned how to dwell in the environment and other than human entities became revealed, interspersed with occasional, rich sociocultural interaction in atypical conditions. During the second and subsequent fieldwork, dwelling continued with increasing knowledge of the meshwork. Concurrently, understanding socio-cultural and socio-ecological systems as inhabited by Islanders through a continuum in place deepened, as increased participation in environments produced high relationality following reduction of pandemic restrictions.

This research utilised four sources of data: interview/dialogue, participant observation, dwelling, and documentary sources (historical and contemporary), with photographic ethnography as an additional support. Postill (2017: 28) argues that it is 'helpful to think of actual social changes in the plural, as (a)countable, concrete, identifiable, unique and messy processes'. In addition to multi-sited ethnography, Postill (2017: 28-30) also argues for the importance of 'multi-timed ethnography' which pays attention to the social changes of the present in alignment with the 'mature process of change'. In this approach to ethnography, the synchronic methods of fieldwork are supported by diachronic methods which include analysis of historical and contemporary records (Postill, 2017). Theoretically, this research proposes that the socio-cultural processes contributing to climate change resilience and vulnerability in Inishbofin result from a continuance of social structures, the origins of which are identifiable during colonisation, and which continued post-Independence. Practices reproduce social structures, even while the structures themselves change or appear to change, and the practices may seem altered. The characteristics of islands are contributory only because of how they are (mis)understood through mainlandness, while the reproduction of marginalisation is expressed in the actions and inactions of external authorities (examined in Chapters 6, 7 and 8), embodied through neglect which led (1) to mass depopulation and resettlement of island communities including Inishark, and (2) the ongoing pervasive threat of depopulation currently experienced by island communities including Inishbofin, recognised here as spatial injustice and 'slow violence' (Nixon, 2011). It is continuously reenacted through control of the

essential services and infrastructures required for a society to function at its fullest capacity, resonant of Anand's (2017) findings. The social structures of the island, formed from islandness and resistance to external authorities, support the reproduction of resilience as discussed in Chapter 5, and therefore have served to offset marginalisation. Marginalisation's absolute expression is depopulation. These practices (in island and mainland structures) have become institutionalised to effect a complexity of discordant interplay that is, however, ultimately detrimental to Islanders.

Humans 'participate in history both as actors and as narrators' and 'power operates, often invisibly, to silence certain voices' as Trouillot ([1995] 2015: 3) states, whereby the 'distinction between what happened and that which is said to have happened is not always clear'. The triangulation of diverse methods in this research supports understanding of what has happened in Inishbofin, as well as of the institutional narratives, or the louder voices, holding power through control of policy and resources. Taking a multi-sited, multitimed approach in collecting and cross-verifying data through the four methods mentioned strengthens, it is hoped, the validity of the research findings and mitigates any bias of positionality. The multi-sited approach incorporated analysis of island-mainland interactions through place-based ethnography that recognises local-national-regionalglobal connections and the interdependence of populations, and the co-constitutive properties of climate change and culture (Crate, 2011: 185). Another site of the research, desk-based documentary analysis, focussed on government and local authority publications and policies (during colonisation and post-colonisation), media including newspapers and television, poetry, and a variety of archival resources including social media platforms. The multi-times approach prioritised analysis of themes traceable from the 1800s to the present through ethnography and documentary sources.

'Phenomenology lends itself to the study of islandness' (Brinklow, 2023: 105). Phenomenology focuses on natureculture, landscape, subjectivity and embodiment, and the lived experience, themes relevant to and explored throughout this work. Because climate change is abstracted from people's everyday experience, it too is a phenomenological challenge. Phenomenological interpretations of the landscape originated largely with Ingold (1993), Tilley (1994) and Wylie (2007). Ingold's theories, as discussed in Chapter 3 and this chapter, inform the research framework, and Wylie's scholarship (2007) is also drawn on. Phenomenology opposes the prevalent understanding that defines 'the essence of what it is to exist as a human being—in terms of visual detachment ...' with 'ourselves not as creatures *in* a world but as points of view upon it, as

spectators looking at it from a distance, or from above' (Wylie, 2007: 145). For these reasons, Interpretive Phenomenological Analysis (IPA) is chosen as an appropriate methodology in designing the research and in data analysis.

Guided by hermeneutics, and in contrast to a wider thematic analysis, this methodology is suited to in-depth, repeated interviews with fewer rather than larger numbers of participants with the intent to gain a deeper meaning of their subjective experiences. IPA originated with Smith in 1996 in psychology, and is now used across qualitative enquiry as an inductive, experiential method whereby fieldwork data is gathered through the methodology and systematically analysed, on an ongoing basis, to discover if themes and/or meanings emerge. It is 'concerned with the detailed examination of personal lived experience, the meaning of experience to participants and how participants make sense of that experience' (Smith, 2010). IPA recognises a 'chain of connection between embodied experience, talk about that experience and a participant's making sense of, and emotional reaction to, that experience' (Smith, 1996).

Inductive, open-ended thematic coding was used to identify themes in the data, and as it avoids imposition of a rigid structure in advance (Braun and Clarke, 2006). Analysis starts with reading and rereading data, making initial observations and descriptive comments, before interpretation to find additional levels of meaning. Following this are 'conceptual comments' which support new depth of understanding of how participants find meaning. Reading and rereading and the process of analysis, eventually leads to what Smith (2008) terms superordinate themes, the main connecting themes. IPA's success is contingent on nurturing relationality in the field. Madison (2020: 164, 165) asserts that being '... together in a space of direct bodily communication' contributes to an embodied narrative. The researcher moves beyond prioritisation of seeing, to allow for other kinds of connection such as listening. It means being attentive to tensions as a way to keep dialogue open and flowing, rather than being dominated by one sensory method or narrative: 'body sensation as body knowledge comprises impressions and interpretive meaning' (Madison, 2020: 197). The quotes selected for inclusion in the findings chapters are intended to represent the predominant themes and opinions that emerged and also, through inclusion of perspectives that were sometimes marginal or dissenting, to highlight that Islanders are not a homogenous grouping. Additionally, this allows for further transparency in how the themes emerged and their interpretation. The focus is always to present Islanders' opinions and experiences in their own words; some quotes were included for evocative quality. It is the people of the island who are best placed to describe their experiences, feelings, ideas and opinions. As dwelling, interviews and participant observation were conducted through these approaches, data analysis was further facilitated. IPA therefore aligns with long-term ethnography through a dwelling perspective.

4.5 Conclusion

This chapter, through discussion of the process contributing to design of the research, positionality, the setting and participants, and data collection and analysis methods, has illustrated the development and application of an interdisciplinary study in geography, anthropology and island studies through an islandness approach in response to issues identified through fieldwork. Simultaneously, it considered limitations and challenges of the research, and how these were addressed. The chapter argued that critical climate ethnography, dwelling, photographic ethnography, and analysis and review of historical and contemporary documentary sources were appropriate methods for the study, place and people at this time. The theories and methods underpinning the research supported the commitment to islandness, and triangulation of fieldwork findings through a diversity of methods strengthened the study. Place and temporality were central considerations. Situated research that incorporates multi-site and multi-time approaches examines the processes of climate change response, resilience, vulnerability and transformative adaptation through a diversity of perspectives and processes as they converge in Inishbofin. This idea is thematically progressed throughout the following chapters and returned to in Chapter 9. The next chapter, examining dynamics contributing to identities, socio-ecological systems and formation of resilience, focuses on the first research question.

5. CULTURE, IDENTITIES AND SOCIO-ECOLOGICAL RELATIONSHIPS

5.1 Introduction

Island communities are associated with conceptualisations of resilience. A core objective of this research is to identify drivers of resilience and vulnerability, and examine the processes that contribute to their formation, as discussed in Chapter 1. Accordingly, this chapter addresses the first research question: what are island identities and why are they important for resilience? The concept of identity is responded to in this discussion as the effort to 'establish a sense of Self in time', individually or collectively (Berenskoetter, 2011: 648) and as Breakwell's ([1986] 2015: 11) 'social psychological identity' which links 'intrapsychic and socio-political processes' to 'show how both are necessary in the workings of identity'. Tajfel and Turner (2004) define social identity as the aspects of an individual's self-image derived from the social categories to which they view themselves as belonging. Individuals aim for a positive social identity which forms from comparison between the in-group-in this case, the Islander-and some out-groups, whereby belonging, purpose, self-worth and identity are co-constructed (Tajfel and Turner, 2004). Tilley (2006: 15) argues that how identities are 'produced and sustained' must be understood as 'within frameworks of power relations, dominance and resistance' and for the importance of 'their relation to different kinds of knowledge, 'Western' and 'Indigenous". It is intended to move away from ideologies of 'The Islander' that verge on the stereotypical, mythological or mystical to establish the meaning of identities in Inishbofin today. To frame the discussion, this chapter firstly considers how location is conceptualised, followed by a brief ethnographic account. Ideas of identity, elements of socio-ecological relationships and how these come into being, and how all are entwined, are then analysed. By thus responding to the central research objective and the first research question, this chapter aims to expand understanding of the dynamics that contribute to climate change response, and identities and resilience formation.

5.2 Island Meaning of In and Out

The following observation is included here for its relevance to identity making and culture, and topics that are examined in later chapters including governance and policy. To refer to their island/mainland geographical location, people from Inishbofin use the terms *in* and

out. 'Going in' means travelling from the mainland to the island. 'Going out' means leaving the island to go to the mainland. Islanders are not on but in Inishbofin. All islandscape, irrespective of any specific location, is in. My understanding as a mainlander had been to 'go out' to be 'on' an island (Figure 5.1). It was some weeks living in Inishbofin during Autumn 2020, before I became aware that this was shifting and its significance. The changed response, in this place, to the inherent meaning of these deceptively simple terms—in and out—denoted more than an altered geography, or an attempt, conscious or not, to try to 'fit in' by incorporating the phrases I was hearing. It instituted a new way of thinking about spatiality and scale. This advanced a reconceptualisation and reinterpretation of the island-mainland relationship. It engendered awareness of how islands and island-mainland interactions are discussed through understandings and language originating from mainlander perspectives and the fundamental dangers of this. Correspondingly, as my engagement with the island and with islandness was altered, it became possible for this research to more effectively centre islandness as a key premise of nissology, as outlined in Chapters 2 and 4.



Figure 5.1: Directional road sign in Cleggan village to Inishbofin Island. Source: Author (2017)

5.3 Clifden Town

In the early morning of 16th December 2020, I set out from the cottage for the forty-five-minute walk to the pier. The narrow roads reverberated to soft sea and wind, to fleeting notes of birdsong and an occasional sheep call in temporal articulation of the 'permanent consciousness of being on an island' (Perón, 2004: 328). On nearing Middlequarter, I stepped into the long grass verge so a car could pass, sharing the island lifts of chin and forefinger with the first person I had seen in days. Soon after, the roar of the ferry engine clanking up quickened my pace and as it settled into a soothing whirr, I boarded the boat to Cleggan pier. My destination was Clifden, just over eleven kilometres from Cleggan village, to stock up on supplies and buy gifts. The forty-minutes on board were calm though bitingly

cold. Covid-19 restrictions had eased towards phasing to Level 3 of the government's framework a few weeks earlier and public transport capacity was now capped at 50% but, with no tourists, winter ferry journeys are rarely busy. The few island residents on board were protected by facemasks and layers of warm, waterproof clothing. The trip, usually an opportunity for conversation, was hushed.

The subsequent fifteen-minute land journey from Cleggan to Clifden offered time to begin the readjustment to mainland life: an adjustment to seeing faces unknown, and then to the bustle of the town with its loud lights, thrumming traffic and sparkling shops in the lead up to Christmas. It seemed to me, on this winter's day out from the island, simultaneously exciting and disorientating. Clifden is almost eighty kilometres from Galway City and colloquially known as the 'capital of Connemara'. It has an urban population of 1,597 and serves approximately 10,000 residents in the surrounding rural area (CSO, 2017). Many of its businesses are networked with Inishbofin. Kavanagh's, a large supermarket, provides an online order facility and delivers Islanders' groceries to the pier at Cleggan to be taken in on the morning ferry. The town's pharmacies manage prescriptions, sending them by post or ferry. Sweeney Oil supplies home heating oil to the island. Tanks are delivered on the cargo ferry, and a small island-based oil truck filled from these.

On this day, I casually conversed with eleven people in Clifden, two of whom had visited Inishbofin and commented on the community's friendliness and the island's scenic beauty. The remainder who had not been to the island included one person from Cleggan village, its mainland 'sister'. It is notable that eight people expressed sentiments that confirmed what people from the island describe as attitudes often directed towards them by mainlanders, and that suggest a disconnection from the island and Islanders. Comments included: 'they have their own ways out there', 'it's not really part of Galway' and 'I don't think of them as being the same as us'. Ideas endure and are not static (Glacken, 1967). Historically choreographed identities are of contemporary societal importance, as political narratives and policy originate through mainland perspectives. While identifying as the island's Indigenous people, terms including 'indigenous' or 'native' may be responded to as encapsulating local experience of historical and contemporary injustice and discrimination enacted through damaging stereotypes. Sometimes tourists do ask if Islanders are 'native'.

'And they'd ask you, 'Are you a native?' That's like ... anywhere I went in Ireland, or to Dublin or if I met you somewhere, I wouldn't say, 'Are you a native?' That's like ... 'native'!'

Islander, 2017

'You get the 'native' question. 'Are you a native?' Like, they think this is the back end of the world sometimes. There's no harm ... really ... just they don't know.'

Islander, 2022

5.4 Island Identities

5.4.1 Embodying 'The Islander'

Islanders, Baldacchino (2005: 249) observes, are settlers subjected to identity tropes including 'mariners, pirates, fishers, travellers, merchants, brokers, prison guards, happy natives, environmental stewards, migrants'. Islanders 'often develop a relationship with their island that becomes part of their identity' and is associated with its distinctiveness including traditions and culture (Royle, 2014: 55-56). Notwithstanding 'dwindling remoteness' and 'an end, in most cases, to seamless historical continuity', island identities remain 'remarkably tenacious' (Hay, 2006). Bonnemaison (1985: 61) contends that identity is 'reproduced and reacquired in each generation through journeying and circulating within the areas of alliance and shared identity'. This research proposes that island identity starts with geography. Each carve of land and curl of eddy is an orientation. Knowing them is an identifier that demarcates a person of the island. The island, defined and yet undefined by an ever-shifting and permeable boundary of exchange, creates a geographical 'inside' and 'outside'. These expand or contract dependent on the sea, weather, season and shore and how these are conceptualised, while socio-cultural response forms through inside and outside influences, passing through and held within the porous boundary. Therefore, fluidity can be recognised as a primary characteristic of islandness. The island is delineated by the natural world rather than by the political divisions that contain much of contemporary human society.

The Islander lives expertly with the islandscape. The interactions of land and sea are thickly experienced here. Both are sources of stability and of challenge. Bofiners are traditionally subsistence farmers and fishers. Thus, identity is also a response to the material world, climate and the rest of nature, and understandings formed within material media (Ingold, 2011) through processes including *hybrid memory actionality* (discussed in Chapter 5, Section 5.4.6). Identity therefore incorporates an understanding of the localised socioecological relationships examined in Section 5.6, as a result of dwelling in the weatherworld (Hulme, 2017; Ingold, 2010) within an 'integrated system' (Berkes, 2017). Deep entanglement in this process awards the qualification of Bofiner, the being of Islander, and an endowment of self-identity as native to this place. Within the 'mix of the old and the

new, island identities shift—they are endlessly remade' yet 'enough remains constant for *the* island to persist' (Hay, 2006). Today's Islander identity and the island's socio-ecological interactions are culture's most recent iteration here.

Consequently, *Islander* is an embodied identity through which unfolds the parallels of continuity and change in culture and in climate, incorporating transformation which engenders resilience. As a sociocultural construction, the communal identity of Islander with its combined private and public ethos (Péron, 2004) is contextually present within the islandscape. An aspect of continuity and transformation formed within a natural boundary is an identifiable community. Islander identity is a component of community identity. Community identity is influenced by the characteristics of islands to include all full-time residents, yet Islander and community (resident) identity remain distinct.

'The sense of history that you have together, going back the generations. That marks you out, I'd say. But isn't that part of, you know ... the reason that people come to live here anyway?'

'... a great spirit there ... I'm proud to be part of Bofin.'

Islanders, 2017

'We're lucky. It's the most beautiful place you could live in in the world. Spectacular views, there's a lovely community spirit, a great atmosphere.'

Permanent Full-time Non-Islander, 2017

'There's an odd one or two who just do their own thing. Covid brought all that out more. And they can if they want. Let them at it. But ... they could at least pass the time of day. It goes both ways, but ... They can't expect people to come running then if they do need anything. I mean, people would, if someone was stuck cos there's history and all there so you'd do it cos of that.'

'You know everyone, you can leave your door open. I never take the car keys out [of the ignition]. The kids play outside. There's a nice sense of safety in that, you wouldn't get it many places nowadays. There's no price on that.'

Islanders, 2022

5.4.2 Identity Prejudice

On completion of primary level education in the island's national school, usually aged 12, Islanders must leave home to access secondary level education on the mainland. Recollections of Islanders aged from their twenties to sixties suggests that discriminatory practices were directed towards them at school, corresponding with Bias Based Bullying (BBB). BBB is 'physical, verbal, social, or cyber-based threats directed toward a minority population' which can be based on 'race, ethnicity, religious belief, gender, or sexual

orientation' (Walton, 2018). While the more focussed investigation warranted on this topic is beyond the scope of this research, it will be briefly discussed as representative of certain mainland responses to the identity of Islander today. Islanders who attended boarding school in Tuam, County Galway's second largest town approximately two hours' drive from Cleggan, are mainly those in their forties and older. They describe being targeted for ill-treatment by teachers, usually clergy, and by other pupils because of their identity.

'Islanders were always put down. You'd go out to school, and you'd be bullied because you were from the islands. You were always told you were stupid and backwards. You were made to feel like nothing, that you knew nothing.'

'They didn't bother teaching us from the islands anything, just scrubbin' floors til your hands bled.'

'It was awful. It was hell. It's still there, like, but not as bad now.'

Islanders, 2022

Boarding school attendance began to be phased out in the late 1990s and most children from Inishbofin then started staying with mainland families in 'digs' instead. Several people in their twenties and thirties describe verbal persecution by classmates because of their Islander identity. Some refer to physical attacks orchestrated by groups of mainland teenagers.

'The kind of thing you'd hear all the time, like, 'get back to your silage pit of an island', that kind of thing. It was all the time. Not all of them, but enough of them.'

'They'd say you smelled, 'no running water out there, no showers', stuff like that. Make sounds when you walked by ... like that. Stupid things, like, no point to it. There's no truth to it. And you know that but still ... it's just non-stop ...'

'A gang of them would be waiting and you'd know you're getting the shit kicked out of you. So you stop going anywhere on your own. We were lucky, there were a few of us in school at the same time, a few in different years. So you stick together. Stick with the Bofin crew.'

Islanders, 2022

Not all experience of mainlander response to Islander identities is negative. Many are positive regarding what they perceive as genuine curiosity from interested mainlanders about their status as 'born and bred' Islanders. Nonetheless, early mainland experience is often of being told not only that they are 'different', but that Islanders and their home are 'backwards' and/or 'dirty' and that they 'know nothing'. Walton (2018) discusses 'several

negative health outcomes for adolescents and adults from minority backgrounds' who experience BBB at school which include 'depressive symptoms, decreased quality of life, anxiety, low self-esteem, and conduct disorders'. Building on historical experiences of racism justified by similar conceptualisations, being subjected to identity prejudice at school reenforces for many Islanders that they are viewed as 'less' on the mainland.

5.4.3 Seasonal Identities

From approximately mid-September to April, everything 'non-essential' shuts down (Figure 5.2). Through ongoing jousting and occasional battles with the sea and weather, energy is directed into achieving necessities, maintenance, recovery and recuperation. The population is primarily composed of islanders and full-time residents throughout winter and spring. Public places of social interaction are the shop (Figure 5.2), the Beach Bar—the only pub that remains open throughout winter (Figure 5.3), the church, and community centre. Occasionally classes such as yoga and knitting, or events including film screenings and community meetings, are held in the centre. Most connection occurs in the shop, pub and people's homes as winter weather allows for only fleeting outdoors social encounters.



Figure 5.2: Shop opening hours signs in (L) winter and (R) summer. Source: Author (2022)

Everything changes in April, usually at the Easter long weekend. Hundreds of tourists arrive every week as mainlanders seek out the 'magical island' or an 'older Ireland' in a rapidly changing cultural environment. The harbour fills with unknown yachts at anchor. The island's youth is home. Many take up holiday work in the hospitality sector. Second home owners and holiday-makers return. Seasonal workers also return as the three hotels, hostel and restaurants reopen. Activities such as canoeing and horse riding, the food and crafts

market at the community centre, and evening music sessions at the Beach Bar and Murray's all resume. A series of festivals is also presented across the summer months.



Figure 5.3: The Beach Bar, 9th February 2022. Source: Author (2022)

The rapid growth of, and dependence on, a tourism economy has led to an unanticipated outcome. It has become necessary to produce a new Islander identity: the *summer persona*. This is a seasonal, public, role-based yet communal identity, visible only during the summer months. It is distinct to the group identity of Islander, though publicly imperceptibly so. Tourism with its challenges and its successes is now of importance and of impact to everyone who lives in Inishbofin. Whether or not direct providers, and irrespective of choice, all Islanders now hold ambassadorial roles. Therefore, the summer persona is donned with a resilience and pragmatism historically and socio-culturally earned yet its maintenance is often cited as exhausting, as discussed in Chapter 7.

5.4.4 Gender, Fishing and Farming



Figure 5.4: Granny's Cottage on the Low Road. Source: Author (2024)

During my first stay in Inishbofin, a cottage on the Low Road known as 'Granny's by the lake' overlooking Lough Teampaill (Church Lake) and St Colman's monastic site became familiar to me. The cottage, one of many built by the Congested Districts Board (CDB), is now partially derelict (Figure 5.4). Granny's real name was Mary Cloherty. She was born in the island's East End and is remembered as a strong woman who suffered particularly because of the sea. Soon after they married, Mary's husband was drowned on a return from Westport. She remarried and her second husband also drowned while fishing off North Beach. Then, in 1900, Mary lost two of her sons, one from each marriage, and a daughter-in-law to drowning when their ship floundered near Inishturk in a storm. Mary's experience is representative of differing gender engagements within the islandscape. Traditionally men went out to fish and sometimes were lost to drowning. Women waited on land. With children and other caring responsibilities, often they continued through the loss of their husbands to the sea. One female respondent observed:

'I don't think I'd like it, every night, if I was sitting here and there were four boats from Westquarter and four boats from East End, and they were all out fishin' and there might be a hurricane in the evening and I was mother or wife or sister or something to some of them, you know. It wouldn't be a nice feelin'. You'd be looking out, you know. 'Are they in yet?"

Islander, 2017

In spring 2022, I was part of some very early discussions about how the women of the island could be celebrated. Ideas included a new festival or artwork. The island men who put forward this idea opined that island women 'kept everything going' but it is 'always the men who tend to get talked about'. This observation points to framing of Inishbofin's people as fisher*men*. Founded and dependent on fishing and farming, these roles are deeply rooted within the identity of the Islander, and equally synonymous with ideas of masculinity. Gender, as the social construction of masculine and feminine identities, includes the relationship between them as a result of this construction (Butler, 2004) incorporating a 'gender order' whereby what is seen as masculine or male is of higher value than what is seen as feminine or female (Gherardi and Poggio, 2001). In conversations incorporating gender or sexuality, no Islanders identify as transgender and one as a member of the LGBTQI+ community. Accordingly, this section considers 'traditional' social constructs of female and male genders, as considering Islander identity intersecting with LGBTQI+ masculinities or femininities and/or other identities could not contain anonymity.

Gender varies spatially and temporally and is highly influenced by cultural variability. The normative genders of western societies are associated with Cartesian binaries. How people live under these social constructions, the 'gender contract', includes divisions of labour and within these frameworks there can be substantial regional variations (Forsberg, 1998). In Inishbofin, the island's fledgling tourism industry in the 1960s/1970s was driven by women, changing gender roles and livelihoods. Prior to this, division of labour responded to the social conditions, including genderisation, of earlier decades, the work of land and sea, and the dominance of the Catholic Church. Under conceptualisation of 'the family', a 'single-income household was seen as the ideal', female workers were 'often viewed by a patriarchal government and religious hierarchy as a threat to male breadwinners', and the 'marriage bar' introduced in 1932 required women to leave their public service jobs if they married (Foley, 2022). Repealed for primary school teachers in 1958 and fully lifted in 1973, the marriage bar provides powerful 'evidence of how enshrined the assumption of the male breadwinner was in Irish society' (Donkersloot, 2011).

However, the characteristics of islandness and place-based socio-ecological systems were also influential. In a subsistence mode of survival, households required several sources of income, a practice that continues today for many. In Inishbofin, what Foley (2022) describes as the "family wage" model of employment clearly 'did not fit with economic reality and the lived experience'. Women largely contributed to 'the chief substantial income of the island' which was the sale of eggs and butter to the mainland through the early to mid-1900s (Concannon, 1993: 99). Female skilled work was land, family home and farm-based. It included caring duties, the work of the home, growing vegetables, weaving, raising hens, milking cows and churning butter. Knitted garments were also sold. Male skilled work was in fishing and farming; sea, boat, shore, land and farm-based. Fish, lambs and wool were sold. Marine income was dependent on, in the short-term, seasonal patterns such as the spring arrival of the sun fish (basking shark) and in the longer-term, changing consumerism trends such as the demand for kelp. Another male activity was beachcombing. 'Windfall', items washed off boats or wrecks, could be sold on the black market or repurposed. Islanders also trained in skilled trades such as boatwright, shoemaker and seamstress, with a high degree of community self-sufficiency prevalent in the early twentieth century (Concannon, 1993). Several key socio-cultural roles are recently held by females: nurse, teacher, postmistress. Others are filled by males: doctor, teacher, priest. Today, the characteristics of islandness combine with lack of a secondary school and

the traditional gender contract in contributing to a novel gender imbalance, a discussion reserved for Chapter 7 under Education.

Women's capacities within the socio-ecological relationships of the islandscape are recognised, as production of fishing and farming are understood as being gendercollaborative. Inishbofin therefore demonstrates a high egalitarianism, even while gender is applicable to traditional livelihoods, skills and heritage. A concern is creation of opportunities for the current and next generations of Islanders to continue, reflective of national trends. According to Teagasc (2017), just under 13,000 women were employed nationally in paid employment in the fisheries, agriculture and forestry sectors in 2016. This total of 10.8% is substantially below the EU-28 average of 28.5%. When asked if any particular local place or space is more gendered than others, there are two categories of response from female Islanders: 'none' and 'boats'. If boats/fishing and marine-associated work are still perceived as a male dominated sphere, this points to a persistence of traditional gendered roles and perspectives specifically within fishing. The recognition that women are also fishers and gender research within small-scale fisheries and fishing households is an area of increasing analysis (Delaney et al., 2019; Herrera-Racionero et al., 2020; Kleiber et al., 2014; and others). Understanding male and female roles within fishing may contribute to reforming viable marine heritage related possibilities for islands into the future. Comments by younger island women largely illustrate that they do not consider fishing a viable livelihood option.

'If I wanted to, I would [fish], it's not like years ago. But it's a hard life. Hard work and you make nothing and all the regulations now are crazy. Then there's the overfishing, that's a global problem. And it's dangerous still. I don't see the attraction in a job like that.'

'I'd hate to see [fishing] totally die out cos all our families did at one point. Like, it's an island thing, obviously. But really, like, it's already nearly gone in reality and I don't blame anyone who doesn't want to do it. Some people would still push boys into doing stuff with boats and all. Which kind of pisses me off ... it's just like the assumption that women can't do it or can't do it as well or whatever. The thing is, at the end of the day, none of us really want to do it now. Girls or lads.'

Islanders, 2022

Being 'a "born" farmer' is aligned with rural masculinities (Cassidy, 2018) with just 12.4% of farms in Ireland owned by women though they compose 27.2% of the agricultural workforce (Teagasc, 2017). Furthermore, the patrilineal socio-cultural values that

determine farm succession in Ireland create gender equality issues with men occupying 'the hegemonic position of the farmer' and women 'subordinated to the role of the farmer's wife' (Balaine, 2019). In conversations with women about farming in Inishbofin, it is often noted that men have traditionally been expected to inherit farms and continue farming even when this has been a burden that necessitated setting aside alternative career hopes, and that while women may contribute to farm work, they do not self-identify as farmers.

'Well, it's all of us doing the work depending on whichever of us is around to help when he needs it and the time of year, but he does the most of it. I suppose I never thought 'would I call myself a farmer?' Not really. He's the farmer. I do other things.'

Islander, 2019

'I wouldn't call myself a farmer, no. You know, up all hours with the lambing this time of year and all, that's his thing ... I'd like to see mine doing something else ... Money's always a worry. It's who's going to do it in the future, that's the question you should be asking. It doesn't matter, men or women. It's how to make it worth their while.'

Islander, 2022

Family farming continues to retain a 'very strong socio-cultural meaning and importance, bound up closely with masculine identities' that 'carries with it certain responsibilities' and can include 'notions of pride' (Ní Laoire, 2005). Corresponding with what Ní Laoire (2005) refers to as 'marginal farming' identities, farms in Inishbofin are 'run more as family enterprises' with masculine identities accordingly constructed in 'alternative ways'. The conception of the margin in Ireland's west creates social and economic farming structures different to those in areas of more commercial agriculture, which Ní Laoire (2005) describes as 'the spatial contingency of masculinity'. It is notable that men who are married, aged approximately in their fifties and older, and who fish and/or farm, become less involved in conversations about gender. Their generous sharing of knowledge and time means that I learned much about farming and fishing in Inishbofin. However, gender identities and roles merge with Islander public-private identity, an awareness of scrutiny, and local law which together define acceptable situations in which to be 'seen'. Along with location, marital status, age, and the gender of the researcher, these factors influence which topics are easily or less freely discussed.

Islandness also amplifies implications for marital name choices in a small population within patrilineal practice. Therefore, women often use both their first and second name and/or

'retain' their birth surname after marriage, as illustrated in the representative scenarios in Figure 5.5, in a practice that denotes individual and familial identities, and cross-family relationships over time. This is an innovative 'island solution to an island problem'. Its early prevalence here is progressive within the highly gendered institution of marriage in Ireland, and possibly representative of a broadly practiced egalitarianism.



Figure 5.5: Representative scenarios for island women who marry and change their surnames (above) or who also retain their birth surnames (below).

Source: Author (2023)

5.4.5 The Global Islander

The shared identity of the socio-cultural grouping of Islander can be considered from various perspectives including political representation and panethnicity which transcend boundedness. Neighbouring Irish islands like Inishbofin and Inishark were often one community. Inishbofin and the Aran Islands participate in a Galway Islands Committee. Inishbofin is also a member of *Comhar na nOileán* (Islands Partnership) which administers LEADER, an Irish government and EU programme supporting rural communities. It is represented by *Comhdháil Oileáin na hÉireann* (Irish Islands Federation), founded in 1993 'to draw attention to the difficulties facing islanders in terms of socio-economic development'. Its remit includes a call for recognition of Ireland's islands as a 'specific subregional area' (Oileáin na hÉireann, 2022). Comhdháil is also part of the European Small Islands Federation, founded in 2001 to support smaller island communities, and the EU Smart Islands initiative. Founded in 2016 from earlier origins, this initiative promotes 'the

significant potential of islands to function as laboratories for technological, social, environmental, economic and political innovation' (Smart Islands Initiative, n.d.).

Through the Northern and Western Regional Assembly (NWRA), Inishbofin is represented by the Islands Commission (CPMR), the oldest (founded in 1980) of six Geographical Commissions of the Conference of Peripheral Maritime Regions of Europe with a membership of regional island authorities in the Mediterranean and Baltic Seas and the Atlantic, Indian and Pacific Oceans. The Islands Commission collaborates with additional island structures including ESIN (European Small Islands Network), AIP (Association des Îles du Ponant), SMILO (Small Islands Organisation), and INSULEUR, the EU Island Chambers of Commerce and Industry (CPMR, n.d.). In November 2023, Inishbofin was accepted into the Clean Energy for EU Islands initiative founded in 2017 (European Commission, 2023). It is linked too with the *Energi Akademiet* (Energy Academy) of Samsø Island in Denmark, 'the world's first renewable energy island' (UN Climate Change, 2023). Being networked offers benefits for political advocacy, yet there is a dimension to these connections that is both metaphysical and psychological.

Islanders share a panethnic identity based on occupancy of islandness and parallels in past, present and future histories, experiences and challenges, incorporating cultural and knowledge exchange. It is evident when Bofiners refer to the other Irish islands and their populations as a community. It is also apparent in reference to the Scottish islands in a unity conceived through past interactions and population movement when the ocean connecting all these islands was a busy thoroughfare, as evoked in a 2017 speech to Irish islands representatives at Áras an Uachtaráin (House of the President).

'The boundless sea, which those of you who are fishermen or who work on the ferry services know so well, is the element that connects us to our deep identity as an island civilisation. It is the natural highway our ancestors navigated so extensively, binding us to other lands near and far, weaving the threads of the ancient cultures we share with Scotland, Wales, other parts of Britain, the edges of Europe and beyond, ancient bonds deeper and more important than the divergence of recent histories.'

President of Ireland / Uachtarán na hÉireann, Michael D Higgins, 20th June 2017

The consolidation of the Small Island Developing States (SIDS), a group of 39 States and 18 Associate Members of the United Nations located in the Caribbean, the Pacific, the Atlantic, Indian Ocean, and South China Sea (United Nations, n.d.) is exemplar of islander identity traversing space in alliance against shared challenges. Several are also Polynesian: Hawaii,

New Zealand, Easter Island, Samoa, Tonga, the Cook Islands, Tuvalu, Tokelau, Niue, Wallis and Futuna, French Polynesia and others. They share an indigenous cultural identity including language, and more recent historical links including the impacts of colonisation, spanning over 3,820 nautical miles. Global Islander identities incorporate conceptualisations of allegiance and distinctiveness.

5.4.6 Identity, Memory and Resilience

History, as an all-island encompassing whole, belongs to the island of Inishbofin and its community. Places 'stretch through time' and the traditions of place are 'actively built' in the present (Massey, 1995). History, its inhabited form in place and time, is therefore also familial, individual, inter-personal, and further localised within the islandscape. There are five townlands (Figure 4) with associated distinct identities: Cloonamore, Fawnmore, Knock, Middlequarter and Westquarter. Many central areas of settlement changed over recent history in response to 'strategic proximity to the island's natural resources' (Concannon, 1993: 53) and, as mentioned, following the cessation of the Rundale System and resettlements by order of Allies or the CDB (Lash, 2019). Island families became generationally connected to new villages and townlands including geographically allocated commonage and beaches for seaweed harvesting (Figure 5.6). Island identities, memory, practice and politics are correspondingly complex, and aligned with narratives of interfamily histories and place. Thus, while sharing an island history, not everyone shares the same response to past events or the same vision of the future. Additionally, a migrant, descendent, incoming non-Islander or holiday maker may construct and perceive islandness on Inishbofin differently, holding different meanings and interpretations of Islander identity and history.



Figure 5.6: Townland directional sign, Inishbofin Island. Source: Author (2022)

Analysis by Burholt *et al.* (2013) in smaller Irish islands proposes the following 'two imag(in)eries of Islander identity' which findings of this research reflect:

- 1. Historical identity structured by experiences of shared hardship and self-sufficiency that was essential as a result of a condition of islandness; living in a remote community.
- 2. Contemporary identity founded on a positivity arising from the isolation of islands, from historical belonging, cultural belonging, continuation of 'traditional' values, and regular social community interaction that is safe and offers security.

In Inishbofin, drawing from Burholt *et al.'s* (2013) findings, and building on Massey's (1995: 184) idea of the 'conscious and unconscious constructions of the histories of the place', this research finds that histories within place coalesce in the present of the place through the proposed process of *hybrid memory actionality*. Three pivotal factors are of influence: (1) duration of habitation, (2) continuity of habitation, and (3) historical ties. In today's *inhabited* form, therefore, history continues through hybrid memory actionality. *Memory* is an historical inheritance reconceptualised generationally. *Actionality* is the practice, and skill, of inhabitation now. Both inhabitation, or Ingold's (2010, 2011) *dwelling*, and memory contain understanding of relationality within the islandscape, as with Hulme's (2017) concept of the *weather world*. Thus, non-human inhabitants, weather and climate, and other entities are included. Hybrid memory actionality therefore incorporates the influence of the socio-ecological system examined in Section 5.6. Conditions and actions of this processes are driven by *strategically remembering*.

Strategically remembering is a force in the reclaim of the production and representation of Islander identity. The experience of strategically constructing memory and forgetting, along with how social memory, history, identity, and heritage are assembled as an act of resistance is examined by Hayes (2011) who identifies a paradox; the domains of 'the unconscious, non-lived experience, and the forgotten' are not accessible, yet define the present equally with the conscious, lived experience, and the remembered. Lash (2019) has examined early documented references to the island. While no known written record exists of the responses of its past peoples to numerous occupations, through an interweaving of pre-history, history and present specific to this place that is informing collective and individual memory and practice, history is a dynamic component of the lived present that includes emotive response.

Remembering actively, through hybrid memory actionality, is to remember strategically. Strategy describes the outcome rather than intent, as collation and curation of history through memory and practice responds to dominant socio-cultural realities, engendering the knowledge strategically important to living here. This elevates a response to patterns that may not be accessible to non-Islanders, thereby enabling local knowledge-based capacity to shape response and solutions to challenges, problems and concerns. This positions Islanders to understand how the past has shaped their relationships with each other including lineage, socio-ecological relationships, the characteristics of islandness and how they are responded to here, and the impacts of island-mainland interactions. Memory is constitutionalised as an act of resistance, because strategically remembering resists externally created concepts of Islander identity, deviations by weather and climate from the patterns previously navigated, the risk of depopulation, and mainland conceptualisation of the island as beyond the margin. Together these processes contribute to generational adaptation to weather and climate change, and to cultural change, and hence to resilience through transformation.

Therefore, island culture, holding both the knowledge of place consistency and alteration, continues through the incorporation of patterns of predictable unpredictability. Through this production, which also includes broader (national, global) cultural and climate influences, and ongoing reclaim which is most immediately observable in heritage tourism, Islanders' own identity creation becomes the predominant representation of Islander in Inishbofin. However, reflective of Bourdieu's ([1984] 2020) ideas of fields of power and the process of differentiation, this reclaimed identity seems yet to be fully acknowledged, represented, or infiltrated through mainland perspectives or policy. Yet it is a shared positive identity that, as with elements identified by Breakwell ([1986] 2015), forms from the distinctiveness of this place and generational experiences within it, confidence through continuity and community, evidence-based belief in capacity for self-reliance and taking control (for instance, developing a tourist economy after Inishark's resettlement, repair of infrastructures, or response to extreme weather events), and an increasing projection of the value of Islander identity. Importantly, formed within a heightened environment because of the characteristics of islandess and the influence of the weatherworld, it actively centres the capacity for ongoing transformation. Islander identity is therefore shown to be intrinsically resilient, as reviewed in consideration of these identified components of Island Identity Dynamics in Chapter 9, Section 9.3.3.

5.5 Folklore

5.5.1 Traditional Folklore

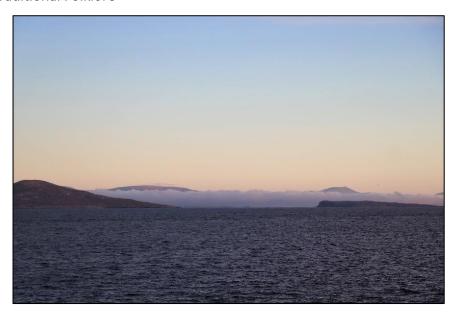


Figure 5.7: Sea fog between Inishbofin and mainland from the East End, 6th December 2020. Source: Author (2020)

The concern that the island's folklore and heritage are fading is often expressed. A comprehensive and affective book researched and produced by Islanders, Inishbofin: Through Time and Tide (Concannon, 1993: 75), states that 'the old ways are more or less dead as regards practice' and are 'in danger of being totally forgotten'. A story that everyone still knows is the island's origin story. Its name derives from Inis Bó Finne (Island of the White Cow). Slightly different versions are told of how the island came to be, but in every telling of the story, it begins as an enchanted place floating in mist (Figure 5.7). Two fishermen, a father and son, become lost in dense fog (Concannon, 1993; Feeney, 2020; Gibbons, 1992). They are washed ashore and light a fire to cook a fish. The fire negates the magic, the island becomes fixed into position and the mist clears. The fishermen see what appears to be an old woman driving a bó finne (white cow), as illustrated in Figure 5.8. The woman strikes the cow with a stick, and it changes into a rock of white quartz while she disappears into Lough Bofin, the island's largest lake. The myth persists that in times of great need in Inishbofin, the woman and cow will return. The cow, it is jokingly said, is often sighted and the woman occasionally appears. Some say that she returns every seven years. Similarities in themes between this and other stories of mystical islands off Ireland's west coast—notably an old woman, a white animal and a seven-year cycle—are common, though their meaning is not known today (Gibbons, 1992). Much of the history of the island

recounted in Chapter 2 features in stories shared with me by Islanders. At the same points, individual tellers often evidence a similar shift in inflection, or expression, or stop to take the same pause. After some hearings, it seems possible to anticipate not just a story's conclusion, but its cadence; to know its sound. How history and folklore are internalised and externalised is not homogeneous, but that Islanders continue to tell the stories of Inishbofin and that there is a 'right' way to tell them, demonstrates the dynamism of the island's past as part of its present.



Figure 5.8: Inishbofin Community Centre with a mural of the island's origin story. Source: Author (2022)

Browne catalogued island history and folkloric tradition during the Irish Ethnographic Survey of 1891 to 1903. Recently, Islanders are doing so. In addition to *Inishbofin: Through Time and Tide* (Concannon, 1993), publications include *St Colman's Abbey and Cemetery Inishbofin* (Coyne, 2007) and *Solas: Stories from Inishbofin* (Inishbofin National School with artist in residence, Veronika Straberger, 2015). Collaborations include *Inishbofin and Inishark, Connemara* (Morrissey, 2012), *Island Places, Island Lives: A Guide to the Heritage of Inishbofin and Inishark, Co. Galway* (Kuijt *et al.*, 2015), and *From Our Ancient Land to Bountiful Sea* (Feeney, 2020). Additionally, many long-term visiting academics have produced bird watching and archaeological guides, and photographic ethnographies, with the assistance of Islanders. These publications represent the reclaiming of traditional folklore, history, and external conceptualisations of Islander identity. Choices made through paper and print therefore materialise as the curation of Islander identity by Islanders. Another enactment is the Inishbofin Heritage Museum which has gathered and promoted local material culture, practice and custom since 1998. Attractive to visitors and

generating income through the tourist economy, heritage preservation and curation is an action of strategically remembering, and of resistance and resilience.

One evening during March 2022 in the Beach Bar, I asked in advance of the upcoming season if anyone would take me out on their fishing boat. To laughter, one man commented: 'You won't get anyone to take you out with that hair.' I described something I previously read, an island belief documented by Browne in 1893:

'The sight of a red-haired woman or a cat, on starting out in the morning, will bring bad luck to the fishing; and it is stated that people have resorted to the expedient of getting a red-haired girl to lie in wait for a rival and cross his path as he was starting.'

I joked then that I could wear a wig. 'Ah, you might get out [on a fishing boat] then, al 'right', was one response yet simultaneously, 'No-ones believe in any of that anymore'. In compiling the customs and traditions of the island, *Inishbofin: Through Time and Tide* (Concannon, 1993: 75) notes that its folklore was 'once kept alive orally around the fire-place' but 'the older generation of the island today' is 'probably the last' for whom this was culturally embedded. It is also noted that the island has 'lost most of its old traditions, stories have been forgotten, customs are changing, everyday practices give way to modern methods' and technology is 'taking the place of storytelling'. Broader trends towards a decline in such knowledge are evident across Ireland which has in recent decades 'undergone the most dramatic economic and social transformation since the inauguration of the Irish Free State in 1922' (Allen and Regan, 2008).

Some of the folklore specific to the island that has been occasionally referenced in conversation follows, drawing also from *Inishbofin: Through Time and Tide*. A practice for some older members of the community up to the 1990s was that a visitor should always enter and leave by the same door, with the example given of one older woman who was 'trapped' in a house for a day when the door she had entered by could not be used as the wind changed. An excess of seaweed in the catch was taken as a sign that severe weather conditions would follow. Crabs active on the seabed meant that it would soon rain. If shoals of fish slapped on the sea's surface, the wind would rise. It was considered unlucky for fishermen to encounter a red-haired woman, as mentioned, and also a cat, or to carry money or hear words including 'fox', 'hare', 'cattle' or 'priest' while fishing. A fisherman who forgot something could not turn back to collect it as this was related to increased likelihood of drowning (Concannon, 1993). The use of white quartz as ballast was

prohibited as it was also considered unlucky. There is a tradition of placing white quartz pebbles on graves, and Lash (2019) has examined the use of white quartz in Inishark pilgrimage, or *turas*, rituals. Islanders also interpreted salt deposition on a slate incline known as *Leac a' Tairbh* on Inishark to forecast weather. Folkloric beliefs and practice illustrate how Islanders 'read signs from the sky, the sea, the behaviour of sea birds and seals' (Concannon, 1993: 80) as an aspect of place-based socio-ecological knowledge. Local knowledge thus communicated, contributed to risk reduction and to agency.

5.5.2 Contemporary Folklore

The vibrancy of today's verbal folklore, though changed and changing, demonstrates the continued importance of storytelling to resilience and transformation. Key historical figures such as St Colman, Grace O'Malley and Cromwell, more recent influencers including Allies and statutory bodies of authority like the CDB and Galway County Council (GCC), past and current farming and fishing practices, interfamilial histories, weather events, and drownings are common themes. Personal insight about Islanders recently passed—'she was an amazing knitter, you know', 'you never heard a fiddle player like him' or 'he made currachs for people all over the country' (Figure 5.9)—are prevalent. One Islander has catalogued thousands of photographs belonging to island families over generations and compiled extensive genealogy charts. 'It's hard to explain it,' she tells me. 'But it honours them. They suffered a lot more.'



Figure 5.9: Currach, East End. Source: Author (2020)

An enduring tradition is to light bonfires on Midsummer's Eve, or St John's Night, on 23rd June. This custom merges the pre-Christian summer solstice celebration with the supposed birthday of St John the Baptist. At prominent sites so they could be seen from afar, the fires engendered communication and solidarity between distant villages. In Inishbofin, each

village lit a bonfire. These bonfires additionally solved an island problem: waste accumulated during the year could be disposed of. Folklore and history also continue in placenames. For instance, 'Granny's by the Lake' as mentioned in Section 5.4, in local place names in Irish, and in those of historical memory like 'Bishop's Rock', where a bishop chained to this outcrop as punishment for an escape attempt during Cromwell's time was drowned as the tide rose. They remain too in the names of Islanders, and in those given to boats. Folklore and history are also represented in the murals at the community centre and school (Figure 5.10), and in performance and pride in musicianship.

This, therefore, is the contemporary folklore of Inishbofin. 'As a mirror of culture' and 'autobiographical ethnography' (Dundes, 1969), it 'encompasses all knowledge, understanding, values, attitudes, assumptions, feelings, and beliefs' (Brunvand, 1978: 4) that are passed on verbally or through example. A 'living, breathing culture is not meant to be held' and is required to 'adapt and evolve in order to survive' (Royle and Brinklow, 2018: 13). Thus, folklore is an expression of the inhabitation of history and identity through hybrid memory actionality and strategic remembrance. It highlights that older traditions, though not necessarily considered 'more' authentic in contributing to identity and sometimes now dismissed, provide a foundation for continuity and change. Balancing the preservation of identity and heritage under the influences of globalisation through ongoing socio-cultural adaptation means that inhabited folklore still contributes to learning how to live here. However, it is possible that shifts in the prioritisation of type of knowledge considered of most importance (connected to changed livelihoods) to communicate, combined with new and increasing climate change impacts, may contribute to vulnerability and resilience in alignment with factors arising largely from governance, as discussed in Chapters 6 and 7.



Figure 5.10: School wall mural of the island's history depicting the Cleggan Disaster.
Source: Author (2019)

5.6 Socio-Ecological Dynamics

5.6.1 Of Land and Ocean

Defining the 'edge' of the island for purposes such as mapping or allocation of ownership or responsibility must be recognised as academic practice in response to mainland imperatives rather than to the socio-ecological realities of islandness. A definite edge discounts the meaning of the many spaces that are the island. Although the island *is* defined by a geographical edge, in reality, this edge is fluid. It is composed of, and by, both land and sea (Figure 5.11). Neither is static. The island's edge therefore holds the constant potentiality of change. Foley (2017: 34) refers to the 'blurred liminality of coastal lands and waters'. These 'hybrid spaces, simultaneously in and out of water, are permeable, porous and nebulous, disrupting both orientations and navigations of space as well as the palettes we use to describe them' (Foley, 2017: 34). The surrounding ocean, inhabited in 'a manner fundamentally interconnected with and essential to [Islanders'] habitation of land' and to 'senses of identity and belonging' (Hayward, 2012), is therefore not separate to 'the island'.



Figure 5.11: Looking across the East End Village towards the Twelve Bens, with the Rusheen Pier and old curing station to the centre left.

Source: Author (2020)

In Inishbofin, water appears everywhere with land, and land with water. The fragmentary 'edge' is composed of in-ways, out-ways, islets and rocks. It merges with the multitude of inland waterways to generate a land-water layering effect that renders negligible any differences in their substance. There are five lakes: Lough Bofin, a brackish lagoon, and four oligotrophic. The land is further interspersed with streams, springs, ditches, blanket bog and marshy areas, seasonally changing. The constituent islandscape parts are thus more than the landscape and the oceanscape or their surfaces. An overarching component of the

islandscape is fluidity, as mentioned. This fluidity is synchronously geophysical, ecological, meteorological, climatological, hydrological, cultural and metaphysical. Islandness, through incessant symbiotic exchange, contains no separation between land and ocean.



Figure 5.12: Boundedness/Smallness?: Old Pier and the Pool in different weather conditions. Source: Author (2020, 2022)

The intermingling of the sky with landscape and oceanscape on a ceaseless course is amplified as both a physical and a cultural driver where the land component is most scarce and the sea is infinite. Thus, the sky can enable or repress perspectives of freedom and expanse as another component of islandness with psychological, physical and cultural impact (Figure 5.12). It is therefore recognised in this research as another important driver of the socio-cultural responses of place and as a component of the socio-ecological system.

A 'tense land-sea opposition' (Royle and Brinklow, 2018: 10) may nonetheless be constructed regarding islands. Elements of the material world including rocks, land and shore are in constant flux throughout the cycles of the tides and seasons, or during storms and surges. They rhythmically morph between dry, damp or saturated, and being seen, partly (un)seen, or invisible. Human structures and artefacts are changed, relocated or disappeared. How the land is used generates productions that are sent to the sea with direct intent (e.g., current disposal of food waste, past disposal of vehicles) and/or indirect intent (e.g., greenhouse gas emissions, by-products of agriculture and fishing, run-off, accidental release of recycling or waste). From the sea, oxygen is produced, marine life is taken, animals emerge, seaweed is deposited on shore, societal waste and artefacts are returned (often from distance), and defences are overcome by water. The *relational*, therefore, through various understandings of connectedness and entanglement (Haraway, 2003; Ingold, 2010; Latour, 2005) encompasses 'the world and the many formations which compose it' as 'hybrid assemblages of, and in, heterogeneous entanglements or networks' (Jones, 2009). Argument is made that 'one of the foundational binaries [of geographies],

that of land and water' should be reconsidered so that the 'land-water nexus' is not conceptualised 'primarily in spatial terms' but rather as 'a set of spatiotemporal rhythms' (Lahiri-Dutt, 2014). Krause (2022), after Ingold (2010), argues for the land-water binary to be reconceptualised as 'amphibious rhythms' that occur 'spatiotemporally, and through the practices and perspectives of the people engaging with these rhythms', an idea further considered in relation to island time in Chapter 6.

During my prelimary research visit to Inishbofin in 2017, three dolphins swam in the wake of the ferry as it travelled to the island (Figure 5.13). It was a grey November afternoon. The few other passengers, perhaps more sensible or accustomed to such displays, remained inside. After a while though, one joined me on deck. Gripping the rail as the boat dipped and swayed, we passed an occasional remark about the speed and agility of the dolphins until they veered west as the island appeared in distant view. Why do they do it?' I wondered. 'For fun,' was the reply. 'The sea is fun for them. Not like us.' In April 2023, the island's oldest resident, a vital, humorous and gentle man with a vast knowledge of Inishbofin, passed away in a mainland nursing home after a short illness. His remains, being brought home to the island on the evening ferry on 21st April, were followed at sea by a cortege of fishing and other boats. On land, a procession of vehicles followed to his home in Westquarter. It is a powerful reminder that islandness, in life and in death, is equally of land and of ocean. These two instances illustrate how land-ocean-weather-culture interactions are manifest in a transboundary space also incorporating the rest of nature. However, distinctions in how the land and the sea are conceptualised can be identified.



Figure 5.13: Dolphins swimming in ferry wake towards Inishbofin Island on 1st November 2017 (video still).

Source: Author (2017)

5.6.2 Response to the Land

Conceptualisation of land is derived from how it functions within four classifications: society, environment, economics and spirituality (Hubacek and van de Bergh, 2006). The islandness condition of smallness and the scarcity of land mean that changes permeate all categories proposed by Hubacek and van de Bergh. Even small shifts are immediately visible and impactful under the 'native gaze' (Slater, 1993). Land's physical surface (environment and economics) and conceptual meaning (society and spirituality) must be continuously renavigated through perspectives of attachment.



Figure 5.14: The Low Road by the church. Source: Author (2022)

Inishbofin has one ring road connected by several small roads generally orientated approximately north to south, as illustrated in Figure 4. Numerous spurs, often tracks, reach into less populated areas. The ring road is divided into the High Road and the Low Road, with an informal one-way traffic system operating on sections (Figure 5.14). The Low Road largely follows the coastline to the island's east and south. It provides an interesting study of how response to land must be navigated and then renavigated. A House of Commons submission in 1873 references a dispute between Mayo and Galway county councils in funding repair of the road, illustrating how mainland responsibility for island infrastructures has long been contested. It also provides evidence of historical erosion.

'... to meet the reasonable requirements of the inhabitants on this island, the road ... should be repaired, and those portions which have been injured by the encroachments of the sea made good, either by the erection of substantial breastwalls, or by diverting the road.'

House of Commons Papers, 1873



Figure 5.15: Navigation Tower, Low Road relocation. Source: Author (2022)

Within living memory, sections of the Low Road have been diverted inwards three times (Figure 5.15). Inland relocations of the Low Road have necessitated more than just the structural works that 'took parts of people's gardens' and changed the island's geographical edge, they have required ongoing adaptive and mitigative response that is evident in how Islanders respond to the physicality of the road.

You can't take a road for granted, like. You have to be always watching it, the Low Road especially.'

Islander, 2020

'That road in front of the house collapsed fifteen years ago. The road was closed from here to where the High Road meets the Low Road at Mrs Crabclaws. There's navigation towers, they were on the maps in 1838. Now, the road used to go in my time around the other side of that [navigation] tower. So there was erosion. And then that was closed. And then the road has to go around the back of the tower.'

Permanent Part-time Non-Islander, 2017

Extreme events greatly impact infrastructures. Destruction during the storms of December 2013 and January 2014 included parts of the Low Road in Middlequarter, the wall and road in front of the shoreline cottages at the East End, the Rusheen Pier, and the breach of the North Beach bank (examined in Chapter 8). Concurrently, continuous erosion and weather impacts are of challenge. Erosion has necessitated rebuilding the sea wall in front of the shop several times in the past six years. Ongoing monitoring of drainage ditches, fencing, and road surfaces is necessary as a mitigation response to erosion, as an ordinary part of the island 'lifeworld' (Buttimer, 1976). An Islander employed by GCC fills and must refill potholes with tarmacadam (Figure 5.16). This, the only road, is essential to enable access to

all island services including the piers. Gabions, walls, infill, and beach nourishment embody shoreline protection strategies across the years. Sea wall defences are sometimes controversial. An area next to the new pier is, Islanders say, in urgent need of attention but as this area was previously land that 'fell into the sea', it remains 'under private ownership'. The land is no longer in existence yet Galway County Council (GCC), I am told, 'will not touch it'. This is a bitter experience of the land-water binary. It reflects Jackson's ([1960] 1997) ideas of how statutory bodies abstract both landscape and people's lived realities within it, and demonstrates lack of understanding through a mainlander lens.



Figure 5.16: Low Road surface erosion in Middlequarter. Source: Author (2022)

'And then when it did come to them doing the coastal defences down along, you really felt there was no oversight from the council to the company sent in to do it ... Now there's places where 10 metres would've joined here to here, and would've eliminated the problem from occurring again, but they just kept cutting and cutting and cutting. From my point of view, some engineer in the local authority allowed that to happen. Jesus, it wasn't great.'

Permanent Full-time Non-Islander, 2017

'There's no talking to the Council. They don't listen. Sure they know well that bit's nearly gone. They won't touch it. They've done other bits [of coastline/road] and that's all great but that's no use in the long run, it all needs to be done together, not bits here and other bits there. It'll be gone before they take any action. And still they'll say it's not their jurisdiction.'

Islander, 2020

'Galway County Council's refusing to do that work now. The road there beside the pier, that section and up. That's soft rock, it won't last much longer. It's ridiculous. They say they can't because it's owned. And it goes, and then what?'

Islander, 2022





Figure 5.17: The Low Road: (L) Bank collapse in December 2020, and (R) this section restructured, photographed in February 2022.

Source: Author (2020, 2022)

Smaller areas of land occasionally collapse from hill slopes onto the Low Road after heavy or sustained rainfall. Driving to the morning ferry in a borrowed island car in December 2020, I encountered an area where part of an embankment had collapsed (Figure 5.17). I drove cautiously through without mishap. Concerned about the possibilities of an accident or sheep getting out, I mentioned it to two Islanders working at the pier to be reassured that Islanders would 'come across it themselves and know what to do'. Insider knowledge, the native gaze, and knowledge formed through dwelling (Ingold, 2010: Jackson, [1960] 1997) distinguishes those born to the island from those who are not. It is illustrative of divergent risk perception (discussed in Chapter 7). A kind admonition was also given:

You shouldn't be driving the Low Road. You should use the High Road, it's more safe when you're not from here. You don't know how the road goes.'

Islander, 2020

Under the Rundale System, described in Chapter 3, arable land was divided into plots collectively cultivated by tenant family groupings. This system was a response to earlier dispossession during colonisation and often resulted in smallholdings becoming unsustainable over time. Its legacy was therefore targeted by the CDB for modernisation. A submission by the Inishbofin Community Post-Primary Steering Group (2020) states that 'the middle of the island is where most of the agricultural land is farmed, running east to west and this land is considered to be of very good quality' with Inishbofin considered 'one of the most fertile islands off the west coast of Ireland'. Freeman (1958) describes three distinct land types: 'farmed rolling countryside ranging from sea level to about 150 feet'; craggy hills; and sand dunes used for rough pasture, with commonage '[making] up two-

thirds of the island's 2,480 acres'. A 'rectangular pattern, characteristic of many areas 'striped' by the Congested Districts Board' (Freeman, 1958) still exists. CDB interventions included pasture improvement, house and outhouse building, and arterial drainage. It aimed to counter what was considered 'bad farming practice' (Breathnach, 2005). The intention was to improve health and economic standards for communities experiencing severe poverty and vulnerability, yet the resultant internal migration and apportioning of land arguably also contributed to the disintegration of socio-cultural ties.



Figure 5.18: Commonage towards Dumhach Beach. Source: Author (2020)

You see something needs to be done there, say a post's down with the wind, you fix it. There's always something needs to be done. You're hardly going to snake off and leave it for someone else, animals out and who knows what. You just do it.'

Islander, 2022

Freeman (1958) observes great landscape changes since the Ordnance Survey maps of 1838 and 1898, and questions the breakup of pre-existing villages and redistribution of land which created farms 'more than twice the size of those [previously] normal'. Allies also relocated several Islanders in consolidation and expansion of his own farm, so the combination of all of these settlement changes, plus that Islanders drew lots for some of the lands redistributed by the CDB, contributed to feuds in the early 1900s that are still remembered by some people. Until the mid-1970s, it remained common practice to fertilise the land with seaweed. Each village was allocated a specific beach for this purpose; for instance, those who lived in Cloonamore gathered seaweed from Dumhach Beach. Large tracts of the island remain as commonage (Figure 5.18). Freeman (1958) notes 'jealousies' over how it was used. If they exist today, none have been acknowledged during this research. However, the belief that certain Islanders or island families 'own half the

island' is occasionally expressed. This will be further considered in relation to governance in the following chapter. Commonage is managed through an informal process of equitable responsibility.

Notwithstanding its constant renavigation, land is conceptualised as benign. As it is scarce, it is to be valued and nurtured. Importantly, in comparison to the other elements that make up the islandscape—particularly the ocean and the wind, and while spatially and temporally under their contestation—land is controllable. It yields to management. Symbolically, all the land is collectively 'owned'. Land supports continued inhabitation, while sea and climate threaten it. At times, land is assimilated into the sea and becomes invisible. These spaces remain visible to Islanders who can *see* what was once there as well as what is today visible. Holding traces of field systems since the Bronze Age, dry stone walls, a famine road, and potato cultivation ridges, it tells Islanders' stories. Land is therefore a repository of their efforts and experiences across time.



Figure 5.19: Derelict Cottage, North Beach bay. Source: Author (2022)

When you buy a house on Bofin, you get everything. Not just the kitchen sink, if there is one, but the crockery, the clothes, the lot.'

Permanent Part-time Non-Islander, 2020

Similarly, derelict cottages remain populated (Figure 5.19). Their inhabitants may be deceased or emigrated, yet are known. Often the presence of those gone tacitly remains in the materiality of personal and household items left behind because of the characteristics of islandness. Faded curtains flutter in the windows, religious statues adorn now crooked shelves, and peeling paint holds the trace of handprints. The community may be partially populated by ghosts but theirs is a welcome presence. They feature in stories, as discussed

in Section 5.5, because they remain culturally and societally significant. They contribute to the continuity and transformation of island culture and identity through hybrid memory actionality and strategic remembrance. Simultaneously, these ruins symbolise an ongoing concern: population decline.

5.6.3 Response to the Ocean

In contrast to how the 'maritime world' is absent 'from the realm of most landlubbers' everyday experiences' (Steinberg, 2001), the sea here is a constant presence and influence. It is always in sight, sound and/or scent. This encirclement 'intensifies, distils and exaggerates life' (Royle and Brinklow, 2018: 9) in what Baldacchino (2007) describes as the island effect. As discussed, sea and land appear indistinguishably interspersed throughout the islandscape, an effect enhanced in varying weather conditions (Figure 5.20). The sea is the primary source of transport. It still a source of food, and may drive future energy production. For many, it remains the source of livelihoods. I ask an island man whose livelihood is from the sea if I can talk with him about it and the weather. Raising his cap to reveal baldness, he shakes his head: 'That's what I have to say about it. That's what it's done to me, worry.'



Figure 5.20: The Boreen down to the Pool/Harbour after rain at 12:37 on 28th February 2022. Source: Author (2022)

The memorial pictured in Figure 5.21 is located at the East End Beach. It commemorates nine Inishbofin fishermen who were among 45 lost in the Cleggan Disaster on 28th October 1927. Brady (1873) notes: 'According to the reports of the Commissioner of Fisheries published nearly fifty years ago, this island was stated to be "the most important, with respect to the fisheries of any upon the Irish coast". A total of 174 dependents were left in Inishbofin, Inishkea, Lacken and Aran islands (Ferriter, 2018: 69). In 1907, Inishbofin had been passed to the management of the CDB which promoted replacement of traditional

currachs with longer nobby boats. Dr Michael Lavelle, giving evidence at the inquest, stated that 'it was criminal folly' that people 'were compelled to go out to sea in crafts that would not be used as pleasure crafts even in good weather' (Ferriter, 2018: 70). The Cleggan Disaster remains highly significant and many Islanders say that Inishbofin never recovered.



Figure 5.21: Cleggan Disaster Memorial, East End Beach. Source: Author (2020)

The loss of these young men, followed in many instances by the emigration of their wives, children and other relatives, was a contributing factor in accelerating population decline. It combined with reducing fish numbers as 'effectively the death knell for the herring and mackerel fisheries on the island' and 'this type of fishing was never the same again' (Concannon, 1993: 26). Social vulnerability was already high. The Disaster was preceded in 1918 by an outbreak of influenza during which many died (Concannon, 1993). Disasters and disease, as Royle (2008) argues, contribute substantially to the decline in smaller island populations. Processes of hybrid memory actionality and strategic remembering are evident in a memorial erected in 1997 at the new St Colman's Church commemorating those lost in the Disaster and other island drownings from the 1800s to 1996 (Figure 5.22).



Figure 5.22: Church Memorial for those drowned between 1800 and 1996. Source: Author (2020)

I am told that every Islander has lost at least one family member to drowning. Memorials, including for five Inishbofin men fishing out from Tarrachan on the north of the island on 15th December 1914, two Kansas students drowned swimming off Westquarter on 3rd February 1976, the sculpture by John Behan at the church and many more are, therefore, incorporated into the islandscape. The majority of Islanders traditionally did not learn to swim. If a swimmer is spotted, although many younger Islanders do now swim, it is often a person not originally from here. An Islander in his sixties tells me, 'It's because of respect. You respect the sea.'

'Drownings for islands were like car crashes on the mainland. There's over eighty names down at the church. There's different memorials all over the place. You light a candle in a jar for them, you see people out walking the beach on the anniversaries. You never really get over that.'

Islander, 2017

'No, we didn't swim, the sea was taken too seriously for that. They don't respect it now the same.'

Islander, 2021

'The way tourists see the sea and we do is different. The tourism is great. But they don't think the same. They're here for a week or a month or whatever, it's all fun and games. And it's nice to see them enjoyin' themselves. But you'd be worried watchin' them sometimes, the risks.'

'I look [at the sea] and I don't think I want to go and jump in that now. I'm thinkin', what's it doing now, what'll it be doing later, will I be able to get out tomorrow?'

1'll tell you, the sea doesn't care if you know or not. If you can swim or not. If it wants to take you, you're gone.'

Islanders, 2022

One of the community's oldest Islanders, a returned migrant, says:

'Well, it's respect but mainly it's just there. It's like people who live right beside a mountain—how many of them ever climb it?'

Islander, 2022

In proposing that the 'ocean should be studied as a space of society', Steinberg (2001: 9-11) states that, as with land, it is shaped by and shapes both physical and social mechanisms. He recognises three prevalent perspectives: a source of resources from which food (fish) and renewable energy are to be extracted, a surface enabling transport, and a battleground. Gee (2019) additionally proposes three ways to view the ocean. The first is as

'a collection of material, tangible entities, resulting in particular spaces composed of physical-material facts—such as ocean currents, water depth, water temperature, and flora and fauna' (Gee, 2019). The second is 'as a visual phenomenon, referring to the appearance of the ocean as we see it', and the third 'is the sea not as a space but as a place—moreover, a place that can generate deep-seated attachment and with this, care' (Gee, 2019).

Steinberg and Gee's combined conceptualisations are apparent in human-marine interactions in Inishbofin, as a land and ocean world. This research proposes an additional way of conceptualising the sea, one that contrasts with conceptualisation of land as benign and malleable. It is response to the ocean as an autonomous entity. In conversations, particularly about extreme events, how the sea is given not just personality but *intent* differentiates response in comparison to land.

The sea is lovely, yeah, but it's tricky. And it can go either way and you can never be sure what mood'll take it.'

'Everyone here who drowned knew the sea, better than most. Just the sea can change on anyone in a flash, the weather, and then everything you know is out the window. You can't tell. You know what to do, you learn what you can, you take all the precautions. You have the technology now too, that's a huge difference. But when it comes to the sea, no one really knows.'

Islanders, 2022

Connectedness to nature and how this can create a 'context-specific anthropomorphism' is a 'fundamental aspect of social connectedness' (Pensini and McMullen, 2022). Anthropomorphic perception is derived from a normal human need to discover the most relevant patterns in a search for comprehension that is often not comforting (Guthrie, 2002: 90). Therefore, anthropomorphism can be understood as a cognition process resulting from intuition, which itself is the result of experience. In Inishbofin, contemporary interaction builds on historical and recent experience. The sea is often described as 'powerful', 'crazy', 'tricky' or 'angry', or commonly, as 'mad.' Though it will rage, however, it will sometimes whisper. More than appearance, it is its behaviour that is anthromorphised. Its state controls societal choices. Accordingly, ongoing cultural response, outside of crisis response, necessitates flexibility in adapting plans including travel to work, school or medical appointments, or receipt of provisions such as food and fuel. It requires monitoring the constituent parts of the islandscape; sharing of stories so that knowledge drawn from lived events becomes generationally remembered experience; and at times, resistance.



Figure 5.23: Sea wall defences along the Low Road. Source: Author (2020)

Islanders will resist the sea, fighting its 'ordinary' attempts to reach 'too far' inland (Figure 5.23), or during extreme events. In consideration of recovery from disaster arising from human-marine interactions, including multiple deaths and flooding, it can be argued that how Islanders conceptualise the sea and act on this conceptualisation are essential drivers in continued inhabitation of both the island and its culture. This relationship incorporates the understanding that land must sometimes be resigned to the sea. Land along the fluid boundary, though itself benign, therefore must be unceasingly assessed. Malleable to human control, it can also be controlled by the sea. It can disappear and the sea take its place, yet still be owned. Thus, the island boundary is fluid within limits ultimately formed by the sea.



Figure 5.24: Horizontalism of the Sea: Bofin Harbour, 25th July 2022. Source: Author (2022)

In addition, differences in engagement with the sea are dependent on its circulation and volume. It is its perceived *horizontalism* that enables a symbiotic relationship (Figure 5.24). This is when it is possible for the sea and society to harmoniously co-exist as a whole; when its mood is perceived as even, calm and quiet. It is when the sea 'gives' its surface for utilisation for transport, fishing or tourist pursuits, and when resources from its depths can be safely accessed. The *verticalism* of the sea, in contrast, is to be respected and feared (Figure 5.25). It is responded to as predation by the sea. Verticalism, through historical memory and contemporary experience, is associated with loss and challenge. For all its ceaselessness, as it moves through horizontal and vertical states combined with the fluidity of an edge co-forged with land and with people, the ocean drives local culture, moulding the islandscape and islandness. This concept of 'wet ontologies' incorporating volume, horizontalism, verticalism and the 'three-dimensional and turbulent materiality' of the ocean draws from Steinberg and Peters (2015) who identify its potential in 'new understanding of mapping and representing; living and knowing; governing and resisting'.



Figure 5.25: Verticalism of the Sea: Storm Franklin, 20th February 2022. Source: Author (2022)

How the people of Inishbofin live and what they know is a direct response to a relationship with the sea that necessarily includes anthropomorphism. This complex relationship evidences continuously shifting dichotomies: pragmatic/emotional, friend/foe, victor/loser and physical/psychological. Here, a 'geography of energy' intersects with the geographies of danger and human labour in response to and in conceptualisation of the ocean, as observed by White (1995: 12) regarding the Colombia River, that contrasts with response to and conceptualisation of land. This conceptualisation of the ocean is generationally formed through knowledge and memory of inconsistent certainties across lifetimes.

Therefore, although changing and changeable, it is not erratic. The ocean's volatility is not aberrant because it is known, understood, and expected. To have survived for so long in co-existence with the ocean, and with the memory and interpretation of 'battles' lost, won or drawn in a shifting space, requires continuously navigating exchange with a powerful entity. All space that is culturally occupied—sea, land, and corresponding spaces of fluidity—is influenced by an interweaving of understood patterns incorporating the unknown. This understanding, because it includes the expectation of the unknown as a factor of continuity and transformation, is a driver of Islander identity, resilience and resistance. The patterns upon which this conceptualisation are formed are changing, a discussion that will be developed in Chapter 8. Finally, the ocean is simply lived with. It is, after all, 'just there', as one meshed component of the entangled islandscape.

5.6.4 Response to the Wind

In thinking about the characteristics of islands, land, ocean and their interplay are often considered of most influence. However, the wind dominates socio-cultural activities on Inishbofin Island, strongly contributing to socio-ecological dynamics. It was a historical driver of famine, as this quote from the 5th Report of the Commissioners of Irish Fisheries (1824: 90) illustrates.

'Boffin, Innisturk and Clare Islands, are remarkable for occasional famines which are attributed to high winds.'

Essex Phillips, Chief Boatman, Coast Guard (UK Parliament, 1824)

The term for items swept to shore is still 'windfall'. The wind contributes to soil erosion, particularly in areas denuded by sheep grazing or peat cutting. It influences the plants and crops that can and cannot grow, including the failure of trees to re-establish after deforestation. It is why small rocks and boulders are set around homes and workplaces all across the island so that everyday objects can be secured. It determines what work can be accomplished and when. Travel between the island and mainland is dependent on the wind. It is also why 'island cars' are driven. These are older, inexpensive vehicles kept for use only on the island while the majority of Islanders also keep 'mainland cars' in Cleggan. Island cars will be resigned to the climate. The wind accelerates corrosion of machinery and metals, as illustrated in Figure 5.26. Because of the air's high salt load, here corrugated iron 'cannot stand the weather' (Freeman, 1958: 206).



Figure 5.26: Corroded corrugated roofing in Middlequarter. Source: Author (2020)

Contemporary wind research largely contains a focus on weather and climate processes including Atlantic storms (Dodet et al., 2018; Foley, 2019; Hickey, 2010); on the technical capacities of wind farms (He, 2015; Polinori, 2018; Schutz and Slater, 2019); and on examination of the cultural and societal impacts inherent in siting these structures (Bresnihan and Brodie, 2020; Firestone et al., 2015; Lamy et al., 2020; Wever et al., 2015). Ingold (2007: 519, 529) identifies that the 'experience of being out in the open air on a windy day' is the most 'elusive' of all experiences, and describes feeling the wind as 'commingling'. The lack of research into the persistent wind-culture interactions of place seems surprising, though extreme events are often studied. 'The Night of the Big Wind' (Oíche na Gaoithe Móire) of 6-7th January 1839 is remembered as one of Ireland's most catastrophic storms. Bunbury (2005) notes that 'the waves actually broke over the tops of the Cliffs of Moher ... the ocean tossed huge boulders onto the cliff tops of the Aran Islands'. During the week of Storms Dudley, Eunice and Franklin in February 2022, local impacts of The Big Wind were remembered. Nine island women who had babies took shelter together in the only island cottage with a slate roof. They remained safe, despite great destruction across the islandscape.

Irish local vernacular design varies in response to an area (O'Reilly, 2011: 195) and in Inishbofin, the wind's influence is also apparent in building design. For instance, the roof of the community centre is designed to decrease wind resistance (Figure 5.8). Traditional island cottages are primarily direct entry. The majority have two opposing doorways, so that one door could always be accessed in response to the prevailing wind. As mentioned in Section 5.5, this became incorporated into folkloric practice. One of the island's older residents, a returned migrant, remembers her father, a 'strong man over six foot ...

struggling to get the door shut so there was no hope for us'. How the wind persistently drives culture in Inishbofin, this research proposes, can be understood as wind orchestration. Including contemporary practices, livelihoods, access, folklore, building design and other island infrastructures in its conceptualisation, this orchestration encompasses more than the responses and adaptations described. Wind orchestration describes the socio-cultural processes of thinking about, responding to and moving within the wind.

5.7 Conclusion

By exploring the relationships between culture, identities and socio-ecological dynamics, and through analysis of the links between Islander identities and resilience, this chapter has furthered understanding in response to the primary objective and first research question. Arguing that an islandness perspective requires reconceptualisation of mainland projections of location, the land-water binary and the island's edge, it recognises fluidity as a key islandness component. Within the islandscape, identities incorporate gender egalitarianism and panethnic allegiances and demonstrate how island identities and boundaries are porous. Therefore, the geography, history, present and socio-ecological relationships of place, through the proposed processes of hybrid memory actionality and strategic remembering, demonstrate continuity and change, enabling transformation leading to resistance and resilience. Additionally, the socio-ecological dynamics of place that centre patterns of predictable unpredictability including the malleability of land, anthromorphism of the sea, and orchestration of the wind incorporate expectation of the unknown as an element of transformation, and are highly significant to formation of resilience. Yet contemporary experiences have reenforced marginalisation based on identity. Islander identity belongs to a population in decline at a rate incomparable with any other grouping within Irish society. The next chapter, addressing the second research question, builds on this analysis to examine colonial legacies and post-colonial governance as additional impactful drivers of resilience and vulnerability.

6. MARGINALISATION, GOVERNANCE AND JUSTICE

6.1 Introduction

It is argued that Islander is an embodied identity mediating both continuity and change through the processes of hybrid memory actionality and strategic remembering in the previous chapter. This capacity for continuous transformation, in being anchored by understanding of the predictably unpredictable patterns of place and socio-ecological relationships, engenders resilience. Concurrently, Inishbofin and all of Ireland's islands are marginalised places, subjected to high levels of social vulnerability including the persistent risk of depopulation. Context and history must be analysed for their importance in understanding a complex socio-ecological system (Berkes, Colding and Folke, 2002). This chapter examines power relations and political narratives over time that contribute to production of identities with impactful implications for resilience and vulnerability in the present by addressing the second research question: how do colonial legacies and postcolonial governance contribute to climate change resilience or vulnerability? Tracing the loss of the Irish language and the removal and recent repatriation of human remains from colonialism to the present illustrates continuance in the systemic production of marginalisation. Ergo, this chapter considers local knowledge and cultural authority, and governance with a focus on formal governance—the external, and on local informal governance—the internal, to identify if or how they are situated as correlative forces in vulnerability and resilience formation. What they mean for conceptualisations of identity, production of the margins and marginalisation, trust in governance, access to justice, and implications for climate change including adaptive capacity are also explored. Accordingly, this chapter aims to contribute additional understanding of key socio-cultural processes impacting on vulnerability, resilience and adaptive capacity.

6.2 Colonial Legacy

6.2.1 Not Irish Enough

Irish people, particularly Islanders and west coast mainland populations, were considered remnants of an early 'race'. Scientific racism, according to long analysis (Gilligan, 2017; McVeigh and Rolston, 2009; Metress, 1996; Rich, 1994; Wigger, 2011; and others) was prevalent throughout British intellectual discourse and a keystone of propaganda in relation to Ireland and the Irish. Irish racial identity within the contexts of colonisation and

nationalism has been greatly analysed (Curtis, 1971, 1984; Ellis, 1975; Nelson, 2012; and others). English representations of the Irish from the twelfth century onwards drew on 'a vast reservoir of hostile and demeaning views' of the 'Irishman by nature' (Nelson, 2012: 16). What it meant 'to be 'non-European' was first constructed within Europe ... on Europe's outer frontiers' (van Krieken, 2011) on the west coast and islands of Ireland, with Irish people depicted in Victorian caricature as 'beast-like creatures with Simian features' (Rich, 1994). 'Race' was not initially derived from skin colour but rather 'other sorts of divisions between human beings and their differently structured psychologies according to other sorts of criteria' (van Krieken, 2011), particularly the notion of 'national character'. The conceptualisation of people in the west and the islands as remnants of an early 'race' likely had some origin not just in the Cartesian thinking driving colonisation, but in colonial strategies applied in previous centuries.

One outcome of the Act of Settlement in 1652 was that Gaelic lords were forcibly relocated to parts of the western counties of Clare, Galway, Mayo and Roscommon. Cromwell is today culturally remembered as declaring 'To hell or to Connacht'. The choice of Connacht as the location for a 'native reservation' was likely motivated by military strategy, as these Gaelic-Irish landowners became bounded by the River Shannon and the Atlantic, yet were restricted in accessing transport by sea (Lenihan, 2007: 141). Additionally, they were removed from the centre of English control in Dublin and the surrounding area known as 'The Pale' (Lenihan, 2007: 141), a cultural and a territorial 'line' between the English and the Irish. Irish national character became further racialised in the 1800s, a period 'marked by imperialism and virulent racism' (Nelson, 2012: 59) that depicted the Irish as uncivilised, savage, indolent, dirty and childlike.

Beddoe's 1885 publication, *The Races of Britain*, proposed an 'Index of Nigrescence' with an Irish 'Cro-Magnon' type. Skull dimensions were believed to correlate to brain size, and consequently to race and intelligence. Science had become 'the handmaiden of white supremacist ideology' (Nelson, 2012: 59). Regarding the 'Irish Question', 'race' continued as a central issue in Home Rule debates during the 1892 general election campaign. The predominant intellectual belief was that the conquest and settlement of Ireland by the 'superior races' of the English and Scottish was 'a case of civilisation triumphing over barbarism' and that 'the polarities of Irish society' (Nelson, 2012: 64) evidenced in the extreme poverty and famine experienced by so many were a result of unequal racial capacities. Thus, British policy at this time aimed to 'modernise Irish agriculture and discipline the Irish labour force' (Nelson, 2012: 64).

A continuing impact of colonialism that generates hostility towards Cyril Allies' legacy is the localised loss of the Irish language, as previously mentioned. As Colman founded his monastery with a group of Irish and Saxon monks in c. 665, and Cromwellian forces occupied the island in 1653, it is possible that some English or Latin was spoken or perhaps had been resisted. By the late 1800s, as migration was already established for Islanders into an English-speaking world, fluency was likely advantageous for those who left. However, this absolute ban of the Irish language was highly impactful on identity, economy and population, amplified by post-Independence marginalisation that was also contributed to by loss of the Irish language. Giddens (1984: 25) views the relationship between language and society as one of 'systems reproduction' whereby the formation of language and society is mutualistic. They function as a whole. Similarly, Trouillot (2015) argues that words and concepts are symbiotic 'layers of theory accumulated throughout the ages'.

The Irish language 'experienced increasing social, economic and regional marginalisation throughout the eighteenth and nineteenth centuries' and 'contracted westwards, into predominately rural districts, where it was spoken increasingly by the poorest classes' (Ní Bhrádaigh et al., 2007: 99). After Free State establishment in 1922, the revival of Irish became ideologically important, and islands were 'seen as icons of a true Irishness' (O'Sullivan, 2008). 'Images of 'islandness' have long been used to forge cultural identities in Ireland' with the islands perceived as 'the last surviving bastions of a Gaelic language, culture and identity' and thus centre of a 'Romantic cultural nationalism and also the separatist political nationalist tradition' (O'Sullivan, 2008). The term 'Gaeltacht' was officially adopted in 1926 to describe the regions in which Irish remained the primary spoken language of the majority of the community (Údarás na Gaeltachta, 2023) as part of a 'programme of intended language/cultural protection' by the state (Ní Bhrádaigh et al., 2007: 99). From 1932, there was an 'emphasis on assisting the Irish-speaking parts of the congested districts of the west' (Ní Bhrádaigh et al., 2007: 101). In 1926, Inishbofin's population was 540 (CSO, 2023) and generations of Islanders for whom Irish had been their first language were present. The first Gaeltacht Commission, Coimisiún na Gaeltachta, classified Inishbofin as semi-Irish-speaking—that is, partial-Gaeltacht or Breac-Gaeltacht implying that between 25 to 79% of the population spoke Irish at home. The legal definition of the Gaeltacht in 1928 did not distinguish between Breac-Ghaeltacht or Fíor-Ghaeltacht (true Gaeltacht). This changed in 1956 when Gaeltacht boundaries were re-categorised, greatly reducing its area. The history of official neglect of all Ireland's off-shore islands examined by Ferriter (2018) particularly endured for some islands, including Inishbofin, because of Gaeltacht designations.

The Gaeltacht now includes large areas in Counties Donegal, Galway, Kerry and Mayo, and smaller parts of Counties Cork, Meath and Waterford. Six islands are part of the Gaeltacht: Árainn Mhór (Arranmore) and Toraigh (Tory) off County Donegal, Cléire (Cape Clear) off Cork, and Galway's Aran Islands (Inis Mór, Inis Meáin and Inis Oírr). Irish language discourse has been extensively analysed (Coleman, 2004: Coleman and Ó Ciosáin, 2024). These regions are recognised under legislation, structures and funding designed to ensure that Irish remains a living language (Údarás na Gaeltachta, 2023). Galway's three Aran Islands, with similar experiences as Inishbofin yet each one evidencing unique challenges, have not always been adequately resourced. As they remained Irish-speaking, however, infrastructures including transport links, and aid to establish tourism, were provided by authorities. Currently, 26 Gaeltacht Language Planning Areas are approved for supports under a total fund of €5.8 million, including the Aran Islands which additionally receive 'a yearly allowance of up to €300,000' in consideration of the 'particular challenges faced by the islands' (Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media/DTCAGSM, 2022). The Inishbofin community is campaigning for an island secondary level school to support population stability and growth, but as the island is not Irish-speaking, government applies the same criteria applicable to mainland locations. Under these mechanisms, a secondary school will always be unattainable for Inishbofin (discussed in Chapter 7), in contrast to the experience of Gaeltacht islands with secondary schools where the assessment criteria are more relevant to smaller island communities.

'Some islands off the coastline suffered discrimination because the population was not Irish speaking. I hope that day is long gone.'

PJ Sheehan, TD, Houses of the Oireachtas, 7th March 1996

The quote above, extracted from a Dáil debate on the first all-islands policy in 1996 which was intended to remove discriminatory practices, therefore points to a type of continuing spatial injustice peculiar to Ireland's political, economic and cultural history and structures. Herein, this research identifies an extraordinary paradox that seems specific to Inishbofin. Drawing on Breakwell's ([1986] 2015: 10) ideas of identity as a 'dynamic social product' which must be understood 'in relation to its social context and historical perspective' and 'identity-threatening experiences', it proposes that resistance to the series of socio-cultural

threats experienced by Islanders was enabled because of the endurance of a shared Islander identity of resilience, a foundational element of which was 'being' Irish. During colonisation, Islanders adapted to Cromwellian and other occupations, Iandlords' laws and control, a residential 'improving' landlord and the ban of their language, and additional CDB socio-cultural restructuring, against high baseline poverty with famine, disease, migration, extreme weather events and drownings. Furthermore, this community was specifically racialised through the indignities of physical examination and the theft of human remains because it was perceived as the evolutionary remnants of a primitive Irish 'race'. Yet Islanders were effectively categorised, post-Independence, as *not Irish enough*. Policies that culturally, politically and economically favoured Gaeltacht islands, and contemporary failures by GCC and national government to devise appropriate policies and/or provide essential services and infrastructures, including an adequate pier or a secondary school, sustained unnecessary challenges for the people of the island, exacerbating marginalisation and population decline that continues today.

6.2.2 Repatriation and Cultural Authority

Craniometry (measurement of the cranium) and anthropometry (scientific measurement of individuals) were believed to contain scientific merit for race theory. Charles R Browne, an anthropologist and medical doctor attached to Trinity College Dublin (TCD), and Alfred Cort Haddon, an ethnologist nicknamed 'The Headhunter', conducted the Irish Ethnographic Survey from 1891 to 1903. They documented life, and took physical measurements in Inishbofin and on other Irish islands and along the West coast. A central purpose of their investigation was to record cranial and limb measurements along with detailed physical appearance and other description, and to take photographs. Browne's photographs, including images captured in Inishbofin during the 1890s, offer a remarkable archive of rural Ireland which was presented in a touring exhibition in 2012/2013.



Figure 6.1: Inishbofin Crania, Haddon and Dixon Collection, Trinity College Dublin.

Image courtesy of C. Walsh (2024)

In 1890, Haddon, along with Andrew Francis Dixon, one of his students who later became Professor of Anatomy at TCD, secretly removed thirteen skulls from a recess near the altar and ambry of the ruined 14th century church that now stands on the original monastery of St Colman's (Figures 6.1 and 6.2). Haddon (1890, 1893) documents the 'thirteen crania from the island of Inishbofin' as 'part of a collection' he gave to Trinity College in his academic writings, and in his diary as extracted here.

'... When the coast was clear we put our spoils in the sack and cautiously made our way back to the road. Then it did not matter who saw us. The sailors wanted to take the sack when we got back to the boat but Dixon would not give it up and when asked what was in it said 'Potheen' ... we got the skulls aboard and then we packed them in Dixon's portmanteau and locked it and no except our two selves had an idea that there are a dozen human skulls on board and they shan't know either.'

Haddon, 1890

The remains taken from Inishbofin apparently remained archived in the Old Anatomy Museum of Trinity College Dublin. In May 2012, they were mentioned in a television news story by *Radio Teilifís Éireann* (RTÉ), Ireland's national broadcaster, on the *Fiagaí na gCeann Gaelach* (The Irish Headhunter) exhibition of Browne's photographs co-curated by Ciarán Walsh, and Dáithí de Mórdha of the Blasket Islands Centre. Inishbofin Islander Marie Coyne and Ciarán Walsh, who had encountered the Haddon Dixon Collection during his doctoral research, initiated the repatriation campaign in 2015.



Figure 6.2: (L) Interior of St Colman's Church facing east gable and altar; (R) East gable recess to the left of image, from which the crania were removed, with ambry on south to the right.

Source: Author (2020)

The Trinity Colonial Legacies (TCL) project is a two-year project commenced in 2022. It identifies two main aims: 'to contextualise and historicise the university's deep links to colonialism both in Ireland itself and in the wider world' from the founding of the college in 1592 to the late twentieth century, and 'to raise awareness of the college's physical and intellectual colonial legacies, monuments, and endowments in the present' (TCD, 2023a).

The Trinity Legacies Review Working Group (TLRWG) has invited submissions on two legacy issues: the remains from Inishbofin in response to the Islanders' campaign; and the name of the Berkeley Library after a petition from students drawing on George Berkeley's history as a slave-owner. On 26th April 2023, it was announced that the library would be renamed. This corresponds with 'decolonisation' actions taken globally by universities and other institutions, many aligning with the 'Black Lives Matter' social movement (Ahmet, 2020; Kearns, 2020, 2021; Lobo and Rodríguez, 2022; Warrener and Douglas, 2023; and others). The repatriation of human remains and cultural artefacts is a central tenant of contemporary post-colonialism debate. No 'cultural resource' issue is 'more complicated than the return and reburial of human remains' (Gulliford, 1996). Scarre (2009: 72) states with reference to 'all forms of cultural appropriation practiced in the last century or two' that 'it would be hard to think of any that has caused greater pain or offense to subaltern communities than the removal and retention of their human physical remains for purposes of study or exhibition'.

On 1st September 2022, I remotely attended a meeting hosted by TCD. The steps of a process were outlined that would serve as the framework for an 'open and transparent' 'methodology that will inform down the line' (author's notes, 2022). A public consultation was outlined that subsequently invited evidence-based submissions for review by the Board of TCD for a decision. After the process became widely known to the community, and following a second meeting on the island which was attended by TCD representatives in November 2022, community response was generally positive. Yet it also evidenced a lack of security of belief in the framework and continued uncertainty regarding the outcome:

'I don't know if we can have any faith in this process now. I want to but I don't know, it's hard to trust them now. I have a lot of doubts.'

'After being told so many different things over the years, that's the thing. They said at one point they didn't even know where they were. They said they can't do any more testing on them anyway. So why do we need to do all this now again?'

Islanders, 2022

'No matter what way you want to look at it, they are our ancestors. It's not that complicated as they make out. It didn't need to take so long or be so frustrating and upsetting.'

Islander, 2023

The Inishbofin campaigners had experienced much deferral and lack of clarity during the almost eight years of their campaign. A letter from TCD's Old Anatomy Steering Committee

in 2021, according to Islanders, stated that carbon analysis of one skull dated it to between 1509 and 1660 with a median probability of 1563, but findings did 'not indicate any genealogical link to living individuals or related peoples'. It stated that further DNA analysis would not be undertaken, and advised that it was unable to support 'transfer to the possession of private individuals or historical interest groups'. Jenkins (2010: 55) argues that 'senior professionals' 'appear keen to highlight the negative historical legacy of colonialism' yet have been slow either to return 'valued material' or criticise the role of their institution. Veering towards return of human remains during recent decades signifies an institutional response to a crisis of cultural authority that necessitates institutions creating distance from 'a discredited foundational remit' (Jenkins, 2010: 55). Legget (2018), in analysis of Māori and non-Māori museum stakeholders' response to collections held in New Zealand, identifies that 'where shared authority is taken seriously and stakeholders are involved, accountability becomes meaningful'. A tension in disparities of response between descendants and institutions often exists. Pullman (2017) contends that 'the tension is not between science and ethics, per se, but rather between the ethical values associated with the pursuit of scientific knowledge and the ethical values represented in honouring the claims of Indigenous culture, be they religious, spiritual, or otherwise'.

The Cultural Landscapes of the Irish Coast (CLIC) project, University of Notre Dame, has researched in Inishark since 2007 (Kuijt *et al.*, 2015; Lash, 2018, 2019; Quinn *et al.*, 2018). Lash (2018, 2019) presents excavation evidence for ritual practices developed in Inishark between ~900–1300. Additionally, a CLIC community-based archaeological project in Inishbofin excavated the remains of an early 19th century village. In its submission to the TCD public consultation, CLIC states:

'Inishbofin Islanders' claim that the skeletal remains belong to their cultural patrimony is equally clear and supported by the archaeological, historic, and folklore record. Islanders today represent the most recent generation of a community of care that has venerated and safe-guarded the site of Saint Colman's Abbey over more than 1,300 years.'

Extracted from CLIC Submission to Trinity Legacies Review Working Group (TCD, 2022)

CLIC also argues that the TCD Museum of Anatomy claim that without DNA evidence Islanders cannot assert ownership of the remains 'is premised on an exceedingly narrow definition of patrimony based on genetic descent' (TCD, 2022). It notes that Islanders 'continue to bury their dead alongside generations of ancestors, neighbours, monks,

pilgrims, and others'. Evidence of the kind outlined in the CLIC and other submissions, and by the Islanders' submission—165 Islanders signed a physical petition calling for the return, and an online petition received 948 signatories—requires endowment with cultural authority by those who may previously have considered it solely the domain of academic and state institutions. On 22nd February 2023, TCD apologised 'for the upset that was caused' by its retaining the remains and announced that they would be returned to Inishbofin Island (TCD, 2023b). The issue garnered national and global academic (Jones, 2023; Kendall Adams, 2022) and media interest (Carroll, 2023; McGreevy, 2023; Murphy, 2023; Sands, 2022). TCD liaised with the community to return the remains on 15th July 2023, as discussed in Chapter 7.

During the September 2022 meeting, a TCD representative acknowledged 'a gap' between the university's understanding of 'what we have' [the remains] and 'how what we have is understood' (author's notes, 2022). The necessity of 'widening the franchise' to 'get input' from the National Museum and 'those with more pedagogy and refined skill' on these issues was stressed (author's notes, 2022). From an islandness perspective, scaffolding this meeting was prioritisation of the cultural authority of the academy. As the 'transparent' process outlined was pre-determined, Islanders experienced little opportunity for meaningful contribution. They were compelled to accept the dictates of the authority viewed as responsible for the theft of the skulls and to participate in a process permeated by a profound sense of historic and contemporary injustice. They experienced that they are not recognised as experts about issues related to their island home; they hold no cultural authority.

Accordingly, there are two outcomes. The first is that Islanders must navigate a paucity of understanding of the meaning held in remembering and inhabiting Inishbofin's history including its past peoples as aspects of contemporary identity and socio-cultural experience. The second outcome is the reinforcement of the meaning of the original act. This experience is institutionally replicated by other external authorities, as will be further examined. Thus, it highlights endemic processes of coloniality of power and knowledge which this research proposes are similar to those that continue to underpin mainland-derived policy for islands, and in ongoing prioritisation of cultural authority over cultural patrimony. It therefore offers a study of the devaluation of local knowledge in mainland-island interactions that holds implications for resilience and vulnerability.

6.3 Coloniality

6.3.1 Marginalisation

Challenges continued for the community through the decades following establishment of the Irish Free State in 1922 as fishing and farming, already precarious, were further impacted by migration and disasters. This extract from a poem published during the Irish Civil War illustrates how the island has never been 'sealed' from national events:

Sure, they're runnin' short in Galway, an' supplies is small in Clifden,
An' what chance has Inishbofin to be gettin' food at all?
For the few small shops is empty, an' the people's going' hungry,
An' the little childer's cryin', where the white birds wheel an' call,
Where the say does be onaisy, an' 'tis fretted wid the squall.
Whin min wreck a thrain in Galway, or the lines torn up near Dublin,
Whin they blow a bridge to atoms, an' the goods cannot get by,
Thin, away in Inishbofin, little childer must go hungry,
Sure the mothers is torminted whin they hear the crathurs cry,
An' they're lookin' to the mainland for the help that should be nigh.

Author Unknown, 'An T-Óglác', 5th August 1922

Lloyd (2001: 21) identifies the 'interface between the state formation and subaltern formations' as a space of violence. The duality is that the new state is driven to regulate 'an unformed population' while aiming to establish itself as civilised and modern, separated from how it was portrayed by the coloniser, which creates a 'cultural hybridity'. Coloniality of power describes these processes, with the outcome of local forms of knowledge being 'deprived of their ideological legitimacy and subsequently subalterned' (Castro-Gómez, 2008: 282). These processes are illustrative of the geopolitics of knowledge (Castro-Gómez, 2008; Mignolo, 2008) which arguably resonates in experiences of the Inishbofin community including the repatriation process, discrimination because the community was not Irish-speaking, and ongoing infrastructural challenges discussed in the following chapter.

In 1958, Inishbofin is described by Freeman, an economic geographer, as 'one of the poorest and most isolated districts of the country'. Inishark was depopulated in October 1960, as discussed in Chapter 2, and islands' ongoing population decline and the risk of depopulation are a marker of marginalisation. For Inishbofin's community, dependence

grew on 'remittances home' and social welfare payments (Freeman, 1958; Tall, 1986). As the national rate of unemployment accelerated from the 1970s to the 1980s, the physical isolation condition of islandness enforced through mainland perspectives, though variously a barrier or enabler for Ireland's west coast islands (Quinn et al., 2018), combined with the effects of weather and mainland policy approach towards islands to intensify extremes of social vulnerability and marginalisation. Collier (2011: 3) finds that neoliberalist governance is not 'blind to the need for social protection'. The difficulties for Ireland's islands seems to be the systemic continuance of mainlandness as the dominant view in devising island policies. This view discounts the importance of the influence of place and offers little potential to meaningfully integrate local knowledge. Economic metrics provide one indicator of marginalisation. There are 'significant inter-regional disparities in household incomes' evident in 'geographical review of the SILC' (Survey on Living and Income Conditions) and other surveys continuous 'over the past fifty years or more' according to extensive analysis by Walsh (2023: 26). The areas that remain persistently economically marginalised are the Border, Midlands and West. Data specific to the islands at this level is not available. Their smaller populations mean that anonymity is not possible. The West, Border, and Midland regions 'have never reported a per capita disposable income greater than the state average since 2004' (CSO, 2023) which includes the 'Celtic Tiger' boom years between 2004-2008.

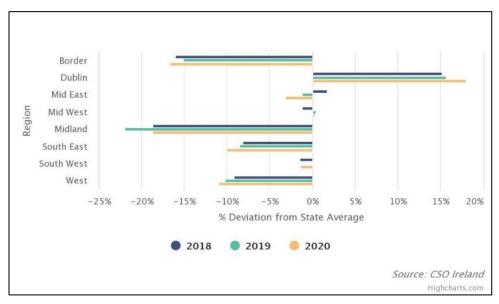


Figure 6.3: Disposable income per person percentage deviation from state average by NUTS 3. 'NUTS 3 - West' is the counties of Galway, Roscommon and Mayo including their offshore islands. (The Nomenclature of Territorial Units for Statistics (NUTS) were created by Eurostat to define territorial units for producing regional statistics across the European Union.)

Source: CSO Ireland (2023)

On the east coast, Dublin's population is 1,458,154 (Census of Ireland, 2022). The population of Dublin City and County (Dublin City, Fingal, South Dublin and Dún Laoghaire-Rathdown) and Outer Greater Dublin (Counties Meath, Kildare and Wicklow) is 2,082,605 which is 40.5% of Ireland's total population. Figure 6.3 shows that Dublin City and County is 'the only region where disposable income per person is significantly above the state average' while the Mid-East (Kildare, Louth, Meath, Wicklow) is the 'third largest in terms of disposable income' (CSO, 2023). In the CSO's 2016 income analysis, Dún Laoghaire-Rathdown households had the highest median income (€66,203), followed by Fingal (€58,795) and Kildare (€54,472). Nine of the ten highest median income towns were in Leinster. Notwithstanding localised socio-economic deprivation, Dublin and the Mid-East region, inside the conceptualised contemporary margin and historically largely within 'The Pale', is urbanised, industrialised and 'developed'. It is perceived as 'not marginalised'. Walsh (2023: foreword), in analysis of Ireland's income distribution, identifies 'a need for narratives that extend beyond economic considerations' and for inclusion of impacts on 'social cohesion, spatial justice and on the resilience of democracy' whereby 'place-based development' and a more 'holistic, human-centred approach' could be formed from 'principles of spatial justice'.

6.3.2 Justice

The Our Living Islands policy (Government of Ireland, 2023a: 49) states:

'At its core, the Strategy recognises that infrastructural investment needs to be complemented by supports for social development, for building communities and, in particular, for enabling people and groups who are marginalised—economically, socially or geographically—to become more involved in decision-making processes which affect them.'

This policy places *margins thinking* 'at its core'. People are defined as 'economically, socially or geographically' marginalised in relation to a 'centre' that itself is not defined. A *margin* in the Oxford English Dictionary (2024a) is 'an extremity or furthermost part of something'. This means that the margin can exist only in peripherality to something else. Complex creations of what and whom are inside and outside 'the margin' permeates contemporary identities, social structures and cultural understandings. Accordingly, something that is bounded by or contained within any margin is the non-marginal. *Marginalise* (Oxford English Dictionary, 2024b) is defined as 'to render or treat as marginal; to remove from the centre or mainstream' and as 'to force (an individual, minority group,

etc.) to the periphery of a dominant social group; (gen.) to belittle, depreciate, discount, or dismiss'. The prevalence and consistency of *margin*, *marginal* and *marginalised* consequently contributes to both conceptualisations and realities of *marginalisation* as lived experience for the peoples and places perceived as on the margins. They become threads woven through time, identities and ideologies into state policy as shown, and potentially, into politicised representation.

Correspondingly, spatial, environmental and climate justice are now inextricably linked. The issues of challenge for Islanders today derive from these deeply rooted ongoing understandings and applications of the margin and the marginalised including stereotypes of islandness that have, to date, failed to release social vulnerabilities and will likely heighten future climate change risk. The same external governance that has resulted in island population decline and marginalisation is responsible for infrastructures including sea wall defences. These conceptualisations, originating in the nature-culture divide, and gaining traction during colonisation and post-Independence with associated ideas of development, are apparent in a multitude of iterations including prioritisation of cultural authority over local knowledge, and a homogenous interpretation of 'development' over place meaning. Adaptive capacity is therefore shaped by processes that cross between the transnational, national and local, as well as the temporal. This presents as an epistemological and theoretical problem requiring examination if Ireland's islands, as places conceptually and physically located on the socio-political-economic margins, are to be resourced through policies and praxis effective in addressing the precariousness of island populations, including access, housing, employment and education, within the new and developing complexities of climate change.

6.4 External Governance

6.4.1 European Union

As Europe's third largest island, Ireland is an island nation. Within the EU, islands population of 20,000,000 or 4.6% of the total EU population, incorporates approximately 2,400 islands belonging to 13 Member States (European Parliament, 2022). In a 2010 study, Moncada *et al.* identify that European Union (EU) policy distinguishes three categories of islands: those that are wholly or partly under the jurisdiction of 'overseas countries and territories'; the 'most remote regions' including the Canary Islands, the Azores and Maderia; and continental European Union islands. EU islands policy is 'fragmented', while cohesion policy identifies islands as areas with 'a geographical or natural handicap' where

special provisions should address problems in farming and forestry 'as a result of remoteness, insularity or distant location', and higher fisheries ceilings should apply for regions 'under a handicap due to distant location' (Moncada *et al.*, 2010). While EU research proposes that islands are areas of 'backwardness' and 'share specific social, economic and environmental problems', Moncada *et al.* (2010), in developing a set of sustainability indicators for European islands including Ireland's islands, encounter 'a major constraint' owing to 'the lack of statistical data' regarding issues of sustainability for European islands and a 'lack of harmonisation of data'. The prevalence of stereotypical conceptualisations of islands combined with a lack of applicable data found by Moncada *et al.* (2010) corresponds with findings in this research of a scarcity of data pertaining to the Irish islands and dominance of mainland narratives.

The May 2022 Report on EU islands and cohesion policy: current situation and future challenges by the Committee on Regional Development 'recognises insularity as a permanent structural handicap' requiring 'strategies for integration', and identifies specific concerns for islands: (1) the impacts of Covid-19, (2) challenges as a 'result of permanent conditions, such as a dependence on maritime and air transport, a lack of infrastructure and rising prices and costs', (3) 'islands' growing hyper-specialisation in tourism' and the need to develop 'other activities in the primary and secondary sectors and other service activities, including those related to the digital sector', (4) the impact of Brexit, notably for Atlantic islands 'in many sectors, such as fisheries', (5) that islands are 'on the front line of climate change, particularly with rising waters and coastal erosion and the warming and acidification of seas and oceans', and (6) that 'islands are more exposed and vulnerable to natural disasters' (European Parliament, 2022). It states that the EU is 'first and foremost a maritime continent, whose islands are sources of substantial geographical, cultural, linguistic and environmental wealth' and that although holding legal recognition as 'disadvantaged territories', the 'islands of the European Union ... do not always benefit from the specific aid provided for in the Treaties'.

To address these issues, the development of an *Islands Pact* to define a 'common EU policy on island matters' is proposed (European Parliament, 2022). On 27th September 2022, a resolution was adopted to call on the Commission to, among numerous other recommendations specific to islands, draw up and implement an Islands Pact and a European action plan for islands. Ireland is a member of the Atlantic Arc Commission of the Conference of Peripheral Maritime Regions (CPMR), Europe's maritime cooperation organisation established in 1973. At its General Assembly on 22nd February 2023, the

CPMR committed to 'keep advocating for an EU Agenda for islands and equitable insular development in the EU' (CPMR, 2023).

6.4.2 National

It is challenging to establish exact habitation and population statistics for Ireland's islands, as discussed in Chapter 2. Additionally, Government documentation demonstrates a notable lack of nuanced analysis, detail and clarity regarding islands. The Island Policy Consultation Paper (Department of Rural and Community Development, 2019), for instance, highlights the importance of maintaining island populations on numerous occasions yet does not include islands population demographics. In Supporting the Sustainability of our Islands and Coastal Communities, Chapter 10 of Our Rural Future— Rural Development Policy 2021-2025, it is stated that 'approximately 30 islands have a permanent resident population' (emphasis added) (Department of Rural and Community Development, 2021: 88). The Government assists transport by sea and air 'to almost 30 offshore islands supporting some 3,000 residents' (emphasis added) according to its Islands Briefing 2020 (Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media, 2020), subsidising '13 passenger ferry services, 9 cargo routes and 2 air services' (Department of Rural and Community Development, 2019: 9). One of these subsidised services is the Inishbofin Ferry (Figure 6.4). Islands connected by bridge to the mainland have not been subjected to the adverse population decline experienced on non-linked islands (Royle and Scott, 1996).



Figure 6.4: Inishbofin passenger ferry moored at the island's New Pier on a July afternoon, with Cromwell's Fort and Navigation Tower in the background.

Source: Author (2022)

Twenty-seven years ago, the Interdepartmental Committee on Island Development established in June 1993, published a report entitled *A strategic framework for developing*

the offshore islands of Ireland, as mentioned. This report, throughout the majority of this research, was the most recent all-islands strategy at Government level. The Committee's aims were 'to review and prioritise development strategies and recommend on actions to ensure a co-ordinated approach to all aspects of island development, including the question of structural relationships'. Its primary recommendations, which followed the period between Census 1986 and Census 1991 when a further ten islands were depopulated (Royle and Scott, 1996), centred on improvement of harbour infrastructure and transport services, and identified their importance in sustaining island populations. This committee apparently ceased meeting, and while access and infrastructure were improved for the islands, its intention to question structural relationships seems to have been unresolved. A new Interdepartmental Committee on Island Development coordinated by the Department of Culture, Heritage and the Gaeltacht (DCHG) was not established until 2019. As part of its aim to 'reexamine the possible synergies between the various Government Departments and other agencies', a consultation process was launched in November 2019 to inform a new ten-year Islands Policy reflecting 'the input and combined expertise of all stakeholders' including island communities (Department of Rural and Community Development, 2019).

The Interdepartmental Committee held focus groups on Arranmore (population 469), Bere Island (population 167), Dursey Island (population 4), Hare (Heir) Island (population 28), Inis Meáin (population 183), Inis Mór (Árainn Mhór) (population 762), Inis Oírr (population 281), Long Island (population 20), Sherkin Island (population 111) and Whiddy Island (population 18), and additional online focus groups (Houses of the Oireachtas, 2022a). In Inishbofin, possibly influenced by the Covid-19 pandemic, no government representatives attended its Focus Group meeting. During the latter stages of development of this policy, the Islands Unit was transferred from the Department of Culture, Heritage and the Gaeltacht to the Department of Rural and Community Development under Statutory Order No. 379 on 22nd September 2020 (Government of Ireland, 2020) though the Islands Unit remains based in Na Forbacha (Furbo) in the Galway Gaeltacht approximately 12km from Galway City. Initially scheduled for publication in 2020, *Our Living Islands, National Islands Policy 2023-2033* was published on 7th June 2023. Its primary strategic objectives are to:

- 1. Revitalise population levels on the islands.
- 2. Diversify island economies.
- 3. Enhance health and wellbeing services.
- 4. Empower Island Communities.
- 5. Build smart sustainable futures.

A series of three-year action plans will be released across ten years. Among the initial actions is an allocation of €800,000 for minor capital works on the Aran Islands, with no funding specified for Inishbofin. The strategy commits local authorities and several government departments to 'positively discriminate' for the islands, including financial supports, with a focus on housing (Government of Ireland, 2023a). However, specific budgetary allocations are lacking. One adapted implementation is that the Vacant Property Grant Scheme that enables home buyers to renovate vacant and derelict properties will be increased by 20% for island properties under the government Croí Cónaithe grant, meaning that the renovation of an island property could potentially be eligible for funding up to €84,000 compared to €70,000 on the mainland. This recognises the higher costs resulting from islandness which include import of skilled labour and construction materials. This aspect of the strategy required subsequent governmental clarification as it generated global media headlines, including the New York Times and CNBC, that Ireland would 'pay' people to move to its 'idyllic islands'. However, the majority of the actions contained in this policy reflect processes of consolidation from other pre-existing mainland-focussed policies rather than the development of specific strategies that centre an understanding of the characteristics of islandness and how they impact, and there is no evidence of analysis of the causes of the marginalisation experienced by island communities.

A politically promoted positive of this policy is that it was produced in consultation with Comhdháil Oileain na hÉireann, the Irish Islands Federation, yet a draft was not made available to island communities before the strategy was published, demonstrating imposition of external cultural authority. Additionally, the headline issues to be discussed by the island focus groups were pre-determined. Education, despite this being a key factor in the future sustainability of Inishbofin's population and the focus of an ongoing campaign discussed in the following chapter, does not receive in-depth analysis in the strategy. The post-Independence marginalisation of the Inishbofin community, and local knowledge and experience of disparities in outcomes compared to political discourse, metastasised in a low level of engagement with the publicised consultation process. Calling for 'emancipatory evaluation', Mertens (2007) suggests that 'creative thinking with an awareness of diversity and social justice will lead to a more inclusive evaluation with the potential for addressing the needs of those who may be excluded'. While possibly intended, this has not been evidenced in the processes leading to publication of Our Living Islands which states as a strategic objective its aim to 'empower' island communities (that are already empowered). Ireland's islands have been subjected to systemic continuance of mainlandness as the

prioritised knowledge framework in devising policies for islands. This view, prevalent in both national and local authority approaches, discounts understanding of the influence of place or islandness, and offers little potential to meaningfully integrate local knowledge.

6.4.3 Galway County Council

Ireland's offshore islands all form parts of administrative areas that are mainland-based which leads to differences in treatment of their communities, and a lacking in cohesive and equitable policy (Royle, 1986). Inishbofin Island is under the jurisdiction of Galway County Council (GCC). The most recent County Development Plan, in effect since 20th June 2022, acknowledges its aim to support the four inhabited Galway offshore islands. These are the three islands of *Oileáin Árann* (Aran Islands) which are in the Galway Gaeltacht, and Inishbofin Island. In Chapter 13, *The Galway Gaeltacht and Islands*, it also cites its aim 'to support the uninhabited islands as appropriate particularly with regard to the potential for tourism development' (Galway County Council, 2022). Inishbofin's landscape is described in section 13.7.1 of the plan which also notes that the 'islands off the Galway coast are an important part of the cultural and unique heritage of the County and are a valuable tourist attraction' so there will be positive encouragement by the Council of 'development that complies with the policy objectives of the plan and with the proper planning and development of the area' (Galway County Council, 2022). The primary focus of the chapter is the Gaeltacht region.

Regarding all four inhabited islands, the Plan centres four policy objectives:

- 1. Economic and tourism development.
- 2. Development proposals, including the aim to prioritise 'development that contributes to retention of the year-round population on the islands'.
- 3. Development of pier infrastructure.
- 4. Rural housing, which aims to 'support permanent housing for applicants who can demonstrate that they have permanently lived on the island for a substantial and sustained period of time and can contribute to the long-term viability of the islands', with an Enurement condition of seven years.

In Inishbofin, a divide between aims outlined in GCC policy and their realisation is typically experienced. Services and infrastructures are often deferred or incomplete, and official equivocation persists. A pattern of infrastructural neglect in response to emergencies such as extreme weather events and continuing issues including erosion, as further examined in Chapter 7, is therefore identified in this study as a significant factor in pervasive population decline. The power of mainlandness—wielded through control of narratives and resources,

and where island needs are physically and perceptually distant—is such that Islanders consistently confront barriers in their efforts, demonstrating 'the occluded relationships that result both from slow violence and from the geographies of concealment in a neoliberal age' (Nixon, 2011: 64).

'They forget about us. They have no clue what it's like [here]. So we have to do it ourselves. That's how it's been as long as anyone knows.'

'It's out of sight, out of mind. Even when emergency work's needed here, it'll always be mainland work that's done first. Work's only done here if there's anything left in their budgets.'

Islanders, 2022

In stating that islands 'magnify fundamental themes relevant to the wider Irish historical experience' including 'the relationship between the centre and the periphery', Ferriter (2018) describes numerous specific events when island communities directly suffered as a result of mainland governance actions and policies. The sense of being disregarded by external authorities leads to distrust of those authorities and the institutional frameworks of politics. It facilitates practices of resistance, and contributes to identities of resilience, as explored in Chapter 5. It aligns with what Quinn *et al.* (2020) identify as neoliberal governance shifting responsibility through resilience discourse, which this thesis identifies as an iteration of Cartesian thinking. All of these factors combine with islandness to contribute to the processes of internal governance.

6.5 Internal Governance

6.5.1 Island Law and Insiders

Within the prevailing hierarchies of knowledge and power, Inishbofin evidences 'an entrenched peripheral status relative to the nation', as identified by Stratford (2003) in examination of the island of Tasmania in relation to Australia, and as explored throughout this thesis with reference to contemporary interactions with, for instance, Galway County Council and Trinity College Dublin. Warrington and Milne's (2018: 184, 185) *fief* typology of islands governance is arguably representative of how Inishbofin has been situated relative to mainland governance. The fief experiences 'to an extreme degree' 'peripherality, vulnerability, and dependence' 'compounded by neglect, repression, and exploitation' by an 'external power or its own elites', and a political system characterised by asymmetries,

notably the 'centre of power versus the fief', 'imperial agents versus indigenous elites', and 'officials versus ordinary folk' so that resistance to the state may ensue.

In 2017, I interviewed a WOOFer (Worldwide Opportunities on Organic Farms), a casual, seasonal worker from the US who had been in Inishbofin for several months. Her primary observation was her surprise at 'the level of roots and ties that everyone has ... how everyone is related, has a back-story of some sort'. She commented:

1'm from a small town so I understand that to some extent but it's deeper here, on a level I haven't experienced before. How everyone is tied in some sense.'

A long-term incoming part-time resident notes:

'There's a lot of history among the local population. You don't know who's friendly with who. First of all, you don't know who's related to who. That takes 50 years before you figure it all out.'

Older members of the community may on occasion choose to reveal details of historical disputes. In the telling, emotional response resonates, even in description of an event experienced years previously or by an earlier generation, demonstrating the depth of hybrid memory actionality. Seldom are names or specific details mentioned, however, as Islanders demonstrate fidelity to the socio-cultural responsibilities of being an Islander here and to earlier generations. When names or details are shared, they are often accompanied by a stipulation: 'Don't write that'. This command protects the integrity of the informant. It ensures adherence to *Bofin Law*. Bofin Law refers to local socio-cultural practice which can include reinterpretation of certain mainland laws in response to the socio-ecological conditions of place including the characteristics of islandness.

Island governance can also lead to local politics becoming focussed on a narrow range of issues (Warrington and Milne, 2018: 185). However, to consider the local political and governance interests of Islanders solely thus is to potentially discount other drivers including distance, weather and climate change which, owing to the immediacy of their experience and impacts or required response, often necessitate a narrow focus. Additionally of consideration, and necessitating this narrow focus, is the issue of population decline and how it should be addressed through future island development. The informal tradition of Bofin Law, facetiously titled yet made real through hybrid memory actionality, custom and practice, has been necessary to support continued inhabitation in a remote place where experiences are amplified. It establishes an in-group (Tajfel and Turner, 2004),

though with fluid boundaries as all residents can 'participate', cements social identification and belonging, and mobilises futuring.

'Fairness' is held as a central tenant of island law. As mentioned, where seaweed, a fertiliser for the land, could be harvested was allocated in response to the geography of villages and beaches. This practice remains evident in Proportional Representation election procedures for the voluntary Board of the Island Development Company. The intention is to achieve equitable representation from across the island's five townlands. Changing population patterns with, for instance, the majority of East End homes being now holiday maker occupied, are increasingly creating difficulties in achieving this. The fief can also be illustrative of factional interests, resulting in a 'collaborationist indigenous elite' and 'oppositional groups' (Warrington and Milne, 2018: 185). In conversations with Islanders, it is apparent that many believe this to be a factor underlying local 'island politics'. There are occasional resentments expressed primarily over land ownership and purchase, state or county council contracts, and the successes of businesses. Interpersonal and familial histories and the characteristics of islandness arguably amplify these perceptions.

Accordingly, the often mentioned island politics may generate antagonism for some and frustration for many. An example of some division in ideas of how the island should be 'developed' is the existence of two organisations operating separately in contributing to this development: the Inishbofin Development Company (IDC), an island established corporation, and the Inishbofin Community Services Programme (CSP), an employment programme managed by Galway County Council. Both have voluntary Boards composed of Islanders and/or island residents, are staffed by community members, and operate from offices in the community centre through external authority funding. However, when Inishbofin experiences challenge or threat, constructs of individual identity and differing visions for the island's future become secondary to a collective identity of cohesion, as illustrated in how the North Beach breach was repaired during the storms of winter 2013/2014 (discussed in Chapter 8).

One older resident observes:

'Islands and small villages are still tribes. And you may have warring within the tribe, but if something happens, everyone will turn out ... pulling together ... And if there's a court case from time to time, which occasionally there is, trying to get an Islander to give evidence against an Islander would be impossible, even if they're at daggers drawn.'

Permanent Part-time Non-Islander, 2017

Warring' is evident on the island because of historical inheritances and more recent disruptions including the Covid-19 pandemic. This is less a simmering type of war, however, than a cool one which is enacted largely through avoidance. The 'space limitations' of the islandscape with 'implications for simply mov[ing] from A to B' (Péron, 2004) mean that opportunities for socialising, transport, shopping, education or religious practice are limited. Therefore, avoidance, to be successful, must be actively practiced by those who choose it. Occasionally I have been in conversation with an Islander along the side of the road—where interesting exchanges so often occur—and witnessed avoidance of interaction with another Islander, even when the passer-by and I shared a greeting. Younger Islanders are largely dismissive of the practices of avoidance, saying they do not embrace historical disputes. Some recall that they had, as children, been told 'which families [they] could be friends with and which [they] could not'. The response of many community members is, therefore, to 'stay out of it altogether'. As one Islander comments: Wherever there's blood flowin' in a vein, there's politics.' Within all matters of island politics, Islanders are respectful of a shared Islander identity which, despite any contemporary resentments or historical differences, contributes to 'a stronger sense of closeness and solidarity' through 'sharing an ethos that is both private and communal' (Péron, 2004).

Effective self-governance is the response of Islanders to the perceived failure of 'official' external governance, to the absence of a garda presence or other civil authority, to distance from the mainland, and to being required to respond to extreme events without outside help. It is evident in ongoing maintenance of the islandscape; including repairing roads, managing commonage, fundraising for repair and improvement works, and securing smaller areas of erosion. While there is much tolerance of activities deemed acceptable in response to the characteristics of islandness, there are defined parameters. Should anyone drive too recklessly, for instance, 'a word may be had'. 'A word' is a caution or a reprimand, drawing attention to the socially unacceptable behaviour. It usually originates from one or more older community members, probably male though this is dependent on the perceived infraction. That a warning was given and understood will become known. This corresponds with the assertion of Burholt, Scharf and Walsh (2013) that 'older people hold central roles in creating and sustaining identities in Ireland's islands'.

However, it is rare that such a caution is required as internal governance has a three-fold impact. Firstly, it contributes to a reluctance to 'be seen'. To be seen is to publicly engage in any activity which could result in censure or attract attention. Islanders are "fully aware of being constantly under scrutiny' (Péron, 2004). Secondly, it consolidates identity and social cohesion. This contributes to feeling 'safe and comforted' and is 'manifested in a strong sense of community' (Royle and Brinklow, 2018: 12). Thirdly, Bofin Law incorporates the socio-ecological relationships discussed in Chapter 5. Therefore, it is founded on relationships with the sea, land and weather that enable inhabitation in this place. Some can feel restricted within the islandscape and these parameters, however, leading to a distancing from local politics that can manifest in a lack of involvement in island initiatives by skilled and otherwise motivated members of the community. Others may 'chafe at the edges' leading to a 'pressing inwards' of emotion (Royle and Brinklow, 2018: 12) which may be present for several younger people who experience mental health difficulties. Lastly, island law contributes to traditional societal values being maintained and controlled in a place where much is outside of human control. Islanders, through adherence to local law, inhabit an acute sense of responsibility to the island, community, culture and the future.

6.5.2 Island Law and Outsiders

'On an island, you're very exposed,' I am told by a permanent resident, who continues:

'Let's say if somebody violent comes into the island. They are in your space. In a very small area. It can bring a whole different level of intimidation. You're an island, you're out on your own.'

Permanent Full-time Non-Islander, 2017

Violence coming into the island resulted in the death on 6th July 1999 of three elderly sisters from an island family. A young man from County Down was found guilty by unanimous verdict in March 2001 of setting fire to their house in the early hours of the morning. Using fire extinguishers from the hotel nearby, Islanders worked for over two hours to quench the fire, and this tragedy continues to impact on the community. In Spring 2022, reconstruction work commenced on the house where the deaths of the sisters occurred. When it became known that the rebuild would include a memorial at the site, it provided comfort.

During winter, houses and cars are unlocked, but with the arrival of day trippers from Easter onwards, more attention to security becomes necessary. Bofin Law is applied to

non-Islanders who relocate here and become full- or part-time residents, both permanent and seasonal. I am given the example of 'a word being had' with a seasonal services industry worker when it became known that he had thrown hot water at a cat. Holiday homeowners on the island and all incoming non-Islanders 'fit in' depending on how they respond to local law and socio-ecological dynamics because, within an amplified environment, all residents impact on community experience.

'People who are the blow-ins, myself included, how we'd necessarily look at things versus people who are from the island all their lives. You come in with new eyes, you are completely ignorant to the history. Any in-fighting doesn't matter, any politics doesn't matter. It's just, 'What is the solution to the problem?' And then there can be a little bit of a 'them and us', who do you think you are, coming in here. You see that everywhere. I try to look at it from both sides sometimes.'

Permanent Full-time Non-Islander, 2017

You're in and out. You're here for a few months, then you're gone again. You don't realise how many shitholes have moved here now, and how you notice them more in a small place.'

Permanent Full-time Non-Islander, 2020

'I've been told, 'You're not from here.' And I get that. I know that. But I love it here and if you live somewhere and you want to be part of the community, it's hard to hear that.'

Permanent Full-time Non-Islander, 2022

'Some of the people who come to live here are here because they can't make it work anywhere else. They don't fit in other places. Then they fit here, cos no-one minds them. There's a lot of tolerance here, you know ...'

Islander, 2022

1 love when new people come in, people who've travelled and done other things. You get to hear new things, get new ideas. It's interesting talking to them, different ways of doing things and seeing things.'

Islander, 2022

The same expectations are not applied to short-term holiday makers and day trippers, though intervention is sometimes made.

'Now, we can deal with almost everything ourselves out here. Tap them on the shoulder, and say we're going to cut you off, but I'm also going to ring everyone else and they're going to cut ye off. And then sitting playing Tiddlywinks for the evening is your only option. So everyone does work well together and manage things very, very well together.'

Permanent Full-time Non-Islander, 2017

'People will take the piss out of each other ... and it's not unique to here, that goes all the way around. But if somebody from the outside starts to take the piss out of things, the whole island unites.'

Permanent Part-time Non-Islander, 2017

6.5.3 Island Time

Until the late-1990s when an accessible pier became available, travel to and from the island depended on the tide rather than the clock. Aligned with Bofin Law, therefore, 'Bofin Time' or 'Island Time' must be accepted to live here successfully. Moving into Bofin Time commences on arrival to board the ferry from Cleggan to the island. This shift to, for most travellers, an unfamiliar form of transport, signals not just the beginning of the last section of a long journey but a conceptual readjustment triggered by the materiality of the ferry, embodied by its crew and passengers, under the influence of the surrounding sea and weather. In contrast to more typical mainlander-marine engagements, such as taking a large commercial ferry or cruise where the sea becomes secondary to the experience, or holiday entertainment pursuits, this is an encounter of difference. As the only way to reach the island, it is both a journey and a transport of necessity. It signals the entry point into a socio-ecological relationship formed from the interactions of the sea with the weather, particularly the wind, and with the boat and those piloting it, and with land as a destination reachable only subject to these interactions. Unseen animals that live within the ocean depths may become seen, as with the dolphins on my first sailing to the island. Capitalising on its horizontalism, the boat moves across the ocean's surface, yet concurrently must navigate its verticalism in ways that non-Islanders are often unfamiliar with. The traveller's gait and centre of balance shift in response to the sea's power over the boat. Thus, the sea claims ownership of the traveller's senses and of their physicality. Seen, tasted, smelled and felt, it is undoubtedly in control. The traveller, simultaneously bounded and unbounded, transitions through heightened awareness and increased vulnerability into island time.

A result of the characteristics of islandness, island time is complex. Its physical drivers are the rhythms formed by constituents of the islandscape: the tide, weather and seasons. These combine with mechanical time to form local time. The sea is a continuous presence and the tide becomes a constituent component in the reconceptualisation of time while living in Inishbofin. What the sea is *doing* supersedes the time displayed by the clock. One of the most important markers of time is the ferry, or 'the boat'. Arrivals and departures,

the in and the out of island life—tide, boat, people, provisions—as a continuously shifting boundary, shape Islanders' thoughts and actions. Bofin Time extends farther than to when an event commences (usually later than advertised), or when island businesses open (rarely prior to 11am), to when work can be done based on availability of parts and expertise, and the prevailing sea and weather conditions. Often a relatively simple task on the mainland, such as replacement of a broken light fitting, may necessitate a wait of several weeks or months. It is also apparent in the time-meaning of common phrases. To call into someone 'after lunch', for instance, could result in a visit any time up to mid-evening. The same time in winter and summer is also different in meaning: a result of light or dark, weather, pace, work, and the makeup of the population that is in. Some incoming residents struggle to adapt to island law and time, particularly to the lack of immediacy in meeting of their requirements and a continuing strict adherence to only mechanical time, demonstrating misunderstanding of or disinterest in their cultural importance in this place. Thus, failing to transition, they also fail to adopt the awareness that supports community cohesion, safety and resilience.

6.6 Conclusion

In response to the second research question, this chapter has considered power relations and political narratives as impactful drivers of resilience and vulnerability in Inishbofin through examination of colonial legacies and post-colonial governance. Tracing the loss of the Irish language, and the removal and recent repatriation of human remains, from colonialism to the present illustrates continuance in the systemic production of marginalisation. The island's Gaeltacht designation that determined government and local authority supports resulted from the enforced loss of the Irish language during colonialism and heightened Islanders' post-Independence marginalisation, contributing to new and often challenging interactions with Galway County Council and other authorities. Ireland's new all-islands policy is shown to be based on continued margins thinking. Additionally, in both EU and national policies, mainland control likely contributes to a paucity of data being available for the islands and to inadequate and/or ineffective policy. This chapter therefore argues that policy originating in mainland projections of Islander identity including margins thinking contributes to reinforcement of marginalisation. In response, Islanders now exhibit low trust in external governance that may potentially be accelerated with a changing climate. Thus, historical legacies, reshaped into new perceptual and structural forms, maintain direct implications for resilience, vulnerability and adaptive capacity. While

temporally, spatially and perceptually distant conceptualisations derived from mainlandness have increased vulnerability through reinforcement of marginalisation, these processes are countered by the local knowledge formed from place-based processes (identities production, socio-ecological dynamics and folklore discussed in Chapter 5, and adoption of local governance and local time discussed in this chapter) that build resilience. While peripherality (as a mainlandness projection) and vulnerabilities are increased through external governance, the conception of peripherality also contributes to resilience through local understandings derived from place. Therefore, adaptive capacity and resilience are subjected to opposing forces. Their reduction by external governance which increases vulnerabilities is recognised in this research as a spatial injustice enacted through slow violence, evident too in the prevalence of creeping population decline, which now contains implications for environmental and climate justice. Accordingly, in the following chapter, a systematic examination of island services, infrastructures and livelihoods builds on these ideas to establish current levels of exposure to climate change.

7. SERVICES, INFRASTRUCTURES AND LIVELIHOODS

7.1 Introduction

This chapter responds to the third research question: what is the exposure of island services, infrastructures and livelihoods? Processes of resilience and vulnerability formation, proposed in Chapters 5 and 6 as instrumental to adaptive capacity, become manifested in infrastructures and services, and subsequently in their level of exposure and in livelihoods exposure under a changing climate. Thus, in the context of what Massey (1994: 250) describes as 'the politics of location', exposure through 'space-time' is considered. For Massey (1994: 154), place is constituted by its relationship with the outside world and is therefore 'imagined as articulated moments of networks of social relations and understandings' while boundaries create divisions of 'them and us'. The 'outside' is an equal contributor to what makes a place and 'the fortunes of individual places cannot be explained by looking only within them' (Massey, 1994: 5, 20). These ideas, thematically carried from the preceding chapters, are relevant to how mainland perspectives, practices and policies permeate Islanders' lived realities.

'We have had a scandalous position where the islands are concerned. There are special privileges for Aran and Arranmore and complete lack of privilege and appalling neglect in Inishturk, Inishbofin and Clare Island. The consequence of the policy of successive Governments has been the denuding of these sections, a much higher level of emigration, more people on the streets of London, Nottingham and Birmingham from these regions and others.'

Deputy Myles Staunton, Seanad Éireann Debate, 20th December 1979

Infrastructures 'generate the ambient environment of everyday life', with a 'peculiar ontology [that] lies in the facts that they are things and also the relation between things' (Larkin, 2013) which the quote above encapsulates (Houses of the Oireachtas, 1979). Study of infrastructures incorporates both systems thinking and opportunities to 'offer insights into other domains such as practices of government, religion, or sociality' (Larkin, 2013). Marginalisation and population decline become tangibly manifested in infrastructures and services as evidence of a slow violence occurring 'gradually and out of sight', as a 'delayed destruction ... dispersed across time and space, an attritional violence that is typically not viewed as violence at all' (Nixon, 2011: 2). One of the themes of Ireland's recent history magnified by island experiences, according to Ferriter (2018: 5), is 'the gulf between

rhetoric and reality in state building'. This chapter systematically examines the status of Inishbofin's services and infrastructure, and the processes contributing to current conditions, with a focus on state and local authorities.

7.2 Housing

7.2.1 Present Conditions

Almost half of Inishbofin's habitable houses are without residents and empty most of the time. Simultaneously, many seeking full-time housing on the island cannot secure it. Census 2022 records 184 people in 83 Inishbofin households, with a total housing stock of 163 (CSO, 2023a, 2023b, 2023c). Of these, 79 are occupied by the 'usual resident(s) of the household', with 'residents temporarily absent' from six (CSO, 2023c). Four are occupied by 'visitors only' and 24 are 'vacant house and flat'. Fifty are 'unoccupied – holiday home' (CSO, 2023c). These data show that just over 52% of the island's housing is permanently occupied by usual residents. Ergo, almost 48% of habitable housing stock is composed of holiday/second homes, holiday rentals, accommodating seasonal workers, or vacant (Figure 1).

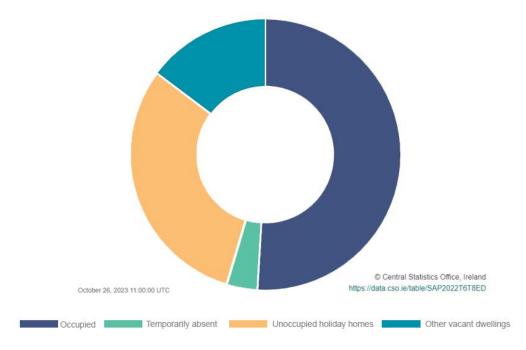


Figure 7.1: Occupancy status of permanent dwellings on Census night, Inishbofin. Source: CSO (2023c) with legend size adapted by author

Land—finite, prized—is seldom released as generational ties are strong. Islander migrants who wish to return often cannot do so because of barriers discussed in this chapter, even when land or houses are available to them. Habitable houses do occasionally become

available for purchase but for Islanders and long-term residents, the challenge, I am told, is that 'ordinary people can't afford to buy here now'. Planning legislation currently means that islands and the mainland are subject to the same regulations. Inishbofin is also a Special Area of Conservation (SAC) which reduces the likelihood of planning permission being approved. The Vacant Property Grant Scheme was increased by 20% in 2023 for island properties under the *Our Living Islands, National Islands Policy 2023-2033* (OLI), as mentioned in Chapter 6 (Section 6.4.2). Up to 17th December 2023, 14 applications for this renovation grant were submitted from islands. In Inishbofin, I am told that no Islanders have yet been able to avail of the scheme though applications concerning local properties have been submitted.

According to the first Action Plan of OLI, revised Planning Guidelines for Rural Housing to be implemented in early 2024 will 'acknowledge the unique challenges and characteristics of offshore islands' (Government of Ireland, 2023b: 4). These 'unique challenges' include a seasonally narrow construction window, and additional costs through import of workers and materials. Builders and tradespeople must also be accommodated. Following initial transportation to Cleggan Pier, further expense accrues for one of the twice weekly island cargo runs (Figure 7.2). For instance, to transport 1,000 blocks costs €110. Subsequent removal from the island pier is on roads navigable by small vehicles only. A complexity of logistics and fees therefore underpin every process that is, on the mainland, less complicated, costly or time-consuming. Also in the first OLI Action Plan, upcoming objectives include a review of the cost of transporting building materials by ferry, 'a targeted programme to deliver new social homes', and the appointment of Vacant Home Officers to 'develop a reactivation programme for retrievable properties' which will include 'use of Compulsory Purchase Order where necessary' (Government of Ireland, 2023b: 4).



Figure 7.2: Construction materials unloaded at the Old Pier/Cargo Pier. Source: Author (2022)

Several people highlight what they view as a short-sighted prioritisation of seasonal accommodation provision to holidaymakers over long-term rental to island families, and the impact of the lack of housing on population sustainability.

'... it's selfish in the long run cos there won't be anyone left. But, so then you think, will we be able to have our own house here ever? And I don't know. I mean, how? Islanders can't afford to build or buy a house here now. Everyone's delighted when an island family comes back or has a baby — oh, it's an old island family, isn't it great? But then when it comes to it, it's money first.'

Islander, 2020

'My [sibling] wants to come back with [their] family but can't. They live in [a mainland location]. As soon as anything comes up, it's too much or it's snapped up anyway so Islanders don't have a chance. And [they're] exactly what's needed.'

'It's like non-stop worry. We were at the point where we were looking at moving back to [mainland area previously lived in]. It was killing us but there literally wasn't one house and no help.'

Islanders, 2022

Housing precarity generates anxiety. For renters, securing a house for continuous occupation is a challenge. Property owners may more often agree a short-term winter rental, usually between October to March. Islanders sometimes resist 'official' agreements so these are private, influenced by existing relationships and 'word of mouth'. As the same houses may be rented short-term by holiday makers for considerably higher rates than long-term rental, there is little financial incentive for those with second properties to offer long-term residential rental, particularly considering the inheritance of subsistence living. Housing is also bound up with Islander understandings and meanings through history and identity, so that housing is often an emotively complex topic. The primary categories of renters impacted by the lack of island housing are:

- 1. Islanders who live in Inishbofin who wish to establish their own home;
- 2. Migrant islanders wishing to return, including those intending to raise their families here; and,
- 3. Incoming non-islanders of working and family formation age, with and without children, who want to live here permanently.

On 6th October 2021, during a Joint Committee on Social Protection, Community and Rural Development discussion on the National Action Plan for the Development of the Islands (Houses of the Oireachtas, 2021), Inish Mór Islander, Chairperson of *Comhar na nOiléan* and Manager of *Comharchumann Forbartha Árann*, Cathy Ní Ghoill, stated:

'The issues of planning and housing are the biggest threats to population loss on the islands.'

For most Islanders, the progression to leaving home will usually also mean leaving the island and for migrants, a return is often only possible by moving back into their parental home, sometimes with a partner and/or children. Hence, the insurmountably of Island housing barriers can be dependent on the pre-existing resources of the family. The housing sector is almost exclusively private individual ownership, lacking social or affordable housing schemes or alternative models such as apartments. Incoming non-islanders may be compelled to relocate regularly within the islandscape, even seasonally, subject to mobility. Parents confront additional difficulties as responsibility of care reduces availability of suitable accommodation. Houses maintained solely to meet short-term summer occupation are often less adequate for year-round habitation. Additionally, when children reach secondary school age, renters without the security of long-term, affordable housing may have no option but to leave permanently.

Thus, the extraordinarily high rate of second home owners in Inishbofin and the corresponding number of predominately empty properties and associated localised inflation of house prices creates a displacement for Islanders. They embrace many second home owners as valued community members. They look forward to the return of regular holiday makers, and understand the importance of the tourism economy. Simultaneously, they are unable to secure housing, meaning that they may have to leave the island and the future of the community is threatened. Yet it can be difficult to publicly challenge the trend towards increasing and 'developing' island tourism or to suggest that rates of second home ownership be managed without being perceived at community level as 'anti-progress' or at individual level as 'hurting feelings'.

'There are lovely people coming here years for the summer. I'd call them friends. I look forward to seeing them every year. But most of them, they don't seem to realise that them buying houses here is part of the reason island families can't, we can't.'

Islander, 2020

'A lot of [holiday homeowners] don't really contribute to the community. Like, they'll bring in all their food and drink even. They don't buy anything from the island businesses. And then they'll be at all the meetings, giving their opinions over everyone, just because they're interested in the value of their property.'

Islander, 2022

7.2.2 Future Implications

The geography and anthropology of rural housing in Ireland, previously intrinsically linked with traditional livelihoods and succession, is shifting. Endemic issues within Ireland's housing sector have been extensively analysed (Egan, 2023; Gkartzios and Scott, 2009; Hearne, 2020, 2022; Kitchin *et al.*, 2015; Waldron, 2023). Gkartzios and Scott (2009), with reference to the 'consumption countryside' (Marsden, 1993), identify transformation and gentrification that is 'often associated with the influx of ex-urban middle class residents'. While 'housing in Ireland is perpetually in crisis' (Kitchin *et al.*, 2015), there has been a significant gap in research specific to the islands. This gap is starting to be addressed with a 2022 survey of the seven West Cork islands, commissioned by *Comhdháil Oileáin na hÉireann*. This 'Housing Survey of Ireland's Offshore Islands' was extended to all islands and opened online for Inishbofin in September 2022.

The authors highlight in the West Cork islands report that the impact of the national housing crisis is distinct on islands 'given its potential to contribute to their widespread depopulation' (O'Sullivan and Desmond, 2022: 6). O'Sullivan states that islanders face 'an existential threat' because of housing issues (Baker, 2022). O'Sullivan and Desmond's (2022: 5) contention is that 'unlike the mainland, if the housing situation on the islands is not resolved', there is a risk of 'the loss of entire island communities'. The authors state that 'strongly focussed policy' is 'urgently required'. An early printed version of the expanded islands housing survey was distributed at the AGM of Comhdháil Oileáin na hÉireann on Inishturk Island from 17-18th September 2023. On 22nd September 2023, an Oireachtas Committee was held on Arranmore Island, Donegal to discuss it. This is the first time Oireachtas (parliament) proceedings have been conducted on an off-shore island with the Committee on Social Protection, Community and Rural Development and island representatives in attendance. The new report recommends the establishment of an approved housing body (AHB) to focus on the islands. The aim to 'examine the potential role of Approved Housing Bodies' that would be community-led is included in Our Living Islands (Government of Ireland, 2023a: 4). Accelerating national drivers, the monopoly of the tourism industry underpinning island economy and the inflated rate of second home ownership are proposed in this thesis as the main barriers to housing availability and access in Inishbofin.

7.3 Education

7.3.1 Pre-school and Primary

The island offers a not-for-profit pre-school and after-school early years' service at the community centre. As a TUSLA (state agency responsible for children's wellbeing) registered service, it can participate in reduced cost childcare schemes. Its primary challenge is staffing. Along with the Childcare Manager, assistants must be suitably qualified. This is a highly valued service. Essential to futuring, it supports existing families with young children to remain, and is important in attracting potential incoming families. Inishbofin's national school celebrated its 125th anniversary in 2015 (Figure 7.3).



Figure 7.3: Mural at Inishbofin National School celebrating 125 years since its founding. Source: Author (2019)

The school has DEIS status, a policy instrument applying a deprivation index to ensure equal access to resources and education. The staff is two fulltime teachers, a part-time resource teacher, and a Special Needs Assistant (SNA). Freeman (1958), observing that 'the normal figure would be 48' for a population of 260 people, records an enrolment of 29 children aged 5-14 in 1954. On my first visit in 2017, the school roll was twelve. The current enrolment is 18 pupils; ten girls and eight boys (Figure 7.4). This is its highest, I am told by one Islander, 'since I was there myself in the 70s'. An inevitable challenge arises for every island child when it is time to start secondary school and they must leave home.



Figure 7.4: Inishbofin's primary school children, May 2022. Image courtesy of Inishbofin National School

7.3.2 Post-primary Levels

There is no secondary school in Inishbofin. Consequently, children must leave for mainland education at the age of twelve. Daily commuting is impossible owing to distances to mainland schools, ferry and bus timetables, and weather. As mentioned in Chapter 5 (Section 5.4.2), boarding school was replaced by the practice of taking digs—where children stay on the mainland from Monday to Friday in a family home—from the late 1990s. The Remote Area Grant Scheme may contribute up to €4,947 per pupil per annum towards mainland accommodation (Government of Ireland, 2022). However, in recent years, practices are again changing as a result of socio-cultural and economic shifts including:

- 1. Increased and improved transport links including the pier, scheduled ferry services, and mainland buses interconnectivity.
- 2. Increased income for many island families, notably those involved in tourism.
- 3. Decreased participation in fishing and farming.
- 4. Increase in remote working.
- 5. Increased communications connectivity.
- 6. Decrease in mainland families providing digs.

These socio-cultural shifts broaden possibilities for second level schooling arrangements. Some Islander families now rent a second home on the mainland for the duration of their children's schooling. In the majority of situations, a child's mother relocates though occasionally all family members may. This has the additional impact of younger children being taken out of the island primary school. Families who already rent their island home, however, may have no option but to permanently relocate. This necessity to leave the island at the age of 12 is a challenging disruption that island children and their families must contend with. It can create familial relationship strain and financial pressures. The conspicuous absence of teenagers and young adults generates pervasive psychological, social and economic affect. The long-term impact is to establish an early pattern of migration. It is, Islanders contend, a significant barrier for anyone wishing to raise a family here, and therefore central to creating a sustainable population.

Through a variety of socio-cultural iterations, long relationships with mainland hosts, teachers and friends are also enjoyed. A divergent perspective is occasionally offered:

'They've gone to the mainland to school. They've gone to the mainland to college. They have, from a very young age, seen things differently. They haven't always been stuck in their own community. So it's an advantage in some ways.'

Permanent Full-time Non-Islander, 2017

Inishbofin's community began a campaign for an island secondary school in 1996. Currently there are 12 island primary schools on ten islands, and five post-primary schools. These secondary schools are on Gaeltacht islands: Tory (seven pupils) and Árainn Mhór (72 pupils) off Donegal, and on the three Aran islands, Inis Mór (49 pupils), Inish Meáin (42 pupils) and Inish Oírr (27 pupils). According to *Our Living Islands* (Government of Ireland, 2023a: 29), island secondary school attendance increased from 168 in 2011 to 197 in 2021. The model Inishbofin aspires to is Coláiste Naomh Eoin (St John's College) founded on Inis Meáin in 2001. It provides a local education for island children and also targets attendance by mainland children with 'accommodation scholarships'. Islander and school Principal, Mairéad Ní Fhátharta, states that having its young people at home has 'reenergised the island' (McGuire, 2017):

'The school meant that people could have and raise their children here, and we've seen a baby boom on the island and a growing population.'

Inishbofin, through the Island Development Company, formed the Inishbofin Community Post-Primary Steering Group (ICPPSG) in 2018. It made a cogent submission for a secondary level school on the island to the Department of Education with the support of Galway Roscommon Education and Training Board (GRETB) in 2020, designed to repurpose the upper two floors of the existing community centre and therefore necessitating little capital investment. The submission highlights (direct transcript, ICPPSG, 2020: 9-10):

- 1. The high cost of maintaining fragmented families.
- 2. The removal of whole families to the mainland and the subsequent removal of a significant proportion of the primary school cohort thus jeopardising the island's national school.
- 3. Children with special needs and/or medical conditions experience undue hardship and stress.
- 4. Danger of early exposure to peer pressure, bullying, and the use of drugs without family context or support.
- 5. High chances of early school leavers, with a subsequent dependency on social welfare and emigration.
- 6. Unlikelihood of permanent return of students to island base.

The submission also notes (ICPPSG, 2020: 5) that Islanders 'strongly feel that their children are being discriminated against by having to live away from their families in order to receive an education'. In a subsequent letter to the Ombudsman for Children's Office, the Steering Group argued that children living in Inishbofin are denied basic rights under

several Articles of the UN Convention on the Rights of the Child including 'the right to be different, but equal', 'the right to attend school' and 'the right to a home' (UNICEF, 1990). In July 2023, according to community members, the Ombudsman's office advised that the rights of the island's children may be negatively impacted and that this may apply to all islands lacking primary or secondary level schools. It could not then examine the issue further. In March 2023, responding to a Dáil question about Inishbofin's secondary school submission, the Minister for Education stated that GIS data determines where school accommodation is needed, and that 'most new post-primary schools must have a student enrolment capacity of 600-1,000 students' though a 'lower threshold of 400 may apply to gaelcholáistí' (secondary schools outside of Gaeltacht areas where teaching is through Irish) (Houses of the Oireachtas, 2023b). This demonstrates how mainland-centric policy discounts islandness.

The high rate of 32% of the island population with primary education only and the low rate holding a third level qualification at 18% compared to the national rate of 25% (Department of Rural and Community Development, 2021: 88) is not as representative of its younger generations who evidence higher secondary level completion and progression to third level education. In addition to the local factors listed, a governmental focus on increasing overall participation rates at university and expansion of attendance by underrepresented groups including assistance through Student Universal Support Ireland (SUSI) and the abolishment of fees (Scanlon *et al.*, 2019) have contributed. Returning after secondary school often incorporates unemployment, at least seasonally. The majority of Islanders who attend third level education enrol at Galway University, approximately two and a half hours journey by ferry and bus. There is also a history of attendance at the National Maritime College of Ireland. The lack of younger adults in residence in Inishbofin is palpable during term.

'They're all away in Galway [university]. Well, one, two now actually are down at boat school, the Maritime College, in Cork. There's one playing for Galway United. And it's great for them, they have real opportunities as well now.'

Permanent Part-time Non-Islander, 2017

'It's very quiet in winter here now ... But there's a kind of sadness in it as well, you know. A lot of them won't be coming back.'

Islander, 2020

Correspondingly, the return of university students at long weekends over winter and spring is immediately apparent. The increased presence within space is embodied by 'extra' people in the shop, or tables filled in the pub, and significantly in place feeling through elements introduced into the winter islandscape. The soundscape is changed with flashes of laughter caught by the wind, and a lively 'slagging' and posturing in the pub. So too, the sights and scents shift through a shimmer of clothing worn with more than solely the weather considered, or in a wafting of cologne. As suddenly as they appear, the island youth is gone. Winter continues with weather and ocean again the most animated. An effect of the return and departure of Inishbofin's mainland-based students is always the reminder that this research is being conducted in an era of population loss and threat. While direct progression from second to third level education has increased, however, beyond the difficulties in accessing second level, other educational barriers remain. Children and young people with additional needs contend with particular challenges in attempts to access mainland-based services. Older Islanders are stymied in accessing further education and often demonstrate a hesitancy in considering lifelong learning opportunities. One Islander tells me that this 'goes back to always being told you're backwards at school'. Yet in contrast to the experience of those who live here, as mentioned in Chapter 2, islands have long occupied and been occupied by scientists within the social and physical domains as 'spaces that echo the ideal conditions of the laboratory' (Greenhough, 2006).

7.4 Health

7.4.1 Island

'The provision of health services on Inishbofin is a matter for the Western Health Board ... the island is served by a medical officer who is resident in Clifden. I have recently received a petition signed by the residents of Inishbofin requesting the appointment of a resident doctor. This petition is under consideration at present.'

Charles Haughey, Minister for Health, 5th April 1978

The challenges experienced nationally in accessing healthcare services, described by the Irish Medical Organisation (IMO) in 2022 as 'a worsening crisis in healthcare', are compounded by additional factors in Inishbofin. Building on decades of non-provision of essential health services and continuing deferral between the various authorities responsible for services, as illustrated in this quote extracted from a Dáil debate in April 1978 (Houses of the Oireachtas, 1978), these factors include the impeded delivery of an

adequately equipped health centre for over two decades. Constructed in the 1970s, the 'Dispensary', the local name for the health centre on the Low Road, is no longer fit for purpose. In October 2019, some refurbishment was conducted (Figure 7.5). The island currently has a highly regarded resident full-time public health nurse (PHN)/midwife. A mainland-based doctor holds a clinic here every two weeks, weather permitting. Occasional 'Healthy Islands' workshops are held in the community centre as part of an all-islands government programme.



Figure 7.5: Inishbofin Health Centre before (L) and after (R) refurbishment in October 2019. Source: M. Coyne (2019)

In 2003, construction of a new health centre was cited as a priority under the CLÁR programme of the Department of Rural and Community Development. Over many years, various sites were found to be unsuitable and funding responsibility shifted. This resulted in several reapplications for planning permission and an ongoing lack of clarity for the community (Culliton, 2014; Ní Fhlatharta, 2008). In April 2019, the Minister of the Department of Culture, Heritage and the Gaeltacht confirmed that a small section of the unused airstrip (discussed in Section 7.7.3) would be transferred to the Health Service Executive (HSE) for 'construction of a new health centre for the island community' (Houses of the Oireachtas, 2019). At the GCC Plenary Meeting on 26th June 2023, a motion passed so that the majority of airstrip lands previously acquired by GCC may be sold to the Department of Rural and Community Development for the nominal sum of €1 (Galway County Council, 2023a: 3-4). In the current HSE Capital Plan (2023a: 49), Inishbofin is listed for 'provision of a new Primary Care Centre to replace the existing inadequate facility'.

The importance attached to care of community, and how vulnerability and resilience responses are co-enacted, is evident in Figure 7.6. Island response to the Covid-19 pandemic took a different route to that of the mainland. Inishbofin and the Aran Islands voluntarily went into 'lockdown' on 15th March 2020, in advance of the nationwide Covid-19 restrictions coming into effect on 27th March, to protect older and other vulnerable

community members. The island partially reopened to holiday makers on 29th June 2020 to mixed opinion.



Figure 7.6: Screenshot capturing an announcement by Inishbofin Development Company on 15th March 2020 on Facebook regarding Covid-19.

Source: Author (2020)

Difficulty in accessing medical services means that Islanders often self-care and/or self-medicate in an attempt to ignore or subdue pain or other symptoms while postponing seeking, or awaiting an opportunity to make, an appointment that will necessitate a day's travel to the mainland. A number of islanders describe this as 'managing'. Concern is raised by community members regarding care of the island's older population, particularly given the higher than average rate of aged community members. The community has few resources to target senior care, though an Active Aging group meets weekly for lunch. It has identified needs for a day care centre, physiotherapy and home help. When a family member is caring full-time for an aged parent, these carers also are under resourced. Challenges regarding supports for children with additional needs are another concern.

Improved broadband may facilitate greater access to online medical supports. An e-health/digital health programme located in the Connected Hubs on Tory and Clare Islands through a collaboration of the HSE, Donegal County Council and Mayo County Council with the Department of Rural and Community Development is in its pilot stages (Houses of the Oireachtas, 2022b). For Clare island, this 'health innovation via engineering' or HIVE programme, partners also with the University of Galway (NUIG) (University of Galway, 2022) and it is intended that the HIVE initiative will expand to Inishbofin and Inishturk. In Inishbofin, however, connectivity issues with the Connected Hub mentioned in section 7.6 must firstly be resolved. Though the island's last doctor left in the 1950s, with a resident nurse, a visiting doctor, the air ambulance, and the potential future provision of e-health,

there is no expectation by the community that Inishbofin is likely to have a resident doctor again but, notwithstanding the twenty year delay, hope is invested in delivery of the new health centre.

7.4.2 Mainland

Boarding the ferry is difficult for those who use mobility aids or for wheelchair users, and there is no island-based public transport. However, to attend a doctor outside of the biweekly clinic, or a dentist or to access other everyday medical care, requires travel to Clifden. This necessitates a full day during winter and at least a half day during summer. Accessing specialist care—for instance, maternity, paediatric or oncology services requires allocation of at least a day for travel to Galway City. Appointments must align with the boat schedule and/or with the Cleggan-Clifden-Galway bus. A risk is that delays or weather can prevent attendance or return, potentially generating an expensive overnight stay in the city centre. A hotel near Galway's Eyre Square has generationally provided a discounted one-night 'Islander rate' in this event. Health services, their provision or nonprovision and levels of accessibility, can influence Islanders in relocating to the mainland and also potential incoming residents. A related challenge is accessing medication. For medicines that can only be sold by a pharmacist, Islanders must often ask community members for help to transport prescriptions from Clifden. At the relinquishment of privacy yet also enabling a challenge to be addressed, island Facebook groups have become a forum for these requests.

7.4.3 Air and Sea

An emerging technology that may support Islanders in the future is delivery of medicines by drone. The 'Diabetes Drone' initiative was devised by NUIG to evaluate if it may be a viable service for islands isolated during storms, with a successful test conducted in September 2019 to the largest of the Aran Islands, Inis Mór (Siggins, 2019). The Irish Coast Guard's Search and Rescue Helicopter, and the Royal National Lifeboat Association (RNLI), service the island in emergencies. The flight to Galway city takes approximately thirty minutes with a subsequent short land ambulance transfer to Galway University Hospital. Hearing the helicopter approach the island triggers an apprehensive stillness, a searching of the sky, and a filtering of the sounds of sea and wind to listen acutely as it usually means illness or injury for a community member. In 2022, over 150 helicopter medical evacuations from islands occurred (Department of Rural and Community Development, 2023: 46). The effectiveness of this service provides reassurance for Islanders.

'We have a superb service. The Air-Sea Rescue. They can fly in most weathers, it's extraordinary. And by god, are they professional. They don't operate on the mainland though. It's for ships at sea and the islands. If you were on the mainland, say in Cleggan, you'd be in an ambulance to Galway Regional. To arrive by helicopter is the best way.'

Permanent Part-time Non-Islander, 2017

Though the Coast Guard also responds to outbreaks of fire on the islands, there is no island fire service nor community fire-fighting equipment in Inishbofin. Requests were reportedly made to GCC 'back in the 70s' for provision of fire-fighting equipment, and an assessment conducted by the Fire Service was provided to GCC in the early 1990s. In response to the 1999 fire in Inishbofin (Chapter 6, section 6.5), many County Councils provided island residents with fire-blankets, extinguishers and smoke alarms. The National Directorate for Fire and Emergency Management (2013: 61, 79) identifies the necessity for island 'households [to] achieve the 100% penetration of smoke alarms and have appropriate fire protection facilities from a very early stage'. In May 2023, Clifden Fire Station facilitated an island Fire Safety Demonstration and the suggestion to form a Community Emergency Response Team has been mooted, though currently none is established.

7.5 Religion

7.5.1 Past Practice

The passing of the Roman Catholic Relief Act in 1829 ameliorated several Penal Laws, yet open practice remained difficult in Inishbofin as the 'ardently anti-Catholic' Henry Hildebrand was the resident agent of both the Marquess and Wilberforce (Lash, 2019: 357). Following the Wilberforce conversion to Catholicism and subsequent ownership by the Allies family, freedom of religious practice became possible. Funded by Cyril Allies and the parishioners of Shark and Bofin, the current St Colman's Church pictured in Figure 7.7 was built between 1910 to 1913 on an 1800s church site (Saint Colman's Church, n.d.). In 1954, according to Freeman (1958), all inhabitants are 'Roman Catholic in religion' and 'depending on the priest for the main leadership'. A total of 43 priests resided from 1855 until 2001. The 'priest's house' behind the church is now rarely in use.

From 1983 to 1986, Fr Noel Reynolds was assigned to Inishbofin after his request of a transfer from Dublin to an island posting to 'be more in tune with the people' (Commission of Investigation, 2009). Eventually admitting that he had sexually abused over 100 children

in parishes including 'on the island', Reynolds was removed from ministry in 1998. The impacts of this violence within the community are guarded and protected under private identity. Islanders, unprompted, have obliquely referred to this period with one saying, 'Damage was done but it's not something talked about here.'



Figure 7.7: St Colman's Church, Middlequarter, Inishbofin Island. Source: Author (2020)

7.5.2 Contemporary Practice

Many Islanders describe their religious practice as within the parameters of 'Cultural Catholics' who affiliate less with the institution than with a socio-cultural heritage centring the traditional rituals of baptisms, First Holy Communions, Confirmations, weddings and funerals (Inglis, 2007). Funerals represent community solidarity. Memorialising Islanders recently passed with the 'Month's Mind', a mass held one month after a funeral, and annual anniversary masses are also significant. The annual 'Blessing of the Boats' perseveres too. The island's fishing fleet, reduced though other boats are present, gathers. The priest or bishop prays for boats and crews to remain safe, and for successful fishing. Mass in Inishbofin is offered every second Saturday. Updates are communicated via Facebook by a member of an informal lay committee that maintains the church (Figure 7.8). When the ferry cannot sail, and as the decline of the church has resulted in lack of personnel and in parish clustering, weeks may pass without access to religious services.



Figure 7.8: Screenshots of social media updates about mass via Facebook on (L-R) 6th November 2021, 5th August 2022 and 2nd September 2022. Source: Author (2023)

Thus, religious practice must incorporate transformation. The regular mass is switched from a Sunday to Saturday service, and is bi-weekly rather than weekly. Anniversary masses and rituals are aggregated, such as the christening, communion and confirmation ceremony in April 2022 described in Chapter 2 (section 2.4.1). Funerals proceed subject to a priest's availability and weather conditions. Within homes, traces of 'traditional piety' (O'Reilly, 2011) such as the 'holy shelf' (Figure 7.9) are rarely encountered as these artefacts are considered by many now as 'old-fashioned'. However, the socio-cultural impacts of restricted religious practice remain of concern because of effects on practicing community members and on social interaction.

'Well, there's mass now on a Saturday, it's weather permitting as well. There was mass now today ... Today's now was busier than a lot of a masses cos it was for a few people, cos now there's not enough masses so there's three or four people put together. And it depends on who the person was and the amount of family. They might only go when it's their family member.'

'There's less people go to mass now as well. Belief has changed as well. So it's hard to call now, but I know for the old people, when the priest left ... It did something all right. I dunno if it's to the routine of your life or something.'

Islander, 2017

'I'd say that no mass has changed how people meet, yeah. Whatever else was going on, you'd have it every week, it was a big thing in the week. You just went even if you didn't want to, there'd be rows and all, but you'd usually be glad you went. It was the social thing as well, you know.'

'No interest in it. Except you always go to funerals. And family anniversary masses. And sometimes I'd still go [to mass] at Christmas maybe. At the same time, it's not fair that people can't go if they want to, especially the old people. But living here, it's like everything else. Everything always depends on the weather.'

Islanders, 2022



Figure 7.9: 'Holy shelf', Middlequarter cottage. Source: Author (2022)

7.5.3 Repatriation Ceremony

The crania removed in 1890 by Haddon and Dixon, discussed in the previous chapter, were returned in collaboration with Trinity College Dublin in July 2023. After a ceremony in the chapel on 16th July, the remains were reinterned in St Colman's graveyard in a coffin crafted by an Islander whose great grand uncle made coffins in Inishbofin in the 1960s (Figure 7.10), demonstrating the importance of hybrid memory actionality. The white clay pipe, locally known as a 'Lord have mercy' (Concannon, 1993: 97), represents the island practice of providing pipes and cut tobacco at wakes. Photographs taken during the Irish Ethnographic Survey in the 1890s, including those of ancestors of today's islanders, were exhibited at the old pier. Media travelled to Inishbofin, with broadcasts on networks including RTÉ and Sky News.



Figure 7.10: Cofin containing repatriated human remains buried on 16th July 2023 (L), and memorial headstone (R), in St Colman's Graveyard.

Source: M. Coyne (2023)

The repatriation contains a duality of function in proffering respect to the island's ancestors and to today's Islanders. While societal, institutional, individual and community barriers and motivations were navigated, in its penultimate iteration within the islandscape, Islanders curated presentation of 'The Islander' beyond even national boundaries. Its effect is to enshrine the interlinkedness of island history with contemporary practice. The period during which the skulls were taken is inhabited here as one of grievous adversity. Through recognition and positioning of place-based knowledge and cultural authority, a new thread is woven into the complex historical-contemporary identity donned as Islander.

7.6 Communications

7.6.1 Post and Sea

'What time will the mail boat leave for Bofin?'

'When she's ready to go, if the weather is fit. You'd better be aboard, because she won't wait.'

'How will we know when she's ready?'

'You'll see her leaving the pier.'

Richard Murphy, Notes for Sonnets (2011: 98)

Before completion of the deep sea pier and introduction of a scheduled ferry service, mail boats delivered post to the islands and also carried passengers. Today, post today takes a day or two longer to arrive compared to the mainland. Packages being delivered by courier or larger parcels are transported on the cargo ferry which sails twice a week, and are stored in the container known as the 'blue box' on the old pier for collection. The island post office remains an essential component of community life. In addition to its own financial instruments, customers of Ireland's two largest banks, Allied Irish Bank and Bank of Ireland, can access their accounts through the post office which is particularly valued by local businesses and older community members. There is no operational ATM on the island, and the post office is also where pensions and social welfare payments are collected. The island post office is a rare socio-cultural constant for the community. For longer than elsewhere in Ireland, as described in the following section, the post office facilitated all communications. It has been essential in sustaining familial and other socio-economic links through generations of migration, symbolising both island isolation and connection. 'Built on ... expectation of faithful dealing', and 'intimately connected with daily life' (Ferguson, 2016: xiii), it has achieved synchronicity with islandness. Many are concerned about its possible loss. An Post (2018) announced the closure of 159 post offices including 18 in Galway in 2018, though stated that its seven island post offices will be retained.

Maritime communications and marine navigation are another constant, though greatly altered by technology. While broadly understood by a high cohort, their deep knowledge aligns with experience, age and gender as those who work at sea, including the island's two qualified Ship's Captains, are male. A 'group of three freestanding beacons' 'constructed of roughly coursed masonry which is rendered and white-washed' on the south side of the island were 'in existence prior to the production of the First Edition maps in the 1840s'

(National Monuments Service, n.d.). Locally referred to as 'the towers', these beacons are highly symbolic for the community (Figure 7.11). The tower on the Low Road has a niche facing to the south-west containing a statue of Mary, 'Our Lady, Star of the Sea', that is traditionally associated with guiding sailors and fishers safely home. Inhabiting hybrid memory actionality, many Islanders understand navigation by the guidance towers, even if contemporary navigation technology is less familiar to them. They represent early geospatial and engineering achievement yet also historical legacy, identity and socioecological systems. Thus, the towers manifest as the physical foundations of a metaphysical way, grounded on land so that safe passage can form on water. These infrastructures, in providing a glimpse into how Islanders occupy spaces between sea and land that are beyond the shore, and beyond understandings confined by mainlandness, realise the semantics of islandness.



Figure 7.11: Inishbofin's three guidance towers. Source: National Monuments Service (n.d.)

7.6.2 Telephone and Broadband

In March 1987, Inishbofin became the 'last island outpost in the west' to receive an automated exchange and a modern communications tower so that a telephone connection became accessible at all times (Fahy, 1987). This followed the failure of a subsea line in the 1920s that, as warning of the storm was not received, contributed to the Cleggan Disaster. A Morse Code link operated in the post office up to 1950, and then a manual exchange with five telephone lines available only during its opening hours up to 1987 (Concannon, 1993: 103). Speaking from the island on the day the automated exchange came into operation, Fergus McGovern, Chief Executive Officer of *Telecom Éireann* (Telecommunications of Ireland), commented on the benefits to Islanders including greater security and

development of their tourism industry (Fahy, 1987). Noting that the future of job creation would be in information technology, he stated his belief that the automatic exchange could contribute to employment opportunities including development of island industries (Fahy, 1987). While of great benefit, other essential infrastructure was not in place. Islanders were then campaigning for instance, for construction of a deep water pier (section 7.7).

The *Rural Development Policy 2021-2025* (Department of Rural and Community Development, 2021: 88) acknowledges that 'digital connectivity has been a challenge for Islanders' with levels of 'access to computers (58%) and broadband/internet (55%)' 'considerably less than on the mainland where ... 72% have access to broadband/internet'. Under *Our Living Islands*, digital connectivity and telecommunications is recognised as 'a particular challenge for the islands' while 'improved broadband and mobile phone access presents an opportunity to change the economic and social dynamic for island businesses and communities' (Government of Ireland, 2023a: 28). The Mobile Phone and Broadband Taskforce, established in 2016, complements the *Our Shared Future* government programme (Government of Ireland, 2020) as a cross-departmental government initiative aiming to reduce the gap in broadband quality between urban and rural areas. One of its themes is 'connectivity as an enabler of innovation' (Department of the Environment, Climate and Communications, Department of Rural and Community Development, 2022).

The Galway County Digital Strategy 2020-2023 (2020: 1) states that the county 'must harness technology' as a 'truly online society' to particularly 'increase the quality of life ... for more marginalised and vulnerable communities' (GCC, 2020: 1). The Council amended its previous approval to transfer the full 23.5ha airstrip site (detailed in the following section) to instead transfer c. 22ha to the Department of Rural and Community Development. Corrigan (2023) reports that GCC said the land 'may have potential for telecoms infrastructure'. Islanders are aware that a multi-national company is investigating siting a mast here. Additionally, National Broadband Ireland (NBI) is 'rolling out the largest infrastructural project in rural Ireland since rural electrification' (NBI, 2021). In August 2023, NBI advised the community that, rather than a subsea connection to the mainland, a Radio Backhaul Solution is proposed for Inishbofin and this will be rapidly progressed. The connection is described as offering consistent speed and simplicity of repair compared to a subsea cable. The community's response is hopeful yet questions are raised regarding future-proofing of the proposed system in consideration of climate change impacts, population growth, increasing usage, robustness of the equipment in withstanding the extremes of weather already experienced, and maintenance and repair.

Launched in 2021 by the Western Development Commission for the Department of Rural and Community Development, Connected Hubs is a remote working infrastructure in rural Ireland offering hot desks, dedicated desks and meeting spaces as a 'key action of *Our Rural Future*' (Connected Hubs, 2023). Inishbofin's Community Centre, nestled into the hillside with poor mobile network access, is a 'Connected Hub.' The code delivered via mobile phone text to hub users to access the internet often fails to deliver. This is a recent instance of how the conceptual progression from 'development' to 'modernisation' to 'innovation' evident across state and local authority strategy documents as illustrated, has long been directed towards islands and Islanders yet does not account for islandness. It has been repeated since the time of landlord ownership. Islanders advocate for improved telecommunications, yet their understanding is balanced by (1) experience of external authorities consistently failing to deliver on commitments, (2) previous failure of mainland policy and providers to fully consider the characteristics of islands and how they can impact, and (3) a conceptualised 'modernisation', in this case digital connectivity, being always one interlinked issue of many.

'Of course there's computers and broadband, and that has to happen but for the young people, there has to be the jobs for it. Like, broadband doesn't automatically mean there's a job there as well.'

'Remote working is the way for the islands, Covid showed it works. But we need the houses and the childcare and school places and everything, it all goes hand in hand. We can get the best broadband connection, we want people to be able to work here, but they can't work here if there's nowhere for them to live.'

Islanders, 2022

7.7 Access

7.7.1 Sea

Access 'is seen as all-important to life on the Irish islands', and there are 'significant differences between the islands' demographic histories that can be directly related to accessibility' (Royle and Scott, 1996: 111, 118). Inishbofin's Old Pier was built in the 1890s by the Congested Districts Board (CDB), along with the sea wall on this section of the Low Road, and is inaccessible during low tide. Until the late-1990s, the boat was required to anchor in the harbour. Passengers, mail and provisions were loaded into a currach and rowed to shore. Pregnant women, older people and children were then often carried to safety on the backs of crew or family members across the rocky, seaweed strewn beach

(Figure 7.12). The campaign for a deep-sea pier began in the early 1980s. In 1977, there was 'provision for a boring survey' at Inishbofin to examine the 'feasibility and estimated cost of dredging a channel which is necessary to improve transport facilities and communications with the mainland' (Houses of the Oireachtas, 1977). Contracts for the construction of a new pier where 'nearing completion' in December 1984 (Houses of the Oireachtas, 1984b). From this point, lack of clarification, deferral and delay ensued with responsibility variously attributed to the Commissioners of Public Works or Galway County Council. An advocate for the island, Deputy Molloy, was asked to leave the chamber in December 1985 as his attempts to gain clarification were deemed argumentative (Houses of the Oireachtas, 1985). The deputy's comments included:

'It is ridiculous that people in an office in Dublin are designing a pier to meet the needs of islanders on a remote island off the west coast, that they are not being shown what is being designed to meet their needs and that they are not being given the opportunity to comment on whether or not the pier as proposed is suitable for their needs.'



Figure 7.12: Low tide access to Inishbofin from RTÉ news coverage broadcast on 1st April 1987. (L): Transfer by currach from boat. (R): Passengers helped and carried from currach to shore. Film stills used with permission.

Source: RTÉ (1987)

In March 1987, it still had 'not proved possible to allocate the necessary financing' (Houses of the Oireachtas, 1987). By February 1990, the work was in progress under the Department for the Marine (Houses of the Oireachtas, 1990) and in 1992, following more than a decade, the pier was built (Figure 7.15). However, access issues continued as the dredging previously proposed had not been completed. Therefore, Islanders could not land on the new pier during low tide and were required to continue rowing from the ferry. Another long-term advocate for the islands and Gaeltacht regions, Éamon Ó Cuív, noted on 14th February 1995 that the pier was still inaccessible at high tide and was advised by the Minister that Galway County Council held responsibility (Houses of the Oireachtas, 1995a). On 12th October 1995, a Dáil discussion (Houses of the Oireachtas, 1995b) ensued that is

representative of the issues Islanders continue to consistently experience regarding infrastructures: (1) the question of which authority is responsible for financing different works, (2) lack of clarity regarding which authority is responsible for implementing these works, (3) visitors and tourism prioritised over community, (4) discrimination as it is not a Gaeltacht island, and (5) lack of local consultation and communication. The Minister for the Marine stated that 'the harbour authority in Inishbofin is Galway County Council', it is 'the responsible body for maintenance works and for development of the harbour' and suggests that 'as the harbour is not a Gaeltacht Harbour perhaps the County Council would consider making representations for funding to The Islands Committee' (Houses of the Oireachtas, 1995b).



Figure 7.13: Inishbofin's New Pier, the passenger ferry pier pictured (L) from the Low Road and (R) from the ferry on approach.

Source: Author (2020, 2019)

By April 1997, the same argument was repeated with other actors. The Minister of State for the Gaeltacht and the Islands agreed to provide funds to improve the silting situation at Inishbofin and also the pier at Cleggan 'if the Galway county manager and the county councillors adjoining Inis Bofin and the Aran Islands make definite proposals for which they are prepared to provide council money'. The Minister, noting that other county councils 'can provide funds' for their islands, questioned why 'Galway County Council is reticent about investing in the offshore islands' (Houses of the Oireachtas, 1997). These comments, while provided here without political context, illustrate that almost 20 years of delay and deferral of decision-making and funding commitment resulted in ineffective infrastructure despite investment of expertise, time and finances across several authorities while the marginalisation of the island continued along with population decline. This experience typifies external authority processes across essential island infrastructures and services. Royle and Scott (1998: 117), in an analysis of transport and access for all of Ireland's populated islands, observe:

'... the transportation systems are very varied with different levels of both infrastructure and outside support. There seems to be a possible unfairness here which is keenly felt by some islanders.'

The importance of the ferry to the island is apparent in how, when discussing 'the boat', it is so often referred to as the 'island's lifeline'. *Everyone and everything* must be transported by ferry—Islanders, tourists, water, food, the doctor, the priest, post, fuel, animals, animal feed, medicines, local produce etc. It is essential to access education, employment and health services. Inishbofin is equally dependent on Cleggan's infrastructure where responsibility for the pier is between GCC and the Department of Agriculture, Food and the Marine in a historical division since the Marine Works (Ireland) Act 1902 (Figure 7.14). Cleggan's marine infrastructure is also subjected to delays in maintenance and structural works, and lack of clarity regarding financial responsibility. A Steering Committee for future development in Cleggan Harbour is to be developed by GCC at the time of writing. Examining overcrowding at the piers serving islands is identified as an objective in Quarter 4, 2025 under the first three year plan of *Our Livings Islands* (Government of Ireland, 2023b).



Figure 7.14: Cleggan Pier with Inishbofin ferry moored. Source: Author (2022)

Inishbofin Island Discovery Ltd is owned by an island family that also skippers and crews the ferries, holding contracts for the cargo and passenger boats under the Department of Community, Rural and Gaeltacht Affairs (Government of Ireland, 2023c). Islanders regularly praise their skill. Cargo ferry rates are subsidised with at least 20% lower rate for Islanders and for passenger tickets, this is closer to 50%. Currently non-Islander adult return tickets range from €5 for ages 3-5 to €25 for adults. Some recent queries regarding the 'classification' of Islander are raised by second home owners. It equates with full-time

residency regarding transport costs. Ferrying essential goods such as animal feedstuffs or island produce is considered prohibitively expensive by many, and the lack of freezer facilities can be a challenge for transit of frozen or perishable produce like meat, fish and dairy for island businesses.

Every sailing is weather dependent. From October to March, the passenger boat sails twice a day and, usually at the Easter long weekend in March or April, it switches to a summer schedule with three daily sailings at long weekends and throughout June to August (Figure 7.15). At peak season, it may sail four times daily. The cargo ferry service, on Tuesday and Friday each week, is supplemented throughout the year as required; for instance, to remove scrap metal and cars, or when drinking water must be brought in (discussed in section 7.8).

commencing Monday 16th October				
Days of week Mon	Depart Cleggan		Depart Inishbofin	
	11.30am	4.45pm	8.15am	4.00pm
Tues	11.30am	7.30pm*	8.15am	4.00pm
Wed	11.30am	4.45pm	9.00am	4.00pm
Thurs	11.30am	4.45pm	9.00am	4.00pm
Fri	11.30am	7.30pm*	8.15am	4.00pm
Sat	11.30am	4.45pm	9.00am	4.00pm
Sun	11.30am	4.45pm	10.00am	4.00pm
			eather. Please ca	

Figure 7.15: Inishbofin passenger ferry Winter Schedule 2023/2024, screenshot captured from Inishbofinferry.ie.

Source: Author (2023)

An extensive governmental review of subsidised ferry services to the islands was conducted in July 2018 by the Department of Culture, Heritage and the Gaeltacht. The 'annual cost of the subsidised ferry services is approximately €3.9 million' for delivery of 'passenger, vehicle and cargo services through 24 public service contracts to some 15 offshore islands' at an 'aggregate value of almost €40 million since 2008' (Mahony, 2018: vi). The 'average cost per sailing was €94.21' in the period 2008 to 2017 (Mahony, 2018: 59). Inishbofin had 728 contracted passenger sailings in 2016, 40,115 visitors in 2017, and a 34% increase in non-islander visitors from 2008 to 2017 (Mahony, 2018: 42, 73). While acknowledging the need for the State to subsidise island ferry services, the review argues for 'consideration of

the Department's role in relation to the islands into the future' (Mahony, 2018: 75-77). As mentioned, responsibility for islands was transferred to the Department of Rural and Community Development in September 2020.

As a persistent socio-cultural driver, particularly from October/November to February/March, the orchestration of the wind is examined in Chapter 5. Local understanding is that the boat may not sail at short notice, and the ferry company provides a valued text service to communicate cancellations and changes (Figure 7.16). In analysis of missed sailings and future considerations, the 2018 review proposes that future service levels be based on 'objective evidence' through population analyses (Mahony, 2018: 45). Noting that the annual number of sailings 'saw a sustained decrease' between 2008 to 2017 with increased missed sailings in 2014 and 2015, it recommends departmental engagement with providers to gain understanding of the factors influencing this so that 'any further inefficiencies' can be avoided, and also proposes that it is 'not possible to definitively determine the reason for this decline [in total contracted sailings] given the available data' (Mahony, 2018: 58).



Figure 7.16: Text updates received from the Inishbofin ferry company between 11th February and 24th February 2022 of cancelled and rescheduled sailings as a result of weather impacts (mobile phone screenshots).

Source: Author (2022)

A disconnect between mainland policy that prioritises quantitative analysis and the reality of weather impacts seems apparent, with 'missed' sailings described as 'inefficiencies'.

While more analysis would be required to examine potential correlation with ferry services, the 'sustained decrease' corresponds with the increasing impacts of climate change evidenced in Ireland in the period (and the winter 2013/14 storms) that continue to accelerate. Consideration of future climate change impacts is also lacking. That a governmental analysis of island ferry services, understood by Islanders as their 'lifeline', fails to fully incorporate storms and their potentially increasing impacts under a changing climate is further evidence of the mainlandness framework upon which islands policy is developed and narratives constructed.

7.7.2 Land

The 'Coastal Protection and Flood Risk Management Study', for which initial funding to GCC was approved by the Office of Public Works (OPW) in 2015, has not been published at the time of writing (discussed in Chapter 8, section 8.3.1). However, a draft print copy greatly concerned Islanders along with information that a Cost Benefit Analysis to be included in the new study would be informed by a tourist survey. The 'Value of Enjoyment Survey' may be conducted under the Minor Flood Mitigation Works and Coastal Protection Scheme introduced by the Office of Public Works (OPW) in 2009. Under this scheme, GCC was awarded €8,461 for a Value of Enjoyment study regarding 'Cloonamore Inishboffin' in 2023. GCC received funding for 'Cloonamore Inishboffin - Comprehensive coastal erosion & flood risk management study for Inisboffin Island as a whole' of €6,300 in 2022 and €5,395 in 2021 under the same scheme, in addition to €90,000 in 2015. Funding of €441,900 was also awarded by the OPW in 2015 for 'Inisboffin-South Shore New coastal protection barrier - in form of wall constructed from integrated PC block elements - as detailed in RPS report 2014 & being used for new or repair of existing damaged sections of walls at Southern Shore' (OPW, 2023, 2024).

The understanding for Islanders at this time is that decisions regarding currently essential infrastructural works, future coastal protection, and associated budget allocations will be influenced by visitor satisfaction surveys conducted during summer 2023. Awaited works include the rebuild of the Rusheen Pier which was destroyed during a storm on 1st February 2014 (Figure 7.17) as discussed in the following chapter (section 8.3.1). Considerable apprehension is experienced by the community at this new development following ten years deferral. In a letter to the DRCD, OPW and GCC on 10th July 2023, it urged reconsideration of how value is determined.



Figure 7.17: Rusheen/East End Pier and old fish curing station, photographed (L) on 15th April 2013 and (R) on 13th November 2020.

Source: Dolphin Eco Hotel (2013) and Author (2020)

After two months, with no reply from the Department or GCC, the OPW responded that it could not comment until the study is published. Islanders' letter highlighted their 'disbelief, anger and disapproval' at the methodology applied. It argued that it is 'insulting that the viability and value of our entire island community [is] reduced to a matter of tourists' enjoyment', urged consideration of the *Our Living Islands* policy and Sustainable Development Goals, and stated that it is 'sad to see such short-sightedness', 'lack of consideration and transparency'. Additionally, reminding authorities that the community is also waiting for the south shore sea wall defences to be completed while erosion advances, it requested clarification on where responsibility for funding coastal protection and flood risk management for the island lies. The letter stressed that the actions and inactions of these authorities impact on how Islanders live now and will live in the future, and further stated: 'We are not an amusement park, we are an island community'.

7.7.3 Air

Up to the end of the 1990s, as described, accessibility was the greatest island challenge. There was no public bus service between Cleggan and Clifden, and a limited service from Clifden to Galway. Fewer Islanders then owned cars. Advocacy for a pier had been ongoing since the early 1980s. Operating a scheduled ferry at the transportation standards experienced elsewhere in Ireland was impossible. Inishbofin's ferry service was not subsidised at this time though other islands did have subsidised transport. For instance, the Aran Islands Transport Act had been passed in 1946 to provide a subsidised ferry and bus service between these islands and Galway City (Mahony, 2018: 4). In 1970, Aer Arann Islands was established, providing an 'island hopping' fixed wing aircraft service between

Galway Airport and the Aran group which currently schedules 'up to 25 mainland departures per day during peak season' (Aer Arann Islands, 2023). This service is now based at Connemara Airport, approximately 30km from Galway City. Owned by the Department of Rural and Community Development and opened in 1992, the airport was part-funded by Údarás na Gaeltachta/Gaeltacht Authority (ÚnaG) in support of the three Aran islands. Consequently, there was high interest in an airport for Inishbofin in the 1980s and 1990s.

However, the Inishbofin airport development became highly contentious. Early argument for an airstrip had been made by members of the Fine Gael party in 1979 and by the Progressive Democrats in the early 1980s (Houses of the Oireachtas, 1979b, 1984a). Funding of £6,500 for an airstrip feasibility study was allocated in 1998. The airstrip was progressed by Deputy Ó Cuív, a Fiánna Fáil TD, in the early 2000s. Aligned with narratives of development, it was conceptualised as the solution to accessing services, increasing tourism, employment and the economy, and engendering socio-cultural equality, in amelioration of the neglect of the non-Gaeltacht islands since formation of the State. In 2001, the Department of Arts, Heritage and the Gaeltacht commissioned an evaluation of island airstrips and services development by Cranfield University. In November 2003, Deputy Ó Cuív, then Minister for Community, Rural and Gaeltacht affairs (often referred to as Dev Óg/Young Dev by Islanders), confirmed a €10 million allocation for 'a major programme for the islands' including dredging works and 'provision of an airstrip on Inishbofin' (Houses of the Oireachtas, 2003). Planning permission was approved by GCC for airstrips located at Inishbofin and between Cleggan and Clifden. Some reports suggested influence by Galway county business interests (Siggins, 2003) in advance of centenary celebrations for the first non-stop transatlantic flight by Alcock and Brown in 1919 from Newfoundland to Clifden. Several Islanders believe that the process was highly politicised. A second evaluation by Cranfield University in 2007 further investigated the feasibility of airport developments for both Inishbofin and Tory islands. The Inishbofin site was acquired by GCC under Compulsory Purchase Order (CPO) on 54 Islanders who held commonage rights. At least one family did not accept the compensation.

By the time the airstrip was built in 2008-2009, local opinion had largely shifted. A public bus route was now operational between Cleggan and Clifden, and the Clifden-Galway service had increased. Higher car ownership rates also contributed to greater accessibility. Of most importance, a scheduled, subsidised, contemporary ferry service was operational. Tourism had rapidly expanded. The airfields at Inishbofin and Cleggan were constructed at a cost of approximately €9 million. They have not been completed nor operationalised

(Figure 7.18). Bainistiocht Aerphoirt Teoranta Aerodrome Management, currently contracted with annual payments between €1,301,890 to €1,465,564 from 2021 to 2025, maintains Conamara Airport, Aran Islands aerodromes, and Inishbofin and Cleggan airstrips (Government of Ireland, 2023c). According to many in Inishbofin, resurfacing was conducted 'a year or so ago' while the company 'usually just send[s] two fellas in once a year with Roundup'.

Several Islanders question if they would use an island airport should it open. Overall, limited carrying capacity, that a two or three-part journey would still be required to Galway, that the time saving is no longer as substantial given wider increased connectivities, and cost are considered prohibitive to regular use. Environmental concerns are also mentioned. An original suggestion that the airport would provide health security is negated owing to the effectiveness of the air-sea helicopter ambulance. Concerns about the proximity of the airstrip to the school are voiced, and the opinion that a fixed wing aircraft service would not be safe or possible on a year-round basis. Islanders largely agree that the airstrip would be primarily used by tourists. Community and media stories have circulated that it would be vigorously promoted to aviation clubs and private jet owners, and even that Inishbofin could become a 'jet set destination' (Ní Fhlatharta, 2013). Media stories highlighting the 'costs to the taxpayer' regularly appear (for instance, Shanahan, 2019), often serving to reinforce narratives of the islands as a drain on the mainland.



Figure 7.18: Inishbofin Airstrip, 53°37′01″N 10°12′41″W: Google Earth image capture on 26th September 2023 with the Atlantic Ocean on the top left, Lough Fawna to the centre left, and Bofin Harbour and pier to the lower right of the image.

Source: Author (2023)

Local division about the airport, though not completely oppositional ideologies, broadly corresponds with divergent ideas about future development of the island. One view is that an airport would benefit a small cohort of tourists, the majority of whom would be 'islandhopping' aviation club members who would not overnight, therefore contributing little to the local economy. This would increase environmental and noise pollution, and negatively impact the positive aspects of island living. For this group, the airport is linked to politicisation of the island and Islanders to the detriment of culture, heritage and the islandscape in perpetration of 'modernisation' conceptualisations. The counterargument is that the airstrip, at great expense, is already built. With investment to develop a terminal, an island company could be formed to run it to benefit the entire community. For this group, the airport represents progress and being 'modern'. Airports symbolise technology, mobility and glamour, everything that Islanders were, through a confluence of drivers, long denied. The 'sunk-cost fallacy' (Tykocinski and Ortmann, 2011) is arguably also evident. For most Islanders, the airfield site represents loss. Land, once commons, is tarmacadamed and fenced behind a locked gate (Figure 7.19). Now governed by the vagaries of outsiders, it has been rendered useless in a place of land scarcity. The 'very idea of the modern city has for much of the postcolonial era played an ambiguous role within Indian conceptions of national identity with its deep ideological attachment to rural life' (Gandy, 2008: 126). Should 'island' be interchanged with 'city' and 'Irish' with 'Indian', this attempted 'development' of Inishbofin offers some parallels with Gandy's (2008) analysis of the infrastructure of Mumbai including a perpetuation of inequalities, in further illustration of the porous nature of island boundaries and fluidity between local and global.



Figure 7.19: Inishbofin Airstrip gates. Source: Author (2022)

In 2015, the Department's intention to sell Cleggan and Inishbofin airstrips was disclosed. On 29th January, in a Committee of Public Accounts debate, the Secretary General of the Department of Arts, Heritage and the Gaeltacht (DAHG) was requested to 'provide clarification' on the airstrips (Houses of the Oireachtas, 2015). He stated that in the early 2000s, the Department began to 'look more at non-Gaeltacht islands' as previously it 'had paid more attention to the Gaeltacht islands'. With budget reductions following the recession, DAHG had 'moved from a position of capital provision for islands in 2008 being multiples of tens of millions of euro to the current capital provision of approximately €600,000' (Houses of the Oireachtas, 2015). In March 2017, the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs (DAHRRGA) opened a public consultation inviting 'interested parties in relation to the future use of airstrips and surrounding sites' to submit their views as to 'future possible use' including 'provision of air services at both sites' (Department of Rural and Community Development, 2017). By the deadline of 19th May 2017, over 120 submissions were received from Islanders, holiday makers, flying clubs, and Galway business individuals and groups including Clifden West Connemara Airport PLC.

Islanders' submissions reflect their fear of the site being acquired by an external private company. Some who wished to retain it for its original purpose used a pre-written submission which noted that 'connectivity is the lifeblood of the Islands into the future'. Others urged rezoning of the land for a health centre, affordable housing, a waste and recycling management centre, a PVC farm, and a lighted air ambulance landing site. Several referred to environmental damage resulting from the original construction including destruction of lapwing nesting grounds and the introduction of the invasive species, *Gunnera tinctoria*. In 2019, it was confirmed that the new Health Centre would be built on a section of the airfield and in June 2023, GCC retained a portion of the site for a possible telecommunications structure, as mentioned. The majority of the site is now transferred to the Department of Rural and Community Affairs. Islanders have not been updated on a decision as to its future use. The first Action Plan of *Our Living Islands* includes development of 'a programme for renewal of the State owned airports and airstrips serving the offshore islands' during Q4 of 2023 (Government of Ireland, 2023b: 3).

'This is a Fianna Fáil island. Changing, but it was. Particularly because Dev Óg had adopted the island. But [the airstrip] was the worst thing that could have happened the island.'

'One of the specious arguments put up for the airstrip was that if anyone was sick it would take them off. Now, it's very windy up there. But a fixed wing aircraft up there in bad weather would just be dangerous for everybody. It could have been an argument 20 years ago, but not now with the technological advances of the helicopters.'

Permanent Part-time Non-Islander, 2017

'It's really frustrating when you think how that amount of money could have been used. The thing that pisses a lot of people off is the lack of consultation. And then they lock the gate on it, then they say they're going to sell it. Whatever happens with it, it has to be by public vote this time, there's too much at stake.'

Islander, 2017

'The whole thing is a joke. But it's there now so it makes sense to use it for what's really needed like the health centre and housing. Or some people say a solar farm. The people who'd use the airport would be flying in and out again, you know, no benefit for anything. We've had planes land there, they're not meant to but they do in summer, and the noise is honestly awful. An airport would ruin the island.'

'I'd like to see it opened. It has been a total joke though. You look at the Aran Islands and how it made the difference there. Once it's not a private company coming in and taking it over. It needs to be for the people here.'

Islanders, 2022

7.8 Energy

7.8.1 Past

Inishbofin homes in the last century were designed around a central fireplace with an iron crane for hanging cooking pots. Candles and paraffin oil lamps supplied lighting. Islanders burned locally cut peat (scraw/turf). Later, briquettes and coal were also brought in. Peat was early recognised as dwindling. Praeger documents in 1911 that 'the peaty covering of the hills has been almost entirely stripped for fuel', 'the ground is a mere waste'. Freeman, writing in 1958, notes that 'once the peat is used up, it is hard to maintain existence on these remote islands'. An RTÉ report in 1977 describes the 'difficulty of getting adequate fuel supplies in the form of turf'. Noting that 'trees are non-existent' and 'turf banks are few', the process of scraw cutting whereby shallow layers of peat are stripped from the rocks and dried is described (RTÉ, 1977). Community members today say that the remaining peat is dry and flaky, and will soon be completely gone.



Figure 7.20: Gas powered wall lamp in an Inishbofin home. Source: Author (2022)

Gas was introduced from the 1940s for cooking and lighting, and was still being installed in the 1970s. A cooker and one or two wall lamps were powered by the butane gas cylinder colloquially referred to as the 'yellow bottle'. Traces remain visible in some homes, as can be seen in Figure 7.20.

'The provision of electricity in all remote areas is done under the rural electrification scheme. Gaeltacht areas are subsidised in this regard by the Department of the Gaeltacht who give the necessary funds to provide electricity on Gaeltacht islands. Inishbofin is not a Gaeltacht island and cannot be considered except in the same context as people living in remote areas on the mainland.'

Deputy Peter Barry, 2nd May 1974

During the early 1970s, Gaeltacht islands were supplied with electricity generated by diesel generators, as referred to in the quote above from a Dáil Éireann debate on provision of electricity to islands at more distance from the mainland. In 1982, this system was introduced in Inishbofin. The production was dirty and noisy with regular power cuts 'caused by arcing as a result of sea salt deposits on insulators' (ESB, 2023). Some islands had a relatively early grid connection, such as Dursey in 1979. However, the geographical distance between Inishbofin and the mainland meant that a national grid connection was deemed unfeasible until the late 1990s due to the cost involved (ESB, 2023). Technological advances and increased funding through the EU meant that connection could then proceed for islands at greater distance via submarine cable. As one of the last places to join Ireland's national grid, being 'unconnected' is associated with conceptualisations of the unsophisticated and backwards islands, and strongly linked with concepts of progress and development.

7.8.2 Present

Inishbofin was successfully connected to the national grid in November 1998 (Figure 7.21) (ESB, 2023). Appliances previously unavailable—for instance, computers, microwaves and dishwashers—became a new possibility. More powerful machines and tools could be used by farmers, fishers and builders. Island tourism rapidly increased. Today, the reliability of Inishbofin's energy supply is considered under two principal areas of concern: (1) the impact of storms in winter, and (2) the seasonal pressures of tourism. Power cuts occur in winter but are not now usually of great duration. For cooking, electric or gas cookers powered by the 'yellow bottle' are in use. There is almost absolute dependence on oil for central heating which is often supplemented with electric oil or gas heaters. Open fires

remain common, though often replaced by a wood burning stove. Many Islanders prefer to avoid dependence on a sole heating or cooking source given their location, the frequency of high winds and storms, and previous experiences of external authorities. The continued use of an open fire and burning of scraw therefore represents the continuity of local knowledge that engenders resilience and resistance. Apart from the piers, the island has no public street lighting. While retaining the depth of night darkness it values, however, and potentially exploring becoming a 'Dark Skies Park', the community is again shifting into new ways of thinking about energy.

New Era for Inisbofin and Clare Island highly accurate positioning technology. Clare Island, as ESB proceeds with a £2.6 million project to install mainland The two islands have experienced significant growth in peak electricity electricity supply to the two islands. The cable is now laid in this part EU-funded project. All stages of the project will be demand over the past five Inisbofin by 39%, and Clare Island by 23%. The provision of mainland completed in the autumn. electricity supply will be a major boost The cable route for Inisbofin extends from Port na hAille (on to the socio-economic development of the islands, and will enhance the quality Inishboffin) to Cleggan on the Galway of the life of the 350 people who live coast. Clare Island's route begins near on them. It will also facilitate the the harbour on the island and finishes at islands' busy tourist season Lugadamba, near Louisburg, on the The project will also provide for considerable upgrading of the overhead Mayo coast. In both cases the routes involve a 10km undersea cable being ESB network on both the islands and laid, using a specialised ship, fitted with the mainland. Electric Mail July 1998

Figure 7.21: ESB Archives: Electric Mail article, July 1998. Source: ESB (2023)

7.8.3 Energy Transition

Islands, in 'occupy[ing] an important role in many national strategies to decarbonise energy systems and expand renewable energy generation' often 'serve as testbeds for new technologies' 'justified by claims to deliver benefits to host islands through blue and green economy investment and employment' (Kallis *et al.*, 2021). Under the Climate Action and Low Carbon (Amendment) Act 2021, Ireland is on a legally binding path to achieve 51% reduction in carbon emissions by 2030 relative to the 2018 level and net-zero by, at the latest, 2050. In its Local Authority Climate Action Plan (LA-CAP), Galway County Council (GCC) has designated the Aran Islands as its Decarbonisation Zone (DZ) with the Arans identified as a 'testbed' for measures that may be implemented elsewhere in the county (GCC, 2023b: 86, 2024). Established by the community in 2012, *Fuinnimh Oileáin Árann*/Aran Islands Energy (CFOAT) is a non-profit Cooperative 'working towards becoming self-sufficient in locally generated renewable energy and free of dependence on oil, coal and gas' with ongoing projects including retrofitting of homes, and it is a member of *Community Power*, Ireland's first community owned electricity supplier (CFOAT, 2023).

Other smaller island communities addressing energy production include Clean Energy for EU Islands; the *Energi Akademiet* of Samsø, Denmark; Tilos Island with Greece's first hybrid power station (wind and solar); and Gapado and Jeju in South Korea. Rathlin Island, Northern Ireland, is part of a new *Green Transition Ecosystems* project by Ulster University and Queen's University Belfast, with the Glasgow School of Art and University of the Arts London (Rathlin Community, 2023). Several projects in Scotland include the Shetland Islands' new tidal energy production initiative aiming to power one third of the homes of their almost 23,000 residents. The world's first tidal array was developed there in 2016 (Shetland, 2022).

Inishbofin Development Company (IDC) has implemented the first stages of an Energy Master Plan aiming to generate sustainable energy on the island by 2030, and engaged KRA Renewables, an energy consultancy, to conduct an island-wide energy usage audit and devise transition solutions. Working with the University of Groningen through an EUfunded research project, EC2: Energy Citizenship and Energy Communities for a Clean Energy Transition, it also conducted an energy transition survey. In November 2023, Inishbofin was accepted as a Clean Energy for EU island. In April 2022, I attended an energy event in the Community Centre for a presentation of KRA's findings and the survey launch. Present were approximately 20 people, the majority Islanders and at least one second homeowner. High interest was somewhat tempered by previous experiences and understanding of challenges including geographical remoteness, maintenance, economics and aesthetics. Islanders are determined that the project will benefit the community. Creating local employment, reducing household energy costs, and generating income that could be paid as a dividend are identified as having the potential to contribute to population stability and climate resilience. One Islander commented: 'It's about what's actually going to work here, realistically, and to identify what we can start with.'

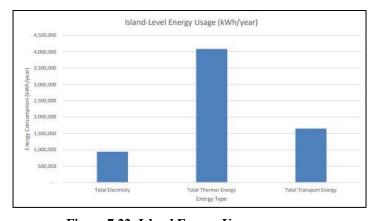


Figure 7.22: Island Energy Usage per year. Source: KRA Renewables for Inishbofin Development Company (2022)

The KRA analysis worked to 79 properties having a year-round energy usage profile, and 70 being summer only. Thermal energy use dominates, with transport the second highest category of usage, followed by electricity (Figure 7.22). The domestic sector is the highest consumption category overall, followed by sea transport (passenger and cargo ferries) and the commercial sector (primarilarly hotels, hostel and B&Bs). Reliance on oil for home heating and diesel for ferry transport is apparent (Figure 7.23), corresponding with the highest categories of CO₂ emissions. A monthly electricity usage profile yielded an estimated yearly consumption of ~939MWh/annum of electricity island-wide while analysis based on verified incoming electricity was ~907MWh, equating to ~278 tonnes of CO2 emissions annually. The highest thermal energy consumption results from burning oil for home heating, while ferry transport equates to an estimated 1,650MWh of diesel fuel and ~435 tonnes of CO₂ emissions per annum, with land-transport usage at ~192,000kWh and emitting ~51 tonnes of CO2. These findings demonstrate that seasonal usage rates are reversed compared to the majority of mainland rural communities as a direct impact of tourism, second home ownership and islandness, and that the island occupies both land and ocean. To formulate an average per capita emission accounting for the complexities of the island, however, would necessitate design of a specific methodology. The energy solutions proposed included home retrofitting, electric cars and electric, hydrogen or biomass fuelled ferries, a large scale solar PV array at the airstrip, and a tidal barrage at Lough Bofin. Wave energy generators, utility scale wind turbines, and small scale wind turbines, with battery and hydrogen storage options, were also presented, along with various transition pathways.

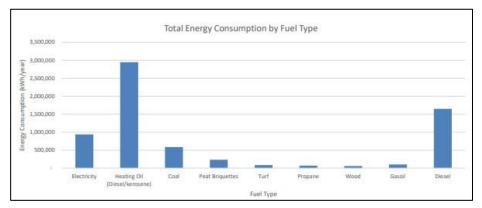


Figure 7.23: Total Energy Consumption by Fuel Type per year. Source: KRA Renewables for Inishbofin Development Company (2022)

Inishbofin may, in the future, become an 'energy community', generating or facilitating sustainable energy and/or sustainable practices on a community level according to Jans,

Perlaviciute and Becci, University of Groningen who, on behalf of the Development Company, analysed the survey which was completed by 30 people. Half of the respondents were permanent residents, 40% were female and 60% male, with an average age of 52 years. Of these, 40% had attended the energy event. All of the energy efficiency measures proposed at the meeting were considered acceptable. Of the proposed generation technologies, a utility solar energy such as a large-scale array of solar panels potentially at the airstrip was considered most acceptable, followed by domestic solar energy, wave energy, and small wind turbines on the Island. Least acceptable were a tidal barrage and large-scale offshore wind energy. Energy citizenship was highly rated and viewed as a 'very important right, along with the rights to information on and participation in the energy market', and respondents wanted 'to co-decide any future energy scenarios' though 'tend to be somewhat less willing to make decisions themselves' (Inishbofin Development Company, 2022). They found that respondents strongly approve of establishing an energy community and are interested in getting involved (Figure 7.24). Respondents preferred a communal organisational structure such as a co-operative that would provide benefits for all community members.

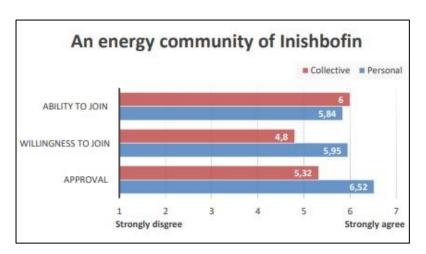


Figure 7.24: Survey: Involvement in a Future Energy Community. Data analysed by Jans,
Perlaviciute and Becci.
Source: Inishbofin Development Company (2022)

'Islands always were self-sufficient and we still are to a certain point anyway. This way we'd be managing it ourselves too. The maintenance is going to be the big issue. Will it stand the weather? If there's damage, you know, will we be able to fix it or would we be stuck?'

'If we can make jobs of it, that will be the best case. Like, in retrofitting and keeping up a PV array or whatever system. It makes sense that it should provide local employment, there has to be jobs for the young people.'

Islanders, 2022

Engaging with island communities on energy issues holds particular challenges but there are important gaps remaining in understanding island community responses to energy initiatives and approaches must be tailored to the characteristics of place, recognising that islands 'often have complex political, social and economic relationships' with the mainland and are subjected to 'multiple imaginaries about their identities and roles' (Kallis et al., 2021). The characteristics of islandness, 'confined physical and social spaces in which debates are held', and 'misguided presumptions about island identities and needs' are most evident on smaller islands (Kallis et al., 2021). 'Where local empowerment and knowledge featured strongly in discussions', and it was clear that the project would deliver local benefits, engagement was 'more constructive' (Kallis et al., 2021). Reilly et al. (2016) acknowledge that despite expert agreement on the importance of the consultation process, it 'is not effective and ... carried out from the top down with little opportunity for real participation', and propose alternative mechanisms including stakeholder workshops and dedicated forums rather than central government or local authority decision-making, and further investigation to develop tools to support consensus being reached (Reilly et al., 2016), reflective also of Merten's (2007) ideas of 'transformative evaluation'. The 'relative isolation of all islands' according to Cross et al. (2017) 'presents challenges to the economic and energy aspects of these communities' and islands are 'one of the strongest economic cases for new and innovative energy storage technologies' which may have wider application. However, if islands are viewed only as 'testbeds' and/or without prioritising active community participation in decision-making, the historic marginalisation of smaller islands will be accelerated as an injustice of transition.

7.9 Water

7.9.1 Wells and Springs

Water, an ongoing issue of concern for all island populations, has become particularly urgent for Inishbofin since 2022. In addition to the lakes and streams previously mentioned, Inishbofin has three known 'holy wells' or springs traditionally revered under pagan and/or Christian practice. Holy wells 'function as sites of spiritual healing', and are central to place identities incorporating 'metaphors of faith and belief' as well as 'embodied health performances' (Foley, 2016: 23). These are assemblages that signify, as Foley (2011) argues, 'culture-nature expressions' of the connections between the material worlds of humans and their 'spiritual underworlds'. That Inishbofin's holy wells are now disused, or even inaccessible, may be illustrative of the rapid acceleration of cultural

change within the islandscape, notably since the 1990s, including the adaptations of folklore and faith previously discussed (Chapter 5, section 5.5; this chapter, section 7.5). St Scaithín's Well in Westquarter is believed to have been covered and/or filled in for safety reasons during the mid-1980s. Flannán's Well, enclosed by a circular structure built by an Islander in gratitude for a cure for his son's illness in the late 1800s, is likely extant but difficult to access in the medieval section of the graveyard at St Colman's monastic site. The third holy well is also located at the monastic site, though is understood to have been affected by an initiative to reintroduce trees into this sheltered valley. A bullaun stone remains in place. Likely used for holy water and possibly repurposed from pre-Christian practices, it came into use as a test of strength during the last century.

Additionally, there are four known natural springs which were in everyday use until the mid-1980s. Each townland had access to at least one freshwater source. The first spring, located on the hill behind the community centre, has been compromised by drainage works. The second, on privately owned farming land, is operational. A third had not been visible for decades as Lough Bofin levels rose. It was sought out and cleared on 2nd June 2020 when the lagoon level temporarily dropped (Figure 7.25).



Figure 7.25: Westquarter spring, accessible after Lough Bofin level dropped in June 2020. Source: M. Coyne (2020)

Located in the East End, the fourth spring is abandoned. Examination of a dry-stone wall during March 2022 revealed a stile set neatly into it, with steps overgrown and unseen from approach as they lead inland (Figure 7.26). Brambles criss-crossed a barely discernible path through low lying tree branches towards the spring which is enclosed in flat stone slabs (Figure 7.26). It is predominately people who grew up nearby in the East End/Cloonamore who seem aware of this spring, perhaps indicative of earlier territorial

markers. Few Islanders live in the East End village now. Of these, one remembers that a typical errand was to be sent to collect water after school. All their household water requirements were met by the spring up to the mid-1980s.



Figure 7.26: East End spring: (L) dry stone wall stile, and (R) spring source with stone slab. Source: Author (2022)

7.9.2 Piped Supply

Inishbofin was one of the last places in Ireland to be connected to piped household water, when an island-wide public mains supply was completed in the 1980s. The largest freshwater lake, Lough Fawna, is the source of its 'raw' water (Figure 7.27). Located in the centre of the island where the topography features 'several rocky hills' occupying 'three extensive lobes', Lough Fawna was described in 1911 as having 'beautifully clear water', 'an immense profusion of Littorella and also the rare *Isotes echinospoa*' (Praeger, 1911) or Spring Quillwort which is today designated as threatened/near threatened (Biodiversity Ireland, 2023). Inishbofin's water treatment plant is a gravity-feeding system with three tanks (Figure 7.28).



Figure 7.27: Water Treatment Plant at Lough Fawna, Inishbofin Island. Source: Author (2017)

An EPA audit in 2015 stated that the plant was producing 233 m3/day on 21st August 2015, and serving approximately 169 people during winter and approximately 500 during summer. The plant was upgraded in 2012 from a 'slow sand filtration process' to 'coagulation, dissolved air flotation & filtration (DAFF) and disinfection by chlorination and UV treatment'. The EPA audit was attended by the EPA inspector, two representatives from *Uisce Éireann* (UÉ) (Irish Water), five from the Health Service Executive (HSE), two from GCC and the local caretaker employed by GCC. It was conducted 'in response to the notification by Irish Water dated 13th August 2015 of the failure to meet the aluminium parametric value' (EPA, 2015).



Figure 7.28: Water treatment gravity-feeding system at Lough Fawna, Inishbofin Island (panoramic image).

Source: Author (2017)

Listing fourteen recommendations, the EPA audit notes (direct transcript):

- 1. Irish Water should characterise the variability in raw water quality. Trends in raw water quality should be analysed and used to determine the optimum treatment conditions for the water at the plant. Data should be used to identify whether rapid variations in raw water quality give rise to problems with the treatment process.
- 2. The audit found that some of the alarm settings at the plant were set at very high levels which would not alert the caretaker to the abnormal conditions in sufficient time to allow actions to be taken. Irish Water should conduct a full review of all alarm settings to ensure that potential issues are quickly detected and promptly brought to the attention of the caretaker.

The 2015 Audit Report also includes a photograph of 'corrosion of chemical injection points into the DAFF unit' and notes the importance of developing backup systems in the event of failure of units 'considering the island location'. A further EPA audit conducted on the 2nd of October 2022 identified a number of failures leading to the 'Do Not Consume' (DNC) notice discussed in the next section, including that alarm settings were 'not appropriate to alert operators to deteriorating water quality or failure of a critical process', as had been referred to in the 2015 audit with the recommendation that these settings should be corrected (EPA, 2022). During my initial research trip in 2017, system changes conducted by

UÉ at the plant subsequent to the 2012 system upgrade were raised as a community-wide concern. Many Islanders connect the systemic failure of household appliances including pumps and electric showers with these works. Concern was additionally expressed about 'the levels of chemicals being put in' and that water quality had disimproved, with one person commenting that it 'often just tastes bad'. Another told me that there was 'talk of taking a case'. Some Islanders started avoiding piped water, instead purchasing bottled water or collecting spring water. Short breaks in piped supply would occasionally occur, with residents advised to conserve or not use tap water as there were 'issues at the plant'. UÉ officials, when they visited the island, were informed of the community's concerns according to Islanders, and suggestions formed from place-based knowledge regarding improved supply management were offered. There is recent discussion regarding the possibility of an island desalination plant being developed, as referenced in UÉ's *Draft Regional Water Resources Plan – North West: Strategic Environmental Assessment* (2022a), but Islanders are reserving opinion on this until they receive precise information.

7.9.3 Do Not Consume

On 25th August 2022, in consultation with the HSE, a 'Boil Water Notice' was issued for Inishbofin by UÉ and GCC and communicated via island social media pages, authority websites and media. On 3rd September, this was revised to a 'Do Not Consume' warning due to identification of elevated levels of manganese attributed to a drop in Lough Fawna's level following a drought event in summer. Manganese, 'a silver-grey metal that occurs naturally in soil, water and rocks', is linked to health impacts particularly affecting those who are 'vulnerable such as babies in the womb, infants and young children' as it may be harmful for development of the nervous system and brain (HSE, 2023). Bottled water was shipped in and, later, water tanks would be positioned by the pier. Eight UÉ updates were issued between 3rd September and 21st December 2022. The second noted that the elevated manganese levels 'may have occurred prior to the imposition of the Do Not Consume notice', possibly from 11th August (Uisce Éireann, 2022b). The community was advised to 'contact their GP for advice' if they had health concerns. As discussed in section 7.4, there is no local GP and accessing healthcare is challenging, however. On 28th September, UÉ stated:

'Water levels at our source lake have reduced to historic lows due to a significant depletion in rainfall. As water levels rise through autumn and into winter we expect to see a reduction in manganese levels which would enable the lifting of the notice. In the interim we are continuing to carry out operational works at the treatment plant to optimise its performance.'

By the end of November 2022, water levels in Lough Fawna had replenished, raw water quality was improving, specialist works had been conducted at the plant, and a 'programme of works to clean the reservoir [had] also been undertaken and completed' including 'network flushing' (Uisce Éireann, 2022b). The DNC notice remained in place until 21st December 2022, a duration of almost four months. On 14th September 2023, another DNC notice was issued due to elevated levels of manganese in the water supply that was enforced for two and a half months until 4th November. During this time, there was no visible reduction in the water level of Lough Fawna following above average levels of rainfall in summer 2023. Community members stated that it 'looked clear' without the algal growth visible the previous year. Furthermore, as extensive works and an overview of processes were conducted in 2022, Islanders question how the conditions of the 2023 DNC arose. In September, before tourism closes, two of the island's annual festivals take place including a food festival meaning that the water issues were challenging in additional ways.

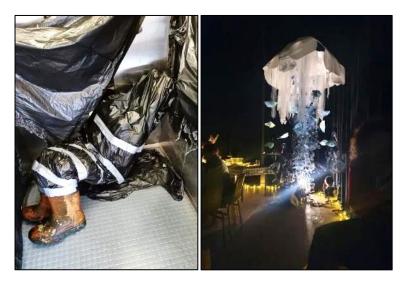


Figure 7.29: Plastic bottles reused in (L) one of several Halloween party props of a 'dead body' and (R) a giant jellyfish art installation in the Inishbofin Community Centre.

Source: Author (2022)

In October 2022, with bottled water to last for a few days' stay, I travelled to the island. Transporting the extra weight and remembering to use the bottled water for simple tasks including teeth brushing or filling the kettle enforced the ongoing challenges Islanders were experiencing in sustaining caring responsibilities, business and farming. An environmental concern was raised: the volume of single use plastic bottles generated. One person observed that 'it must be hundreds of tonnes'. Some of this plastic was creatively re-used to decorate the community centre for the Halloween party on 29th October, the first organised all-community gathering since the ending of Covid-19 restrictions (Figure 7.29).

The volume of plastic and lack of recycling storage necessitated the organisation of additional waste removal sailings. Anand (2017) shows that public water supply does more than distribute water; it can reinforce social identities and marginalisation. Bresnihan and Hesse (2020) argue that 'the interplay of social, political, economic, and ecological factors produces uneven exposures to health risks that are situated within and mediated through water infrastructure'. Official response is to treat the natural water supply as both 'the source of the problem and the site of the solution', rather than rectifying the systemic drivers of the issue which means that 'infrastructures mediate nature/society as rural/urban', positioning infrastructures as 'unevenly distributed ...' 'mediators of risk' (Bresnihan and Hesse, 2020). The first response by UÉ was examination of water and interactions of water with the treatment plant as both the problem and solution. In alignment with Bresnihan and Hesse's (2020) argument, this suggests dependence on the 'infrastructural "fix" that has 'obscured political ecological relations'. The second DNC notice for Inishbofin suggests that there is a complexity of cause—both in occurrence and in authority response—that seems not always related to the water level at Lough Fawna and/or rainfall amounts in preceding months.

Prior to the plant's establishment in the mid-1980s, Islanders drew water from the island's springs and wells, as discussed, in a form of shared ownership defined through townland affiliation. Introduction of 'modern' infrastructure in the 1980s led to the socio-cultural abandonment and/or loss of most of these. This exposes a tension between Cartesianinfluenced narratives that position the 'old' (connected to nature) as incompatible with, separate to, and replaceable by, the 'new' (technology). External authorities implemented the processes perceived as successful across the mainland. Islanders, for so long officially neglected (Ferriter, 2018), eagerly adopted this 'modernisation' as a release from the drudgery of gathering water every day. Just one homeowner chose not to join and also not to avail of an electricity connection. Concurrently, this demonstrates that the majority of community members placed trust in the external authority, the modern system and narratives of development in a place where any loss or risk of loss of essential infrastructures, including water as a fundamental aspect of health and population retention, is amplified compared to a mainland location. The second 'Do Not Consume' notice is therefore more than a warning not to drink the water. It highlights additional processes in the context of future vulnerability and resilience: (1) imposition by external bodies of a cultural authority that does not fully integrate local knowledge in controlling an essential resource, and (2) potential impacts to the water supply resulting from a changed

and changing climate. Climate change is acknowledged as a possible factor impacting on piped water by many in Inishbofin. Simultaneously, for generations who gathered water from wells and springs until the 1980s, and the few who still use spring water, freshwater supply is understood as being plentiful, with climate change more often linked to future water supply rather than the present. One Islander told me, relatively unconcerned, that the lake last 'ran dry in the 70s'.

Elevated levels of manganese (M_n) and other minerals in water are associated with global warming. Higher summer temperatures, rain and inflow, and changing wind speeds are identified drivers (Bertone *et al.*, 2016: Bourg and Bertin, 1994: Howard and Chisholm, 1975: Jyväsjärvi *et al.*, 2015). As M_n is common in rocks, sediments and soils, it is often present in natural water bodies. Radwan (2020) notes that 'thermal stratification and mingling process are influenced by ... the atmosphere condition, the morphometry and the hydrology of lakes'. The typically distinct layers in a water body are altered by air temperature because of exchange processes between water and atmosphere (Straile *et al.*, 2003). 'Warmer groundwater shows signs of enhanced mineral weathering and higher concentrations of drinking water-relevant elements such as manganese' (Riedel, 2019). Changed air temperature and wind speeds may have significant ecological consequences with variability increasing with larger wind speeds (Magee and Wu, 2017).

Exploration in Inishbofin in the 1970s and 1980s suggest a deposit of c. 5 million tonnes of talc-magnesite containing c. 50% talc (Meehan *et al.*, 2019). Talc was traditionally mined on a local scale in the 1800s and used to remove grease from wool. Mining can increase natural M_n concentrations in waterbodies (Matveeva *et al.*, 2022). It is 'critical that a site-specific understanding of M_n dynamics is obtained before implementing any built or digital solutions' (Semasinghe and Rousso, 2023). The site-specific factors leading to elevated manganese levels in Inishbofin's water supply may be a combination of some or all of these local (talc deposits, historical mining, orchestration of the wind, topography, hydrology) and national (mainlandness, power and knowledge hierarchies, marginalisation of island communities) and global factors (climate change, globalisation). Injustices and inequalities are 'exemplified by problems of access to water' (Gandy, 2008: 110). These challenges evidence a complex interplay that is 'multiscalar, multitemporal and multistakeholder' (Crate, 2011: 188).

7.10 Livelihoods

7.10.1 Fishing

Inishbofin was one of the most important fishing centres in Ireland. By the 1820s, it was a key white fish centre. Later in the 1800s, it became a main herring fishery partly as a result of Allies and the CDB's work to establish a viable industry (Concannon, 1993: 23-25) including a curing station on *Glasoileán* (Green Island) in the Pool in 1892 (Figure 7.30), and another built in 1897 with the Rusheen Pier in the East End. An important species long associated with Inishbofin, the basking shark was previously hunted to the point of extinction around the western islands. Although a large animal, weighing up to 4 tonnes and 12 meters in length, it is a gentle plankton feeder as the proverb *chomh sámh le liamhán gréine* (as tranquil as a basking shark) illustrates (IBSG, 2022). It is locally known as the Sunfish. In the 1800s, its liver oil was highly sought after, and in the 1900s, a new market for its fins, considered a delicacy in many countries, later reinvigorated the industry here. With the arrival of basking sharks in April, crews would join together to hunt them.



Figure 7.30: Fishing boat at anchor in front of Glasoileán Island in the Pool with the derelict fish curing station built in 1892 to the left, and Cromwell's Fort in the distance.

Source: Author (2017)

Kelp production by fishers was also 'an immensely important element of coastal economies' (Forsythe, 2006). Browne (1893: 349) notes the decline of kelp production towards the end of the 1800s as consumer patterns changed. The Commissioners of Irish Fisheries Reports in the 1800s provide remarkable detail about the marine industry and its socio-cultural framework, including descriptions of thousands of fishermen convening at Inishbofin. In 1873, the Inishbofin fleet had 52 boats and 243 men, while Inishark had 12 boats and 52 men fishing (Concannon, 1993: 23). Buyers came from the Shetlands, Liverpool and Germany up to the 1920s. Today, sustaining small-scale fishing is described as 'almost impossible'. Few now fish for a living, with only two boats going out full-time.

Mackerel, pollack, and sometimes ling are the main species caught, with potting for lobster and crab also continuing. In addition to those who fish professionally, many Islanders fish and lay pots around the island for their own tables. Additionally, in mid-autumn, some gather sacks of periwinkles for which there is a traditional market, profitable within a short period, with buyers from Europe.

The Cleggan Disaster combined with factors including declining fish stocks, migration, inadequate resources, and post-Independence lack of marine policy and investment, resulted in a waning of the local industry. There is disillusionment with Ireland's membership of the European Union (EU) for its impacts on inshore fishing. The quotas, or Total Allowable Catches (TACs), allocated to member states under the Common Fisheries Policy adopted in January 1983 are considered highly inequitable and incompatible with the small-scale fishing practiced by Islanders. Additionally, an increase of European supertrawlers within Ireland's exclusive economic zone (EEZ) with further damaging impacts on fish species, numbers and markets is anticipated as a BREXIT outcome.

Inhabitation of *being* fishermen and a fishing people is highly meaningful. I asked an Islander, naively, in 2017 if he was 'from a fishing family'. He laughed as he responded, 'We all are.' The knowledge in orientation and navigation that is generationally taught, known as *Marcanna na Talamh* (landmarks) in some islands, is recorded in Ireland's National Inventory of Intangible Cultural Heritage. Although fewer younger people express interest in the work (Chapter 5, section 5.4.4), as a socio-cultural identification formed through hybrid memory actionality, fisher*people* is an identity symbolically crossing gender, age, education and profession. Recognising this multi-dimensional importance of fishing, Urquhart *et al.* (2012: 1) contend that the 'environmental, economic and social' aspects must be incorporated into policy for sustainable and successful outcomes. 'Fisheries governance is an ontological challenge that raises questions of culture, equity, legitimacy and inclusion/exclusion' (Brennan, 2022).

The majority of Ireland's fishing fleet is classified as small-scale or inshore yet a framework for the governance of small scale fisheries was only recently devised (Fitzpatrick, Brennan and Jackson, 2020). In 2012, 'previously peripheral' coastal areas 'suddenly became a priority for the state' with establishment of the EU *Natura 2000* network of conservation sites, with Bresnihan (2017: 216) identifying the 'slow tragedy of improvement'. In 2019, a *Strategy for the Irish Inshore Fisheries Sector 2019-2023* was officially launched (Fitzpatrick, Brennan and Jackson, 2020). On 29th June 2023, the Minister for Agriculture, Food and the

Marine, was requested to 'outline the actions in the *Our Living Islands* policy related to supporting the inshore fishing sector; the budget allocated to each of these actions; and the timescale for the completion of these actions' (Houses of the Oireachtas, 2023c). The Minster replied that the Islands policy actions are 'closely aligned with actions in my Department's 'European Maritime, Fisheries and Aquaculture Fund Seafood Development Programme'. None, however, are yet specific to islands or account for the challenges faced by fishers in alignment with other island challenges.

Currently, there is interest in the Island Fisheries (Heritage Licence) Bill 2017 which aims to 'provide for the issuing of heritage licences to island fishermen to facilitate the continuance of traditional fishing practices on Ireland's offshore islands' (Houses of the Oireachtas, 2017). However, the Bill is currently on the third stage, or Committee Stage, of an eleven-part legislative process from proposal to enactment. In 2022, it was referred back to the Select Committee on the Marine. Local opinion is that 'it isn't going anywhere'. Formed from consultation with island fishers over two years, the CO-SUSTAIN (2020) project states that the 'Irish fisheries policy environment does not welcome challenges to the status quo'. The Irish Islands Marine Resource Organisation (IIMRO), representing fishers of Counties Donegal, Cork, Galway and Mayo, advocates for greater recognition of, and policy response to, small offshore islands fishing communities in the EU Common Fisheries Policy (IIMRO, n.d.). It states that 0.85% of Ireland's quota was taken by the under 12 meter fleet segment during 2018, yet these 1,307 small boats total approximately 84% of the Irish fleet.

'If you look at the marine traffic, you see these gigantic boats now, from Europe, like hoovers. And they just sweep up the whole ocean floor. And you'd be thinkin', what are they doing now here. They come so close to the coast. There'd be a lot of people here now who'd say the European Union wanted us for our waters, and they got a good deal. There's not many fishermen get a livelihood out of Bofin now, you know, which is sad too.'

Islander, 2017

Islanders identify numerous obstacles in maintaining fishing as a viable livelihood, notably: policy that is incompatible with small-scale/inshore fishing; European supertrawlers and overfishing; Brexit impacts; the costs of boats, equipment, permits and licences; challenges in a route to market which contributes to difficulties in developing the industry locally; lack of pier cold storage facilities; and a changing species array. A sense that the few who continue to fish for their livelihood are guardians of both a rite and a right of islandness often resonates, illustrating how fishing is locally understood as more than solely an

economic pursuit. This reflects what Bresnihan (2017: 219) refers to as 'neoliberalism's 'other': the social and ecological relationships, practices and values that are excluded from the narrow economic calculus of neoliberal governance'.

'It's like everything, the one size fits all thinking. And of course it doesn't for the islands, any logic would tell you that. What's needed is policies for the scale here and the type of fishing done. You get more [people] back into it and then grow the industry up around the fishing again. That's got to be a strategy over time though. And the islands don't do much for their balance sheets, the way they look at it.'

Islander, 2022

7.10.2 Farming

The area farmed on the island is 447.9 hectares with an average holding size of 12.8 hectares, according to the 2020 Census of Agriculture (CSO, 2021a). There are 35 holdings, with a median farmer age of 59 (CSO, 2021a, 2021b), two years older than the national average. Approximately one-third of the land is used for agriculture, predominately sheep farming (Chapter 8, section 8.4.4). The remnants of 'lazy beds' or potato cultivation ridges, are still visible across the island and its surrounding islets. Cattle generally do not need to be housed during the island's mild winters. Many people still cultivate a 'garden' or small vegetable plot, and a few keep hens and geese. There are no foxes or mink on the island so fowl can roam freely. Individual farms are dispersed in scattered pockets across the island, a result of the various historical resettlements and restructuring.



Figure 7.31: Sheep being directed onto the cargo ferry for transport to the mainland. Source: M. Coyne (2021)

Traditional practices rapidly changed during the 1980s and 1990s with connection to services, as discussed, and an increase in tourists. Farmers were incentivised to adopt

practices in line with mainland policy, including use of chemical fertilisers and clearing borders of nettles and other wild plants. Islandness means that additional costs, labour and logistics accrue in import and export (Figure 7.31). Islanders are highly skilled in animal care, and technology is also now utilised such as vet video call or calving alert applications. A farmer tells me that his work is now 'as much about filling out forms as looking after the animals'. Government and EU support schemes are relied on for a liveable wage. One such subsidy is the Areas of Natural Constraints (ANC) and Areas of Specific Constraints (Island Farming) Scheme which offers payments per hectare for farmers 'who face significant hardships from factors such as remoteness, difficult topography, climatic problems and poor soil conditions'. Additionally, the Basic Income Support for Sustainability (BISS) payment provides a direct income support (Department of Agriculture, Food and the Marine (DAFM), 2023a). Many are in the Eco-Scheme, part of the Agri-Climate Rural Environment Scheme (ACRES) introduced in 2022 which aims to 'reward farmers ... for undertaking actions that are beneficial to the climate, environment, water quality and biodiversity', including maintenance of habitat for the Corncrake (DAFM, 2023b).

Topics of concern for farmers today, which are evident in the quotes below which have been selected for typicalness, include: (1) how to maintain a liveable wage, (2) the disparity between those making policies and the realities of island farming, (3) who will continue to farm in the future, and (4) the impacts of weather and climate change (further considered with regard to observed changes in Chapter 8).

'There's a girl in Galway County Council, we were talking about the leave no trace thing. They were talking about dog pooper scoopers. And she was saying that farmers out working the hills, that maybe they'd have to clean the waste up after their dogs.'

'The last thing you want is some fella coming out, you've never seen him before in your life, with a nasal voice on him, and saying "Yaaah" and telling you "you can't put anything in there because I'm really important, look at my ID."'

'We had a meeting ... And one of the things we were talking about, how are we going to get young people, local people, to farm again and do all of these things. It's the environment, but it has to be the environment as well as the people.'

Islander, 2017

'No-one's farming cos they love filling out forms. You [farm] because it's what you do, it's like a responsibility ... Well, to your family that's gone before, to their work, and the land. And whoever comes next, whoever will keep it going now, if there is anyone.'

'Poverty was different then cos everyone was on the same level, farming and fishing. It's not like it was ever about profit, they got by, but they were shockingly poor.'

'Artisan food and farm shops seem to be the thing now. We'd have [enough customers] in the summer, probably ... it's a whole other business. The reality of actually doing these things is different when you never stop as it is.'

'Price fluctuations have a huge impact here because of the scale. You'd think it'd be the other way round but a small change can mess the whole thing up, you know.'

Islanders, 2022

7.10.3 Tourism

'Some island residents fear for the future of Inishbofin as more and more people are forced to leave the island to make a living. The problems are compounded by the fact that Inishbofin is not a Gaeltacht island and does not benefit from the grants, aid and funding available to other remote areas in the region.'

Pat Martyn, RTÉ, 1977

The quote above is from the RTÉ agricultural programme Landmark, broadcast on 7th April 1977. At this time, without eligibility for the grants available to many other island communities, Inishbofin received few visitors. The founding of its tourism industry is attributed largely to the vision of two women, Margaret Day from Inishturk Island, and Margaret Murray from Lusk, County Dublin. Margaret Day, nee O'Toole, was the island's nurse for 34 years. She and her husband Miko refurbished the Allies' house as a hotel during the 1960s and ran Day's pub, now the Beach Bar and with the fourth generation of the family. The hotel, known locally as 'The Posh', is currently owned by a non-island company. Margaret Mansfield was Inishark's school teacher who married Paddy Murray of Inishbofin in the 1950s. They offered B&B to visitors in their home. In the 1960s, they opened Murray's, the Doonmore Hotel, now run by the third generation of the Murray family as Europe's 'most westerly hotel'. Connections to electricity, piped water and telephone, and infrastructures including the new pier, as earlier discussed, accelerated tourism from the 1990s. A third hotel, the Dolphin Eco Hotel and Restaurant, was opened by an island family in 2006. There is also a hostel with a camping ground, B&B offerings, and approximately 25 self-catering houses. Today, ~40,000 visitors travel to Inishbofin annually. Detailed statistics are not yet available, but a survey by Atlantic Technological

University (ATU) commenced in July 2022 aims to measure tourism effects on six islands including Inishbofin, the Aran Islands, and Donegal's Aranmore and Tory (ATU, 2022).

An elevated environmental awareness and sustainability are at the centre of the tourism industry, and in fishing and farming, partly as Inishbofin is a SAC and SPA. It was the first Irish island to be awarded EcoTourism status in 2016, recognised by the Global Sustainable Tourism Council (Siggins, 2016). Additionally, it became the first 'Leave No Trace' (LNT) Irish island in 2018. Seven of Inishbofin's businesses are LNT members (Leave No Trace Ireland, 2018). Islanders' environmental concerns particularly correspond with tourism and its sustainability, including that infrastructures (housing, roads, water, effluent, recycling/waste, electricity), biodiversity and ecology are pressurised by tourism. These dilemmas are likely not considered by the majority of visitors as Péron (2004: 331-332) proposes that the idea of the island for mainlanders is a 'virtually unchanging, abstract, utopian image' that originated as a 'historical invention of Western culture'.

In summer, honesty boxes offering home-made bread, eggs, vegetables, flowers and even hand-painted rocks are dotted around the island. Other island businesses include: Inishbofin Ferry; the Equestrian Centre; walking tours with *Cultúr na nOileáin* (Culture of the Islands); King's Bike Hire; aqua sports; fishing trips; the Heritage Museum and Gift Shop; Harbour Lights Bookshop; and several local arts and crafts producers. Publications by Islanders in recent decades in reclamation of their traditional folklore, history and identity are widely sold. A micro-brewery produces *White Cow* ale using spring water. Several island businesses focus on locally-sourced produce through an emergent sustainability ethos.





Figure 7.32: Inishwallah, Westquarter. Source: Author (2022)

These include Inishwallah (Figure 7.32), serving contemporary Indian-inspired cuisine using its own-grown produce, and the Salt Box (Figure 7.33), launched in July 2022 by two island

brothers who are fishers and their partners. These and other businesses demonstrate how traditional livelihoods and heritage may further merge with tourism, and also how tourism can hold potential to support continuance of these livelihoods. The island hosts a series of summer season festivals: Inishbofin Arts Festival, Bia Bó Finne Food Festival, Inishbofin Set Dancing Weekend, and the Desmond O'Halloran Music Weekend. At its busiest throughout June and July, the season tapers off from late-August into approximately mid-September. Typical of islandness, many tourism businesses may close on a day-to day basis in response to weather or if the ferry cannot sail, meaning that there are no day-trippers. All are vulnerable to the projected impacts of climate change.



Figure 7.33: The Saltbox: the board reads 'From our boat to your plate'.

Source: Author (2022)

Music also illustrates how tourism and heritage merge. Inishbofin has a long tradition of producing skilled musicians. Sessions take place six nights a week throughout the summer in Day's and Murray's (Figure 7.34). Thus, the production of music in pubs for visitors has effectively replaced the tradition of playing in neighbours' homes. However, it also provides a continuing platform for younger people to learn, and older people to share, the art. There are common concerns for all of Europe's 1,639 smaller islands in 'maintaining and developing their cultural identity' while also attempting 'economic development through areas such as tourism, marine harvesting and low-impact energy development' according to O'Rourke (2023: 335). In *Our Living Islands* (2023a: 18), islands' tourism is recognised as a strength yet overreliance is also identified as a weakness, echoing the opinion of many in Inishbofin. In the past three decades, in particular, tourism has become the foundation of

the economy, superseding farming and fishing as the island's primary and newly 'traditional' livelihood with, as noted earlier, third and fourth generations now involved.



Figure 7.34: Musicians performing in Day's pub (The Beach Bar). Source: Author (2022)

Today every Islander is an 'ambassador' for, influenced by, and reliant on tourism even if not directly involved in its production. Islanders are ambassadors for five reasons: friendliness and interest in visitors, pride in their island, heritage and culture, recognition of the importance and value of tourism, and visitor perceptions and projections. Hay (2006) contends that there 'is disagreement about the extent to which islandness can survive the dynamism of rapid population change in the wake of globalization' as 'island identities intrinsic to long-standing community ties' are 'displaced by the coming of wealthy recreational, tourist, or otherwise transitory populations, as well as part-time holiday home or twilight-of-life retirement residents'.

Tension arises in Inishbofin because of *displacement*. Displacement is physical and conceptual, and amplified within islandness. A profound perceptual shift is that, in its very recent history and as is still largely the case during winter, everyone knows everyone else, *and* who is in or out at any time. This is no longer possible in summer. Islanders must also alter everyday taskscape practice. Sometimes tourists open or close gates, affecting the movement of animals. Pedestrians and cyclists unfamiliar with rurality often monopolise road space, and the volume of cars has increased. Moving from A to B within the islandscape is now challenging during summer. Thus, tourism means that the island's roads adopt a new kind of unpredictability. Divergent risk perception also exists regarding differing ways of engagement with the sea as a cause of displacement for Islanders. This concern has little outlet as visitors do not live within the same shared socio-ecological understandings that incorporate island law and time.

Concerns regarding the sustainability of tourism centre on island culture and way of life; built heritage, infrastructures, and services; and the environment and the rest of nature. There are broadly two viewpoints regarding the development of the sector locally, reflective of the airport division discussed earlier. The first, opposed to an airport opening, is that the community agree a charter to achieve sustainable tourism, limiting visitor numbers, refocusing on environmental efforts, restricting the numbers of non-Islander/resident cars, promoting overnight stays, expanding direct benefits of tourism to more Islanders, and prioritising year-round quality of life for community members. The second view, usually in favour of the airport opening, prioritises the increase of tourist businesses and services, greater all-island expansion into the shoulder seasons in March and October/November, and development of a year-round tourism economy. These present views converge in a shared futuring vision whereby the population is maintained and opportunities are increased for young people to remain and/or return.

This idea of *the island* as enchanted and magical is experienced because of the characteristics of islandness. Being in Inishbofin is to be in the sky, responding to both land and sea, with the islandscape creating constant interactions with non-human nature and entities to reveal a dynamic culture responsive to socio-ecological relationships that manifest in island time, hybrid memory actionality and strategic remembrance. Importantly, how these elements combine in formation of *this island* creates the 'enchantment' of Inishbofin, whether real or imaginary, or perhaps, some merging of both. Consequently, the incongruity of heritage tourism is that by capitalising on the elements that make Inishbofin *this island*, tourism risks at least their perversion, and at worst, their destruction (for instance, housing as explored in section 7.2). These far-reaching consequences also illustrate how smaller islands, though they may appear bounded or insular under the external or mainland gaze, are fluid, shaped by influences originating across the local, regional, national and global.

'I know when I was young it was nothing like this now. And as I said to you before, I was 12 when the electricity came. So when the tourist season ended in September, then it was over. You might see one, in a blue moon. But there's people now coming all year round. Which is nice cos you want to see them comin'. But I think sometimes in the summer when it gets what I call 'too busy', I feel like, get me outa here.'

Islander, 2017

'There are far too many cars now, too many people in summer. You look at the size of the island and the facilities we have. You could probably calculate how many

people it can support. We had thousands living here in the 1800s but they didn't use all the resources the way we do nowadays.'

Islander, 2019

'The summer now, it's too much sometimes. You want them here, you want them to have a great time ... Just trying to get about your business. It took me 25 minutes from my house to the shop the other day. And you know my house, normally it'd be five. It's just a bit stressful. You're on edge.'

'It gets more and more each year and it seems to go on longer. I don't know if that's the climate changing and people are on holiday more in Ireland now, maybe that's all influencing it. I just think we need more balance at this point so that we can actually live here too. I mean, enjoy living here, in the summer. But it's like this, as you know, you need your summers when you get the winters we do.'

Islanders, 2022

7.11 Conclusion

Responding to the third research question, this chapter reviewed island services, infrastructures and livelihoods considering Massey's 'politics of location', infrastructures scholarship (Anand, 2017; Bresnihan and Hesse, 2020; Gandy, 2008; Larkin, 2013), and Nixon's 'slow violence' with implications for climate change exposure and justice. Island-mainland interactions form on a hierarchical positioning of mainland over island, with the mainland controlling resources and narratives. Conceptualisations of development and modernisation as inducive to empowering 'marginalised' island communities to become 'innovative' are identifiable since at least the late 1800s. Analysis of the language and objectives of contemporary state body and local authority documents in this chapter establishes this continuity, as with their actions and inactions as a source of hardship and challenge for generations of Islanders. This is also where spatial injustice is enacted including that Inishbofin is not part of the Gaeltacht. It is persistently the 'last island outpost' connected to services including electricity, telephone, water and broadband, and subjected to delays and inconsistencies regarding responsibilities of the various authorities.

A functional society requires functional institutions, services and infrastructures. Population decline, though a quantifiable articulation of marginalisation, results from a highly complex assemblage of drivers. Distrust of external authorities and policies results. Resistance and transformation are evident in Islanders' capacity to adapt (religious practice, livelihoods, the ambassadorial and seasonal role of tourism) and to manage (water, personal health, leaving home aged twelve) but non-linear entanglements exist. For

instance, tourism and the rate of second homeowners combine as a barrier for Islanders to access housing, stress infrastructure, and impact on the community's experience of the island, all of which contribute to population decline. Simultaneously, tourism supports the economy, musicianship, and sharing cultural heritage, arguably contributing to a reclaim of identity that further resources the community. Tourism adds quantifiable 'value' through mainland governance perspectives, a value that may now receive equal, or greater, consideration in provision of infrastructures required by the community. Its hyperaccelerated dominance generates rippling displacements, paralleling familiar processes of marginalisation for many. The potential outcome of these entangled drivers, based on current degrees of exposure, is more than increased vulnerability to climate change. Rather, projected climate change impacts could prove a tipping point. Reflective of the events leading to Inishark's depopulation in 1960 (discussed in Chapter 2), it holds the potential to result in resettlement. There is alignment here with Anand's (2017) contention that citizenship and governance manifest through infrastructures. This is further considered in Chapter 8 which builds on the findings herein, and those of Chapters 5 and 6, to consolidate these ideas in exploration of the weatherworld of the island including the storms of winter 2013/2014 and observed climate, sea and biodiversity changes in response to the final research question.

8. THE WEATHERWORLD: LIVED REALITIES – PAST, PRESENT AND FUTURE

8.1 Introduction

As it occurs in any place at any time, weather is the outcome of a series of complex physical systems, the mechanisms of which may be scientifically measured. Weather is packaged into thirty-year averages to model past, present and future climate change across timescales beyond the human experience. While weather has become objectified as academic climate, how weather and climate are experienced and responded to is through dwelling within the socio-ecological systems of place. Dwelling is an embodied response to the world around us, relational, emotive and immediate. Aiming to extend Hulme's (2011) concept of the 'weather world', and considering his contention that this is an era of 'neoenvironmental determinism' or 'climate reductionism' that does not account for human agency, this chapter builds on Chapter 5's analysis of culture, identity and socioecological relationships, the issues of governance, marginalisation and justice explored in Chapter 6 and the examination of services and infrastructures in Chapter 7, to contribute a climate change narrative that centres 'lived' experience and human agency within a western socio-cultural setting. Accordingly, this chapter examines the experience of weather and climate in Inishbofin with reference to the storms of winter 2013/2014, observed climate and environmental change, external governance response, and planning for potential futures. In so doing, it consolidates examination of the components of the weatherworld experience that are of most impact to climate change resilience and vulnerability, and responds to the final research question: what are the lived realities of the island weatherworld including implications for the future?

8.2 The Weatherworld

The pervasiveness of climate as a powerful and 'enduring idea of the human mind', and of climate change as a phenomenon and discourse 'which is remaking the contemporary world', requires stepping back to 'undertake historical, geographical and cultural investigations of the idea of climate itself' (Hulme, 2017: 2). Climate has a 'cultural geography and history which is interwoven with its physical geography and history' (Hulme, 2017: 2). Weather, unlike climate, is imbued with *immediate* socio-cultural meaning. Through societal perspectives, as Hulme proposes, weather is emotionally and

imaginatively responded to, and physically and psychologically adapted to, through a continuous intractability. The endurance and transformation of culture, identities and socio-ecological relationships in Inishbofin have been previously examined (Chapter 5). We know climate as 'fickle, with a will and mind of its own', according to Hulme (2009: 2), an idea with particular resonance for meanings attributed to the ocean. Hulme (2017: 2-3) rejects nature/culture dualism as maintaining a 'false separation' between the physical world of scientific enquiry and the imaginative world of human meaning. Climate, Hulme (2009: 32) argues, is 'best understood as an idea that binds together the physical world and our cultural imagination'. This research, recognising the nature/culture or nature-culture binary as 'a profound misreading of the world', aligns with philosophical arguments that it is a 'deeply flawed' 'bifocal reading of the world' (Jones, 2009). Jones (2009) uses the hyphen rather than the more commonly used slash to 'reunite these two realms', an idea that this research builds on through its removal, after Haraway (2008). To further consider how culture mediates perspectives of climate change within the prevailing narratives, however, examination is progressed here under two categories serving as an analytical framework: (1) weather and climate as natureculture, and (2) climate and climate change as nature/culture. These inherently fluid groupings of relation are separated only to facilitate discussion of varying ideas of weather and climate, and draw from Hulme's (2017: 28) categories: personal, indigenous, scientific and consensual.

Weather and climate as natureculture represents the relationality of the experience of weather through Ingold's (2010: 121) dwelling and 'paths of movement in the weatherworld' and Hulme's (2017: 2) recognition of the 'deep material and symbolic interactions' that 'occur between weather and culture in places'. Hulme (2017: 2) argues that unlike weather, climate is '... an idea of the human mind'. Climate becomes known to people through 'their direct experience of the atmospheric weather ... encountered day by day' as 'each place has its own distinctive patterns of weather which its dwellers experience' (Hulme, 2017: 28, 29). 'Personal and impressionistic', climate results from people 'dwelling fully' in a place, whether rural or urban (Hulme, 2017: 2). Ingold (2007: 527) considers the ground as an 'earth-sky interface' meaning that human experience of the world primarily occurs within the dynamic interface of earth cycles including, as is very immediately experienced in Inishbofin, atmospheric and oceanic circulation through 'body incorporation'. 'Social life has always been part and parcel of ecological life' as humans are 'indissolubly mind and body' (Ingold, 2005: 5, 503). This is natureculture, humans and the rest of nature entwined within weather. Thus, weather is culturally understood through

establishment of the socio-ecological relationships previously discussed, and humanenvironment dynamics come to incorporate understanding of patterns of weather, ocean and the rest of nature in climate.

Climate is knowledge resulting from 'places, bodies, practices' and 'also bound up with memory' (Hulme, 2017: 29), considered in this research as the knowledge of localised patterns of predictable unpredictabilities that become incorporated into identities and culture over time in a community of place (Chapter 5, section 5.6). Climate, therefore, is the meaning of weather extended through time in place as it is transmitted by memory and adapted by experience. These patterns necessarily incorporate both continuous relationships with weather, sea and land, and experience of extreme events into memory, perspectives and responses in the present. Accordingly, they contribute to ideas of the future. As with the Cleggan Disaster of 1927, the impacts of the storms of winter 2013/2014 are now bound up with climate through memory in Inishbofin. Therefore, the meaning of these patterns, including their known unpredictability, is a driver of transformative resilience. In alignment with Hulme's thesis, this research finds that climate understandings are produced and reproduced generationally by the practices of hybrid memory actionality and strategic remembering.

Climate and climate change as nature/culture further demonstrates that climate is an idea of the human mind and that it can hold different meanings. Therefore, unlike weather which demands an immediacy of response, climate takes many forms. Consequently, climate as nature/culture is a second idea of climate: how climate is political in a way that weather is not. Williams ([1972] 2005: 47) contends that 'nature has a nominal continuity, over many centuries, but can be seen in analysis, to be both complicated and changing, as other ideas and experiences change'. Ingold later regretted his use of the term 'dwelling' as it 'sounds altogether too cosy and comfortable', seeming to exclude the political, particularly how the concepts of both nature and society are 'intensely political' (Ingold, 2005: 503). Hulme (2017: 1) argues that from the 1970s onwards, the term 'climate change' received new meaning from use as a noun to use as 'an issue', as 'a phenomenon caused by complex chains of human actions (and natural processes), but also an agent which could influence far-reaching sets of material and imaginative phenomena ... inscribed with multiple and complex political and cultural meanings'. Hence, climate change has become 'a condition through which human life now takes shape' (Hulme, 2017: 6).

Climate change as nature/culture correspondingly refers to how climate is changing as an outcome of the natureculture binary, what Jones (2009) refers to as the 'so-called divide', and to how climate change is conceived through this binary. In applying Hulme's idea of climate change as a condition, the meaning of climate is culturally altered as it is removed from socio-ecological relationships. From cultural meaning formed on individual and collective experience of local weather in a place over time, climate has shifted into a meaning derived from a politicised concept of a global struggle. With the dominance of nature/culture separated academic and political narratives as a driver, this conceptualisation of climate and climate change is removed from human embodiment and memory, and therefore from meaning. Simultaneously, climate is severed from local, placebased knowledge upon which stability and resilience form through inhabited knowledge of patterns and understanding of the parameters within which these patterns may diverge. Thus, the divergence in lived and political applications of these ideas of climate and climate change suggests that the acceleration of transformative socio-cultural response necessary under climate change projections is tempered by climate change narratives and policy. Similarly, in Inishbofin futuring implications contain new uncertainties, further considered in section 8.5.

Ethnography responds to the social and physical and psychological worlds and how all are variously entwined within the fluidity of cultures, and the relational experience of dwelling in the weatherworld during fieldwork is represented in Appendix A.

8.3 Observed Changes

8.3.1 Winter 2013/2014

The Irish Meteorological Service, *Met Éireann (MÉ)*, states that winter 2013/14 was 'severely affected by an exceptional run of winter storms, culminating in serious coastal and widespread, persistent flooding' as the Polar jet stream extended across the Atlantic over Ireland. This contributed to strong winds, tidal surges and low pressure resulting in 'unusually long' peak wave periods and 'record wave heights' (MÉ, 2014). Storm force winds were experienced in December, January and February (MÉ, 2014). O'Brien *et al.* (2017) record 'extensive flooding in Galway City' and 'six cars ... swept off the pier at Cleggan' on the 2nd and 3rd January, with the storm of 5–6th January exacerbating damage, 'particularly along the Galway coast' where 'chunks of coastline [were] ripped off'. They also note that 'infrastructure on the Aran Islands and Inisboffin [sic] were badly damaged and parts of road were washed away along the Connemara Coast'. In Inishbofin,

the 5th, 14th, 18th, 24th, 26th and 27th December 2013, the 3rd, 5th and 6th January 2014, and the first week of February 2014, notably St Brigid's Day on 1st February, were severely destructive.

In 2017, an Islander who had documented these storms and their island-wide impacts showed me photographs, and mounted and captioned newspaper clippings, in her home. These images included one of the island's three navigation towers with reference to the beacon and navigation light on Gun Rock, pictures of the Beach Bar and cargo pier area in Middlequarter with 'The Pool' referring to the innermost part of the harbour and the 'Barking Pan' to a historic structure previously used by fishermen in maintenance of nets and rope, the Atlantic breach of the North Beach cobble bank at Lough Bofin, and damaged infrastructure in the East End Bay (Figures 8.1 and 8.3-8.5). At the island's East End village, Cloonamore, the Rusheen Pier dating from 1892 collapsed (Figure 8.2) as did a large gable section of the fish curing station built in 1897. Islanders here experienced waves crashing over their cottages, with stones hitting the windows. The sea wall was also destroyed and parts of the road washed away, as shown in Figures 8.3 and 8.4.

'This was very poignant here. This was a signal light, the tower light. But that was gone, the morning of 3rd January. I could see it right here from the house. The sea out there was crazy. I'd never seen anything like it. I don't think anyone ever had. Nothing like this. Or all that damage. I never want to see anything like it again.'

'And then cars. Whatever was on the pier. A lot of them ended up in the tide. But like, if you look at the beer garden there, and further down, and all these currachs – they were all back on the old pier here. They were all taken and thrown in the Pool. Everything that was on the pier was gone.'

'The pier there. The road was all eaten in here. All past the dispensary ... Down by The Beach [Bar] area. All this area, that was all thrashed ... The Barking Pan, it's still there, but that whole area was all ruined.'

Islander, 2017



Figure 8.1: Destruction at the Barking Pan and Beach Bar area along the Low Road (2014).

Source: M. Coyne (2014)

Another Islander who could not return home as the ferry was cancelled owing to the storms, remembered first viewing the destruction at the East End.

'It was a shock. Hugely. I'd never seen anything like that. No one had ever seen sea like that before. I'll be brutally honest with you, it was emotional. You don't realise. It's like someone said, you don't realise how attached you are to something until something happens to it.'

Islander, 2017



Figure 8.2: Remnants of the Rusheen Pier. Source: Author (2020)



Figure 8.3: Cloonamore, East End Village following Winter 2014 storms. Source: M. Coyne (2014)



Figure 8.4: East End Village road following Winter 2014 Storms: Mounted photograph by M. Coyne (2014).

Source: Author (2017)

The North Beach that separates the Atlantic Ocean from Lough Bofin, central to the island's origin story (Chapter 5, section 5.5.1), was breached by the sea which effectively joined the lagoon and the Atlantic Ocean (Figure 8.5). In conversations about the devastation, many Islanders describe how the island was 'almost split in two'. Nine houses in Westquarter were cut off because of the resultant flooding. A permanent, part-time incoming non-Islander described how the breach was fixed:

The tide came in, it was washing in and out of the lake. The land was flooding. The lands all around and the road was under. There was a load of diggers and guys. They came and they tried to fill it in the first night just with stones. So, then the sea came in that night and washed it again. Then the next time, they got those big white bags, then they filled them with stones and dropped them into position. And then they back filled it, and it held.'



Figure 8.5: Repair of the North Beach breach after Winter 2014 Storms. The natural cobble bank separates the Atlantic in the upper part of the image from Lough Bofin in the lower part.

Source: M. Coyne (2014)

'The North Beach [was] breached. The sea had just cut it, cut a trench in it. You know the lake, Lough Bofin? You could have driven the ferry into it, you know.'

Islander, 2017

'It was like Armageddon. You worry more now when there's a storm.'

Permanent Full-time Non-Islander, 2017

Regarding the ecological importance of Lough Bofin, the *Environmental Report of the Galway County Development Plan 2009-2015 Strategic Environmental Assessment* notes that it is a 'relatively rare' example of an 'isolated sedimentary lagoon with a cobble barrier' 'in an almost completely natural condition, of which there are very few examples in Europe'. Among its flora are 'the rare charophyte Foxtail Stonewort (*Lamprothamnion papulosum*) ... listed in the Red Data Book and protected under the Flora (Protection) Order, 1999' and 'an excellent example of a *Ruppia/Lamprothamnion* community and the

plankton appears to contain unusual brackish species of the genus *Prorcentrum'* (CAAS, 2009: 10). Lough Bofin is important to the life cycle of the critically endangered European Eel (*Anguilla anguilla*). This species is 'still somewhat mysterious and not fully understood' (Inland Fisheries Ireland, n.d.). Inishbofin and Inishark is a designated Special Area of Conservation. Both islands are also designated as Important Bird Areas including for the red listed Corncrake (*Crex crex*) (National Parks and Wildlife Services, 2015) and contain areas of archaeological importance.

Inishbofin was cut off from the mainland through many of the storms. The work of Islanders to build a three-meter-high bank to secure the North Beach area and Lough Bofin took a total of ten days. The Islander who photographed the storms and this repair, remembers: 'Oh, it was woeful. You could barely stand up.' Some of these images were published in the media with headlines including 'The heroes that saved Bofin's North Beach'. An Irish Times article (Siggins, 2014) quotes Simon Murray, then Coordinator of the Inishbofin Development Company, who estimates that Islanders' reconstruction work would have cost Galway County Council approximately €400,000. In a case of survival, he said, Islanders 'just couldn't afford to wait—we were on our own, and it was the sea or us'. Ronan Coyne, who lives in the East End cottages described hearing what he thought was thunder at 6am on 1st February (Siggins, 2014).

'And as the day broke, and I looked out from the upstairs window, I could see the entire East End pier had collapsed ... That was the rumble—it wasn't thunder at all.'

From an initial debate on 13th February 2014 by the Joint Committee on Agriculture, Food and the Marine regarding the 'Effects of Recent Storms on [the] Fishing Community' to confirmation on 23rd February 2023 that Galway County Council (GCC) had completed a coastal erosion survey of Inishbofin, a sequence is traceable that evidences delays and deferral by GCC regarding the destruction of the Rusheen Pier and an island coastal erosion survey (ETenders, 2021; Houses of the Oireachtas, 2014a, 2014b, 2014c, 2018, 2023a; Office of Public Works (OPW), 2024). The Department of Agriculture, Food and the Marine replaced the Gun Rock signal light at a cost of €40,000. The Department of the Environment, Community and Local Government wrote to GCC on 27th February 2014 indicating that up to €9,491,055 was available to the Council for storm repair works including €1,144,800 via the OPW for repair to damaged coastal protection and flood defence infrastructure. GCC submitted applications for funding to the OPW for coastal protection and flood defence repair including the reinstatement of coastal revetment walls

in Middlequarter, East End, the south facing shore and North Beach costing €301,024. GCC did not make an application to repair the pier under the Storm Damage Programme, nor under the Department's 2014 Fishery Harbour and Coastal Infrastructure Development Programme. The OPW approved funding of €90,000 in 2015 under its Minor Flood Mitigation Works and Coastal Protection scheme to GCC for a coastal erosion and flood risk management study for the island, as previously mentioned. Further allocations were approved to GCC according to the OPW for Inishbofin studies including €5,396 in 2021 for a 'comprehensive coastal erosion & flood risk management study for Inisboffin Island as a whole', €6,300 in 2022 for the same purpose, and in 2023, a total of €8,461 under the CFERM Value of Enjoyment Study (OPW, 2024). GCC's tender request for the survey, published on 12th April 2021 (ETenders, 2021), states:

'This study is to be a comprehensive coastal erosion & flood risk management study for Inishbofin as a whole. While the study is to encompass all the island of Inishbofin examining both coastal erosion and flood risk management, there are 3 main areas ... of interest for this study: 1. Cloonamore (Primary Interest) 2. Southern Shore 3. North Beach. All of these areas have experienced significant coastal damage in the past with repair works having been completed to some damaged areas. The primary area of interest is Cloonamore and namely the destroyed pier / breakwater at the East end which was significantly damaged by adverse weather and storm conditions in the winter of 2013/2014.'

Galway County Council, 2021

Two visitors to the island, utilising a drone, confirmed that they were conducting a coastal erosion survey on behalf of Galway County Council during spring 2022. On 23rd February 2023, the Minister for Public Expenditure, National Development Plan Delivery and Reform stated that GCC had completed the *Coastal Erosion and Flood Risk Management* study examining 'three individual areas of interest on Inishbofin Island, which included Cloonamore Bay where the East End pier is situated'; the 'draft final report is completed and under the Council's review' (Houses of the Oireachtas, 2023a). At the time of writing, the report is not publicly available and no repairs have been made to the pier. However, a draft version viewed by the Island Development Company in summer 2023 has created apprehension for the community, as detailed in Chapter 7.

Islanders understood, since the destruction of the Rusheen Pier in 2014, that it would be rebuilt. The length of time incurred from the storm to the 2015 funding approval of €90,000 for a survey, to the survey tender in 2021, and production of the draft report in

February 2023, with no structural work yet undertaken and sparse communication is evidence of continuing marginalisation. This is the site of the departure of the fishermen drowned in the Cleggan Disaster, symbolic of traditional livelihoods and heritage, with further resonance due to its association with the socio-cultural restructuring of the CDB. The pier also acted as a breakwater. Without it, there is potentially greater risk to infrastructures including homes and the Low Road. It had been in occasional use by local fishermen but access is not now possible. In addition to its socio-cultural and historical significance, there are concerns regarding contemporary livelihoods. In 2016, Inishbofin was the first Irish island to achieve an Ecotourism award. The scenic East End beach is a designated Green Coast Beach, sanctioned for swimming and sought out by holidaymakers. Thus, its condition since the storm destruction contributes to social and material displacements.



Figure 8.6: Rusheen Pier, East End: Dispersal of rubble after storm destruction of 1st February 2014 photographed on (L) 23rd October 2020 and (R) 6th March 2022.

Source: Author (2020, 2022)

Following ongoing storms including those in February 2022 (Dudley, Eunice and Franklin), rubble has been farther distributed as illustrated at Figure 8.6. This experience of the state and local authority's response to the destruction of the Rusheen Pier during the February 2014 storm aligns with Anand's (2017: 229) contention that as 'materialized relations, infrastructures also form persons, giving shape to their vitalities, imaginations, desires, and politics' which correspondingly means that 'the political effects of human and nonhuman assemblages ... suggest we need extend and expand our repertoire of agents and actors ...'

Values 'are 'situated' in specific social contexts in that they are influenced by people's experiences and daily practices, and the places and cultures in which these are embedded' (Barnett *et al.*, 2016). The meaning of the Rusheen Pier is now changed for Islanders as an outcome of both the initial storm destruction and subsequent governance processes. There are new repercussions for climate change resilience and vulnerability. Within the

amplification of the islandscape, and the interlinkedness of its meshwork, there is an intensification of the housing challenges discussed in Chapter 7, section 7.2. Inhabited now by few island families traditionally from the village, many Cloonamore/East End Bay cottages are vacant. Many have been acquired as seasonal holiday rentals by non-residents. Several Islanders, however, now view Cloonamore as a high-risk location and will not consider living here. In discussions, the theme of long experience of official neglect through mainlandness approaches emerges:

'At government level, the ball was hugely dropped for an isolated community that showed huge resilience.'

Permanent Full-time Non-Islander, 2017

'This whole one size fits all approach. It's frustrating... It's about trying to get cop on. And it's very bad at the moment, in my view.'

Permanent Part-time Non-Islander, 2017

'They forget about us. They have no clue what it's like [here]. So we have to do it ourselves. That's how it's been as long as anyone knows.'

'It's out of sight, out of mind. Even when emergency work's needed here, it'll always be mainland work that's done first. Work's only done here if there's anything left in their budgets.'

Islanders, 2022

The selection of smaller quotes below is included with the aim of providing a sense of the widespread, typical perspectives of local people which are formed on their experiences, and on their understandings of historical events, and associated governance responses. They are extracted from semi-structured interviews and conversations about the 2013/14 storm impacts and infrastructural repairs required in response to these impacts that have not yet been implemented.

'What's designed for elsewhere doesn't suit here.'

'A huge failing on Galway County Council's part'.

'The local authority [is] of no use'.

'There's no connected logic.'

'They don't consult local people.'

'The road stops at Galway [city].'

'There's a lot of talk but nothing really changes.'

Islanders, 2017-2022

8.3.2 Rainfall and Storms

The majority of Islanders participating in conversations about the weather have observed changes in patterns of rainfall. Most agree that there is more rainfall throughout the year, and that summer rain occurs in short, increasingly intense events. However, some query if this can be attributed to climate change, noting that weather and rainfall patterns have always held inconsistencies.

'We've done a hell of a lot of damage to the environment in the past 50 years. Like, I would've thought it shouldn't have taken 50 years for that event [storm in January 2014] to happen, with all that damage. Well, it was 70 odd years. I think the weather is getting, definitely, more unpredictable ... So you kinda wonder is it just weather being weather?'

Permanent Full-time Non-Islander, 2017

'We've had quite unbelievable quantities of rain coming down. We're experiencing it here throughout the year. It's having impacts here in some cases with the very heavy cloud bursts. You came down that track, didn't you? ... That little stream we were looking at earlier, it cut canyons [there] 6-7 feet deep. That little lane along there, it cut huge holes in it. I had to get a fella with a digger to come and bring the stuff up and refill it.'

Permanent Part-time Non-Islander, 2017

The aim of including this selection of quotes is to represent how Islanders live within a weatherworld. The weather impacts across all aspects of the lived realities of an island community in very tangible, immediate ways.

'[The] moving from hay to silage. Which has a lot to do, I think, with wetter summers. Well, personally, it's more in hindsight, looking back that I noticed it.'

Islander, 2017

'We walked to school every day. A very rare day you might be kept home, we called it a 'rain day' ... but it had to be a real storm or torrential rain. Now everyone has cars so the kids don't usually walk, the small ones anyway. I think if they did they'd have a lot more rain days now.'

It remains important to clearly represent that that not all Islanders are of the opinion that recent events can be attributed to climate change. The intent in the following section is to provide a selection of quotes that represent varying perspectives and understandings, while reiterating that Islanders are not a homogenous grouping. A consistency that emerges is that all Islanders agree that the weather and its impacts have always been of

more intensity here, but this has not been adequately responded to in policy or practice through by mainland-based institutions.

'And again it's that thing—is it accelerated? Yes, the storms are more violent probably. The winters now are ridiculously mild at times. But then you look at 2009, 2010, the snow all over the country. Though it never really settles out here. We had probably one of the only times, I think two years ago, where puddles froze over.'

Permanent Full-time Non-Islander, 2017

'I don't know if it's all climate change. Presumably some of it is, but which parts, you know? You can't say it all is. We had a hell of a lot of rain this summer and people were saying, do you remember we used to always get good summers? And, yes, probably we did but there's nostalgia in that too. I think that's human nature. And the weather, that's what Ireland's known for and you always have to multiply it by 100 here, and it's always been changeable.'

'I read the scientific evidence and I agree with it. I do think the rainfall here has changed a lot. The year to year, but ... that always changes and it always will. They give the storms names now as well. I think that makes people more aware or more afraid. Cos we always had that level here but not with names. Barring any major destruction, like an actual catastrophe like we've talked about the storms we had before, if that increased to a one in ten years or twenty. Otherwise the long-term changes don't mean that much for most people compared to just living your life.'

'We're used to mad weather here ... You just deal with it. So yeah, you're asking if I think we're getting changes or not, the answer would be yes. I'd say rain is worse, heavier, and some of the storms now, they're worse and we probably get more. We deal with it, we're on our own at the end of the day.'

Islanders, 2022

The opinion that there is an increase in storm intensity though not frequency is prevalent, though some people think frequency has also increased. For most, this may be attributable to climate change yet, as noted above, many are uncertain. One person who does not believe that climate change is occurring stated that they have not observed any recent changes in weather patterns. Storms and wind are a consistent occurrence and central to the evolution of existing socio-ecological systems in this place, which is often evident in how they are referred to.

'As virtually all the buildings here have gone through so many storms ... they're survivors. And the storm four years ago, well, the three storms. We've had stronger winds, and we've had higher tides. What happened was, they coincided. If we'd had them separately ... But the fact that they coincided, that really screwed it up. But the damage it did was almost no structural damage to houses. It was all to sea walls, cars parked on piers, flooding where it burst the embankment. And that did

cause flooding to some of the houses there, and on the East End ... It was very, very severe.'

'At the head of the new pier, there's that bloody old metal building. If you look at it there when you're going up, you will see a dent about 7 or 8 feet high, a huge bend in it right the way along. That's where the sea hit it. Now that stuff, because of its profile, is bloody hard to bend, and it has rigid girders behind it. That gives you some impression.' (Figure 8.7)

Permanent Part-time Non-Islander, 2017



Figure 8.7: Building damaged during storms in January 2014. Source: Author (2020)

It is notable in dialogue with Islanders that observed changes seem often what Williams (1985: 16), with reference to language, refers to as 'masked by a nominal continuity' meaning they are at first unnoticed yet can ultimately become expressions of immense changes of experience and history.

'The sea breaks over the road and past the fence more than previously or what you might expect. That's a noticeable change. After a storm now, the windows there could be almost completely opaque. You'd always have that here, of course, but ... it seems increased now. Which I assume means a higher wind, higher swell.'

Islander, 2019

'I wish I had a diary of it but it's more like you just kind of sense it and everyone will be sayin' it. Some years something would happen, like, say, a big storm. So you'd remember that. You know, I think that's what it is ... there's something every year or more now than one thing happening. We were waiting for the rain last year then it hit in August, it was crazy but it was quick. Like all the rain that hadn't come suddenly came together. So that's how you know, I think, the weird things ... the things you'd remember for being strange seem to happen more regularly.'

Islander, 2022

Also of note is that resilience—associated with community, local knowledge and thinking about the future—regularly emerges in conversations about weather and sea impacts, and the potential local impacts of climate change in the future, which are responded to as more than infrastructural only.

'Well, you know we have extremely high winds here in winter. It does seem like when a storm is forecast, if it lands, that it'll land harder. You always have to prepare for the worst case scenario now. You saw last month. We saw what happened nearly ten years ago now, you do have that on your mind.'

'If the weather gets worse, it just means being stocked up on food. Things like batteries and candles. You'd usually have them anyway. But someone would always help you if you needed it, we'd keep each other fed. It would be the kids out at school you'd feel for, those families, if they can't get home as much.'

Islanders, 2022

8.4 Other Observed Changes

8.4.1 Land

In Chapter 5's discussion of socio-ecological relationships, the scarcity of land within the islandscape is examined with a particular focus on the Low Road. Intimately known, this road represents ongoing adaptation and mitigation. On the south shore where glacial sediments are vulnerable to erosion, the road has been partially relocated a number of times. On 24th October 2020, during my first winter, waves overtopped me with an icy shower as I walked between the new pier and shop (Figure 8.8). This is not an error made by Islanders, nor one I would repeat, as 'knowledge is formed along paths of movement in the weather-world' (Ingold, 2010: 121). In Middlequarter, this section of the road is particularly at risk. This is the island's busiest place, with the shop, piers, health centre, church, pub, and numerous homes and businesses. At the East End, the section of the road between the Cloonamore cottages and the sea is also highly vulnerable. Both of these areas were damaged during the storms of winter 2013/2014 discussed in section 8.3. Islanders, therefore, are generationally familiar with erosion and its impacts, and with abrupt, devastating damage. Some people are unsure if erosion has accelerated while many observe an increase.



Figure 8.8: Waves overtopping the Low Road between the New Pier and the shop. Source: Author (2020)

'It's death by a thousand cuts. If you look along the harbour there, like beside the two-storey house beside the pier where you land. That was the post office when I was a child. In front of that there used to be a big garden where they grew vegetables. And now it's just gone. And if you go up right along, where the harbour shop is. You know across the road from that is just sea [now]. If you look at an old map, you'll see there was actually a shop on that side of the road.'

Islander, 2017

'Erosion we can deal with, to a certain point, anyway. You have to keep moving in. So there'll come a point where you can't. But, you know, I wouldn't be surprised to see the road there completely relocated again in my time, definitely.'

'We've talked before about the Council. If they don't fix the wall, all the way along, not just piecemeal, we'll lose the road in the next ten years, I'd say, sooner.'

'I think you notice it in the road, just day to day. I mean, you know, the actual road, the surface. You expect a certain amount but it's hit more by the sea, basically, and the surface gets eaten away throughout the year, it's not just winter and spring.'

'There's always erosion, that's normal. You kind of know it's always there and you deal with it. But ... Like, just kind of in the back of your mind ... It won't stop anyway, that's the one thing we can be sure of.'

Islanders, 2022

Islanders often demonstrate high phenological awareness. Dwelling in a weatherworld, nature-based livelihoods, and retaining generationally understood knowledge through hybrid memory actionality supports this awareness. Though tourism is the primary basis of island economy in recent decades, it too is a nature-based livelihood dependent on the seasons and the weather, and on the patterns that have contributed to forming socioecological relationships in this place. Less predictability in these patterns has been observed.

'There's an overgrown fuchsia bush and I had to break a piece away. And there's buds growing on it. On a fuchsia at this time (November). The grass is growing at the moment too. I have land with new shoots on it. Maybe it's coming to a stage where things are accelerating very gradually and then all of a sudden, there's more and we start noticing them.'

'Another thing, the blackberries. This year looked like it would be a bumper year, the flowers were there, they turned red, but they never got to ripen. They turned into hard berries, they never reached the last stage.'

'The weather and things seemed a lot more regimental when I was a kid. You knew when the buttercups were coming out, the snowdrops, the primroses.'

Islanders, 2017

'I think climate change will, as I said to you before, [alter] certain things. Say in farming. It's very important that the grass grows at a certain time. You time your lambing with that. If you have late years, like one happened a few years back, only a small little bit. But then you have drought issues in the summer. We're so, I think as a nation, not able for it ... And we don't get extremes, you know. We're incredibly dependent on things being the same way as they were.'

'The issue is, everything is timed around it. So you see, there's changes but it's not consistent. It's like the timeframe's getting bigger, say. You might see new shoots earlier or later. So it is a worry because it's all not as dependable.'

'I did notice, there were buds out. That was before Christmas, I remember, we were saying it was a good month earlier than you'd expect. So I don't know if they died off earlier as well. The old people used to know to the week when to plant out vegetables and crops through the year. So then where do we stand, even just growing potatoes or carrots for the house. I don't have the answer ... But you would have to ask if everything seems to be more mixed up in recent years.'

Islanders, 2022

8.4.2 Ocean

'Global mean sea level has risen faster since 1900 than over any preceding century in at least the last 3,000 years', according to the IPCC AR6 (2021). Local sea level rise varies as a result of a complexity of global oceanic, atmospheric and other system cycles and earth processes. In Inishbofin, the majority of people I have discussed sea levels with are of the opinion that clear differences are apparent in local levels yet this is not a universal view.

'The sea levels are rising. And even in my lifetime, there's certain rocks that were rarely covered with the tides and now they're always covered. I'm [age] so I have probably 35 years good memory. And there's one place up there, just near the pier here, and that rock, if it ever was to cover, it would have been exceptional high tides. And now with every tide it'll be covered.'

Islander, 2017

'I wish I'd put a tidal thing in the harbour years ago but ... em ... you see the little causeway? I know what tides it floods on and how long it floods. And they are getting perceptively higher ... When you think it should be 'X' height, it's 'Y' height.'

'It's very much accelerated. I'm talking about the last decade. Certainly it's been happening, and since 2010 onwards, it's becoming more noticeable. Things are getting on the exponential. And this is when, a thing starts small and suddenly, wham, begins to accelerate and once you get on the exponential, that's when things really begin to get noticeable. And if you don't get off that, you drop off the top.'

Permanent Part-time Non-Islander, 2017

'I think people adapt, the Irish are very adaptable. Impacts here? I don't know. Tidal levels over the last hundred years aren't that dramatically different to a hundred years ago. This is my first year not to have flood insurance ... That's based on the hope that the last one was a, they say, a 50 year storm. Tide height, wind speed, the level of swell, all those factors hit. And I don't think I'm in denial or anything. Even talking to old [Islander], the last time he said he saw anything like that here was 1937 or 1947 or something like this.'

Permanent Full-time Non-Islander, 2017

'I can say there's rocks regularly covered at high tide now that weren't before. Most here would say it. You notice it coming into a storm too, rocks fully covered that never used to. It's unsettling, if I'm honest.'

'I was talking to [an older Islander] and he said 100% it's higher now. I think it is, in my own lifetime even. You almost don't see as it's happening, just you realise one day. And then it's, 'Jesus, is that gone awful high now'... the water's at a higher level than it used to be so we have more likelihood of swells, flooding. Storms hit harder.'

'You know because you know the height against certain rocks and the wall. Everyone has their own markers. So you know what it used to be and where it's at now.'

Islanders, 2022

A concern that has been mentioned by several Islanders regarding sea level rise combined with their experience of the impacts of the Lough Bofin breach in 2014 is that the lagoon could become permanently assimilated into the Atlantic Ocean. The remaining low-lying land at the centre of the island would be reduced to less than one kilometre in width, and potentially highly vulnerable to flood under additional sea level rise and/or during surges. In this scenario, a sizeable section of Westquarter would be separated from all island services and key infrastructures including the piers, shop, school and church. Archaeologically significant sites including a *dún* and famine road, roads, occupied homes, grazing, and bog would be cut off, and ecological sites of importance and protected species impacted.

'It might sound stupid but I worry about the island being split in two. We already almost saw that, as well ... So if you look at what they say about sea levels rising. When it breached, the flooding we had. The lake becomes the sea. There's only about a half mile section left then, so the glaciers melting and everything. If you look at the apps online with the different scenarios, that's all flooded by 2050, you know where the bus is. And in 2100, based on those forecasts, we're two islands.'

Islander, 2022

The IPCC (Oppenheimer *et al.*, 2019) states in its *Special Report on the Ocean and Cryosphere in a Changing Climate* that Global Mean Sea level (GMSL) will rise between 0.43 m (0.29–0.59 m, likely range; RCP2.6) and 0.84 m (0.61–1.10 m, likely range; RCP8.5) by 2100 (medium confidence) relative to 1986–2005. In Ireland, the majority of cities are coastal, 40% of the population lives within 5km of the coast, and recent studies show that sea level rise, though regional rates are variable, is significantly higher than projected (McCarthy *et al.*, 2022). In Cork City, for instance, relative sea level has risen by over 40cm since 1842 which is almost 50% more than the 27cm expected (Pugh *et al.*, 2021).

As part of the *Water Futures Project*, colleagues in Maynooth University derived future mean sea level rise for coastal catchments around Ireland from the UK Climate Projections 2018 Marine Report (UKCP18). Regional patterns of sea level rise in Ireland are different to global projections, with two key contributing factors: (1) 'Fingerprints of ice sheet melting', and (2) 'Local patterns of Glacial Isostatic adjustment (GIA)' (Water Futures Project, 2022). Projections detailed in Figure 8.9 under the IPCC's RCP 4.5 scenario show a 0.47m mean sea level rise by 2100, and 0.69m mean sea level rise under RCP 8.5, across all of the examined catchments (Water Futures Project, 2022).

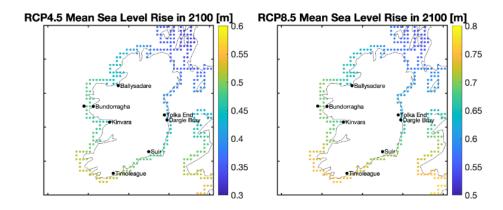


Figure 8.9: Mean sea level rise by 2100 around the Irish coast under the RCP 4.5 and RCP 8.5 scenarios. Note the differing ranges for both scenarios. There is approximately an additional 0.2m of sea level rise by 2100 under the RCP8.5 scenario above that of RCP 4.5. Original data from UKCP18 Marine Report (Palmer *et al.*, 2018).

Source: Figure courtesy of the Water Futures Project, Maynooth University (2022).

This 'compares closely with the global estimate from the IPCC's AR5 report that estimated a mean global sea level rise of 0.47m under RCP4.5 and 0.63m under RCP8.5' (Water Futures Project, 2022). It is also noted that 'significant deviations across the catchments are seen' with variance 'between the catchment with the largest sea level rise and smallest sea level rise' of '10cm or 20% of the total average sea level rise projected'. In Inishbofin, under RCP 4.5, sea level rise projections to 2100 are 0.48m, and under RCP 8.5, it is 0.7m (Figure 8.10). Expert analysis specific to the island is required and scenarios are not a confirmed future, yet that local observations and concerns correspond with much of the data seems apparent.

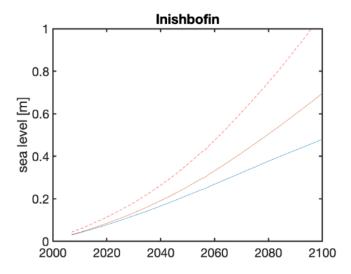


Figure 8.10: Sea level projections to 2100 in the Inishbofin catchment. Estimates of 50th percentile projections for RCP 4.5 (blue) and RCP 8.5 (red) are shown. The red dashed line indicates the 95th percentile under the RCP 8.5 scenario and can be considered an upper limit on sea level rise in this set of projections. Original data from UKCP18 (Palmer *et al.*, 2018). Source: Figure courtesy of the Water Futures Project, Maynooth University (2022).

8.4.3 Shore

In the mid-1990s, erosion became a concern at Dumhach Beach which includes machair along with dunes. Machair is a grassland habitat found only in some northern and western parts of Ireland and Scotland. A community-led initiative involving Galway County Council occurred in the 1990s when marram grass was planted to counteract erosion of the dunes. In the early 2000s, in association with the Heritage Council, the dune system was assessed and strengthened with fencing and planting. Dumhach Beach, along with the East End Beach, is a Green Coast Award beach. At the North Beach bank, shifting and erosion has revealed the tonne weight bags positioned in 2014 (Figure 8.11). Lough Bofin's salinity level is variable. Seawater enters by percolation and overtopping the cobble barrier, while

rainwater runs-off from the hills and at least one spring enters (Chapter 7, section 7.9.1). Before the breach, the lagoon had been assessed as being 'in an almost completely natural condition' in 2009, as mentioned, though also with conservation status of 'unfavourable inadequate' in 2007 (NPWS, 2015). A National Parks and Wildlife (NPWS) report entitled *Inishbofin and Inishshark SAC (site code: 278)* produced in 2015, sometime after the storm destruction and local emergency repair, discusses the conservation objectives for the lagoon, a priority habitat in Annex I of the Habitats Directive. Though compiled after the 2014 breach, it refers to salinity levels from 1995 and 1998 samples, and a species survey from 2007. The report does not refer to the breach event, changes to the cobble barrier structure, or potential species impacts. Some Islanders observe that the lagoon now appears more tidal with noticeably faster drops and rises in its level. If its listed flora and critically endangered European Eel population have been impacted is unknown.



Figure 8.11: Cobble barrier between Atlantic/North Beach and Lough Bofin photographed on (L) 2nd November 2017 and (R) 26th July 2022 with filled tonne bags used in the 2014 breach repair visible on lower right.

Source: Author (2017, 2022)

8.4.4 Non-Human Inhabitants

In addition to the constituent characteristics and components of the islandscape analysed and discussed in Chapter 5—land boundedness, smallness, isolation, fluidity, people and socio-ecological relationships with land, sea, wind and sky—another element is non-human beings, or 'the rest' of nature. The Corncrake (*Crex crex*), or *traonach*, is one of Ireland's most critically endangered birds. The population has declined by over 96% since the 1970s and it is on the Red List of Conservation Concern (Corncrake Life, 2023). A small number of offshore islands including Inishbofin are among the last remaining places it can be found in Ireland (Birdwatch Ireland, 2023). Under the EU's LIFE programme, the five-year Corncrake Life Project began working with landowners in 2019 to enhance habitat. As a ground nester, its decline is associated with mechanisation of mowing and adoption of silage

making over hay, and other factors such as increased use of synthetic fertiliser. The population remains small and fluctuating, though appears to be increasing with measures also supported under the Agri-Climate Rural Environment Scheme (ACRES) project. In 2023, the NPWS documented an overall increase of 35% in the total corncrake population over the past five years, with a total of 218 breeding territories. In Inishbofin, 18 calling males are now reported. The introduction of schemes such as ACRES and LIFE aim to support the return of some traditional methods such as hand cutting of meadows, increasing habitat and safety for corncrakes. These projects allow for a portion of 'resting' land to generate income (Figure 8.12).



Figure 8.12: Corncrake Breeding Site sign in East End. Source: Author (2022)

'The locals sort of know about corncrakes, so they do. The local people who would farm land know about where corncrakes are likely to be, where they have been for centuries. When I was young, I don't know how many corncrakes, calling males, you'd hear — maybe 20 or 25. But they died down to about 1 or 2.'

'I've seen a few more in later years. There were certain areas where corncrakes lived, and then they died out ... When they returned, they returned back to the same areas they'd been in to start with.'

'It's a lot easier to get people to leave a ¼ or ½ acre of corncrake ground rather than 10 or 20 acres. People like having corncrakes on their land.'

Islander, 2017

The *Inishbofin Community Nature Plan 2016-2021* identifies many native and some rare species including yellow-rattle, sheep's sorrel, selfheal, meadow vetchling, wild carrot, heathers, carnation sedge, wild thyme, various grasses and the spotted rock rose as thriving owing to low-intensity agriculture. The variety of habitats in Inishbofin is important

for a diversity of species including birds and insects. Other threatened species breeding on the island include the Lapwing (*Vanellus vanellus*) and Skylark (*Alauda arvensis*). It is also a wintering site for Barnacle Geese (*Branta leucopsis*), a species which has become representative of climate change impacts as it has been compelled to greatly change its migratory patterns in response to Arctic warming with outcomes affecting gosling survival rates (Lameris *et al.*, 2018; Oudman *et al.*, 2020; Tombre *et al.*, 2019). In Autumn 2022, Islanders found large numbers of dead gannets as Highly Pathogenic Avian Influenza HPAI (H5N1) was endemic in wild bird populations across Ireland.

The New Zealand Flatworm (*Arthurdendyus triangulates*) is classed as 'Invasive species risk of High Impact' as it significantly reduces the biomass of earthworms (Biodiversity Ireland, 2023). Twice in 2020, flatworms made their way indoors with me, clinging to my boots after I had walked through long, wet grass in the East End. The few Islanders I mentioned this to were unaware of its presence here. Studies show that the common earthworm, *Lumbricus terrestris*, is particularly at risk from flatworm predation, with additional impacts on grassland productivity and native wildlife which prey on earthworms (Mori *et al.*, 2022; Murchie and Gordon, 2013). Its potential effects within a smaller western European island with a paucity of arable land do not yet seem to have been examined.

A number of Islanders have observed a decrease in the biomass of pollinating species, particularly referring to bees and butterflies. On occasion, Islanders have remembered finding and eating wild honey in the past. One person also mentioned noticing a mainland decline. Of note is that the journey mentioned is through Connemara, which includes a state-owned conservation park and is considered one of Ireland's most 'natural' areas.

'When we were kids we'd be saving hay out in the fields with forks, and we'd find bees' nests, and we'd get honey out of it. My father was a dab hand at it. He'd light a bit of hay and the smoke would distract the bees, and we'd get the honey. But I don't know when I saw it last. I haven't seen wild honey in, I'd say, 30 years.'

Islander, 2017

'One of the things I've been saying for a long time and there's lots here who've noticed it as well. If you're driving to Galway, or not even that far, you don't have anywhere near the amount of flies and insects you'd expect to see. Before you'd have to actually clean the windscreen, you don't now. You do have to wonder about that. Eh, I'd say it's over the past 9, 10 years or so, maybe more.'

Islander, 2019

The decline in butterfly, bee and other insect species is linked to habitat loss, increasing use of fertilisers and pesticides, climate change, and potential additional factors that are not yet fully understood. For instance, the EU Grassland Butterfly Indicator shows there are now 39% less butterflies in Ireland compared to 1990 (Biodiversity Ireland, 2023). Biodiversity Ireland started monitoring Ireland's butterfly species in 2008 and it has been showing ongoing decline for the majority of species. The last Irish Red List classified 33% of Irish butterfly species as threatened or near threatened in 2010. It is scheduled to be updated and it is likely that more species will become red-listed (Butterfly Conservation Ireland, 2023).

Similarly, one third of Ireland's wild bee species is threatened with extinction (National Biodiversity Data Centre, 2021). The variety of habitats in Inishbofin, including machair, is important for insect species. I took the photos at Figure 8.13 in November 2020 and July 2022. The bee on the right is likely Bombus pascuorum, the Common Carder which has a status of 'least concern'. The bee on the left is likely the same though it may be the Large Carder bee, based on its distinguishing features. The Large Carder, Bombus muscorum, is a species which is in 'serious decline' (National Biodiversity Data Centre, 2023). Another bee species I have observed in Inishbofin is a leaf cutter. One Islander told me in 2022 that she had not seen leaf cutter bees in Inishbofin for many years and expressed her happiness when she noticed them again in 2021. Assessment of the island's insect species in collaboration with the community would enhance local initiatives to secure habitats. There is also a high prevalence of invasive flora species including montbretia. Since the airstrip was completed, pampas grass and Gunnera tinctoria (Giant Rhubarb), which has detrimentally impacted ecosystems on nearby islands including Achill and Clare and along the western coastline (Environmental Protection Agency, 2022; Skeffington and Hall, 2011), are observed to have spread on the island too with a localised high presence at the airstrip.



Figure 8.13: Bees photographed on the island, (L) 19th November 2020 and (R) 20th July 2022. Source: Author (2020, 2022)

On 3rd October 2022, the basking shark—historically a focus of island life—was awarded protection in Irish waters under the Wildlife Act, and it is protected under legislation in many others (IBSG, 2022). Islanders say that there are years where it is now never sighted. I was fortunate to see three basking sharks in April 2022 off Dumhach Beach, and observed them for some time. Islanders' consistent comments are about the changing fish species array, which is widely attributed locally to overfishing and warming ocean temperatures, with two main observations: (1) the traditionally known locations of particular species have changed; and (2) there is a great increase in jellyfish numbers. Mackerel, Islanders say, is seldom now found in the traditional locations. It and other species have moved further north and their populations are decreased. In 2017, I spoke with a long-term island resident and retired marine biologist about several specific local changes he had observed, including jellyfish species. He made a point that is regularly repeated in conversations about the weather, sea and marine life with Islanders. Something that was once unusual and would therefore be commented upon, is now commonplace and not commented upon, while something that was once common, is now rare and will therefore be commented upon.

'We're getting huge shoals, and I mean huge, absolutely solid ones. The jellyfish coming in at the moment in the greatest numbers, just sheets of jellyfish, are what previously was an oceanic species, *Pelagia noctiluca*. So it is come in and is multiplying. The other one, *Velella velella*, it's called Sail by the Wind, they're about the size of an old penny maybe with a little sail on the top. They were always a thing of southern waters. And maybe 5, 6 years ago, I suddenly found them spawning, or their equivalent of spawning, reproducing, just outside there, where the boats are. So that's another change. In jellyfish terms, a seismic change. Oh, yes, they're so common now you don't remark on them, whereas before you did.'

Permanent Part-time Non-Islander, 2017



Figure 8.14: Ewes and lambs in a field in Cloonamore. Source: Author (2022)

As an influencer on island biodiversity, the exceptionally high number of sheep present is significant. With 2,757 sheep (CSO, 2021a) and 184 people (CSO, 2023c), the ratio of sheep to humans here is 15:1. Nationally, it is less than one sheep per person (DAFM, 2023c). The incorporation of sheep (*caora*) into Irish placenames has been studied (Mac Con Iomaire, 2014). Sheep have therefore long been associated with place, effectively conceptualised *as* landscape, and remain symbolic of the romanticised Ireland so often featured in tourism marketing. Too often, animals used in farming are assessed only as 'units' of production and a resource for humans, and their intrinsic value reduced to economic terms. Sheep both influence biodiversity in Inishbofin and contribute to islandness.

Sheep are a component of island time, as telling as the tides and the ferry (Chapter 6, section 6.5.3). Through the seasons and the farming calendar, they are variously in lamb, lambing, or have lambs. When lambs appear in the fields, it confirms that spring has arrived (Figure 8.14). A sudden reduction in their numbers (when the male lambs are sent out) in late summer heralds the next season. Flocks are moved seasonally between commonage, fields and islets in a cycle of grazing and adding nutrients to the soil. Being shorn or unshorn, and the symbols 'painted' on their backs and shoulders, also reveal weather, season, farming and farmer stories. Their relation to other species, including the decline in corncrake numbers, is additionally apparent in the breeds and numbers of island dogs. Farmers train collies for herding and other canine species are correspondingly few. Sheep are vocal too. Their ongoing communications are part of the soundscape, layering with birdsong and occasionally a donkey in the distance, on wave and wind and the sounds of human activities. Sheep contribute to a sense of wellbeing in the environment (Kiers et al., 2023). Foley's (2016) ideas of therapy within the landscape, of shaping by a 'constant balancing act between inner meaning and outer context', are also relevant here with a wellbeing effect likely varied for Islanders, residents and visitors. The sheep, inhabitants too, shape the land, biodiversity and experiences of place. Thus, sheep in Inishbofin are more than a visual element of the islandscape, controlled only by humans. In their own right, they also contribute socio-cultural meaning, to the complexity of socio-ecological relationships, and to ecosystems.

8.5 Resilience and Vulnerability

8.5.1 Resilience

Examination of the enduring yet contesting conceptualisations of Islander resilience and vulnerability has underpinned this research. Resilience in Inishbofin arises from and

contributes to generational adaptation to weather and climate change, and cultural change, which engenders transformation within a known stability of predictably unpredictable patterns. Consideration of resilience formation in Chapter 5 examines the relationships between culture, identities and the socio-ecological dynamics of place. It finds that *Islander* is an embodied cultural identity that mediates continuity and change, contributing to resilience formation. Adger *et al.* (2005) argue that 'networks and institutions that promote resilience to present-day hazards also buffer against future risks, such as those associated with climate change'. This research finds that the social systems of place within Inishbofin, continuously enacted by the community, contribute to formation of resilience.

We live in a 'complex, emergent world' (Thrift: 2008, viii). Burrows and Gnad (2018) examine socio-cultural realities under the term 'VUCA-world' representing increasing volatility, uncertainty, complexity and ambiguity, which acknowledges that today's world 'is not prone to one-dimensional explanations, simplistic answers or quick fixes'. The reality of the VUCA-world is 'semi-turbulent and turbulent environments where change is imminent and frequent' (Dooley, 1997: 92), reflective of Chapter 5's discussion. Korosteleva and Petrova (2022: original emphasis) argue that 'complexity-thinking accounts for *self-reliance*, and collective *self-organisation* in the face of adversity' drawing on 'a *shared vision* of *becoming with*' and 'individual's readiness for change' through structures that 'arise from *local processes* and not by means of action at a distance'. Findings of this research, through considering Islander response to, for instance, catastrophic events including the Cleggan Disaster or the 2013/2014 storms, or changed livelihoods, is that these are the processes and responses engendering community resilience as both concept *and* practice, so that transformation is enabled and futuring is envisaged.

Inishbofin has been both internally resilient and beyond the understandings of mainland governance prior to contemporary narratives of resilience and vulnerability. The continuum of experience here is formed on a long-held understanding that there can be no complete knowing or control. When culture 'is able to change during times of flux', including development of 'new narratives, alternative meanings or strategies to lead meaningful lives', then it can be 'an important enabler of change' (Adger et al., 2012). 'Local' resilience contains the following constituent parts: 'identity shaped and driven by a sense of a 'good life'; infrastructures of communal support; philosophy and traditions of neighbourliness; and solidarity and convocation of the peoplehood' (Korosteleva and Petrova, 2022). Peoplehood describes an inclusive, involuntary, group identity formed from a shared

history and the distinctiveness of a way of life. As well as 'common descent—a shared sense of genealogy and geography—contemporary commonality, such as language, religion, culture, or consciousness, characterizes the group' (Lie, 2004). Resilience, then, forms on a framework of complexity-thinking, and 'is to a significant degree future-oriented' (Korosteleva and Petrova, 2022).

Complex systems are entangled, a non-linear mesh, never understood only through analysis of their individual components. In Inishbofin, as discussed, resilience is both a trope of Islander and a lived identity, as an outcome of transformation through time in place, amplified through islandness. Change is a cultural and climate continuum that necessitates transformative adaptation, and island communities must constantly strive to continue to exist. The desire to ensure a *future in place* is therefore a component of how the self—the Islander, and the collective—the community, are formed in the *present in place*. Correspondingly, resilience transcends and is contingent on temporality and spatiality. Responding to the threats of population decline and climate change in a complex world where complete knowing is impossible, the future is, as Berenskoetter (2011: 653) contends, the most important parameter of being/becoming. This incorporates 'anxiety controlling mechanisms' (Giddens 1984: 50) which in Inishbofin include the anthropomorphism of the ocean and management of the land discussed in Chapter 5.

In how it becomes manifested, resilience results from relationality and experience founded on the processes of identity, shared vision and futuring. Identity is 'both affirmation of one's belonging to give some situational *certainty* ... and it is a process of *change'* (Korosteleva and Petrova, 2022: original emphasis). The idea of becoming holds two symbiotic understandings in the context of resilience, with these concepts discussed here drawing on Korosteleva and Petrova (2022). The first is that becoming is intersubjective, as it is a result of relationalities. It is relationships with land, ocean, wind and sky, and the entangled interactions of all entities within place, human and non-human. The second understanding is that stability and change are in balance through continuance of *known patterns of predictable unpredictability*. Thus, as Adger *et al.* (2009) contend, 'limits to adaptation are mutable, subjective and socially constructed' and it is therefore necessary to question how they 'become constructed, rather than how they are discovered'.

Resilience, if it is to be considered as a 'measure' or 'level' of adaptive capacity, forms over time experienced as a continuing series of events, responded to with agency through the taskscape engagement, or dwelling patterns, of Ingold (2000) in the weatherworld. Ingold

(2000: 5) describes that in the taskscape, skills, or 'the capabilities of action and perception of the whole organic being' are 'grown' '... through practice and training in an environment' and are both 'biological and cultural'. Furthermore, skills are 'regrown' generationally (Ingold, 2000: 5). Drawing on Ingold's thesis, and findings of Berkes and Ross (2013) that a 'complex adaptive system and ecological understanding can incorporate the identification of explicit social strengths and connections to place, activated by agency and selforganizing', this research finds that the drivers of resilience formation are experiences of slow and abrupt processes of socio-cultural and socio-ecological change, processed through hybrid memory actionality to enable transformation and futuring aspiration. Becoming is 'a continuing process of identification' and transformation, in search for a 'good life' and 'equilibrium' (Korosteleva and Petrova, 2022). The good life conceptualises a shared vision of the future. Korosteleva and Petrova (2022) consider two vision 'types': robust (certain/predetermined) and creative (able to open political spaces). This thesis proposes that a creative vision of a continuing future is part of the making of Islander identity. Belonging, purpose, self-worth and identity (Tajfel and Turner, 2004) traverse the past, present and future in this place. Consequently, this is a vision of the power of the possible.



Figure 8.15: Windows boarded in preparation for storms in February 2022, East End. Source: R. Coyne (2022)

Each element in the becoming of resilience holds different meaning and influence, yet collectively they are relational, forming the weatherworld of place which influences conceptualisation and enactment of processes of resilience and vulnerability as an outcome of Islander capacity for ongoing transformation. This skill is perhaps not typically associated with the trope of the 'real' or 'old Irishness' of island communities, given that mainland projections are often that these are places unchanged, paused in time, so that island resilience is correspondingly, though improperly, associated with statis in political, external authority, and mainland discourse. However, the islandscape for Islanders is

neither magical nor marginalised. Islanders are not a homogenous grouping. Yet inhabitation of the islandscape requires community enmeshment through ongoing local knowledge production of the patterns of predictable unpredictability within place—patterns visible through hybrid memory actionality though otherwise unseen—that gain meaning through transformation. The identification and analyse of the components underlying the processes forming Islander identities of resilience are proposed as a potential theoretical contribution in section 9.3.3.

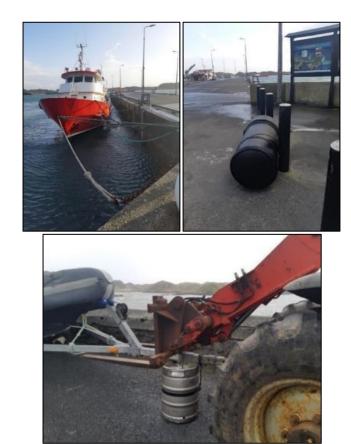


Figure 8.16: Storm Preparations; Extra ferry moorings (top L), bin tied down (top R), rib on Low Road 'clamped' with tractor pallet fork (lower).

Source: Author (2022)

To work towards the possible is to be compelled by hope and creativity utilising the skills of dwelling that carry past and present into the future. A futuring vision is evident in a myriad of ways: repair of the Atlantic breach of Lough Bofin to prevent the land being 'almost split in two'; closing the island in March 2020 to protect vulnerable community members in advance of national Covid-19 regulations being introduced; storm preparation during February 2022 including protecting unoccupied second homes and seasonal lets (Figures 8.15-8.17); internal governance, responsibility and self-organisation; development of the tourism industry; the campaign for the return of human remains; advocating for a school; in how Islanders resist and contest the (in)actions of external authorities; the renewable

energy project; and in how migrants and migrant descendants return. It is also often evident in a pragmatism underpinning response to extreme events and climate change policy.

'Here, you've got to factor in the rising waters and how much of the island would be affected. The harbours would go. But I think the island would be less affected than some areas. It won't do away with much arable land here as it's all well above sea level. So, survivorship communities, there is that sort of built-in element here. I think that islands, or places that are resembling islands, may well be the survivorship communities of the future.'

Permanent Part-time Non-Islander, 2017

'I think what you're doing is important because no one ever comes and talks to you. The local authority isn't bothered as it is, so if things get worse again ... well, we'll be left to our own devices with climate change.'

Islander, 2019

A theme that is particularly emergent in conversations with Islanders (including those of varying climate change perspectives) is that there is little expectation that external institutions will provide all of the supports required to tackle weather/ocean/climate change impacts. This aligns with the belief that Islanders must depend on themselves.

'You can't expect people here to follow the same rules as the cities and towns because we don't have the same lifestyles. That's just not going to happen, like. It's always been a 'one rule fits all' approach and that's never worked before so realistically it's not going to start working now.'

'I don't believe [climate change is] happening. I don't believe in anything now. Whatever they tell you, we're out on our own here anyway.'

'Well, what I'd say is that we're used to dealing with the sea and bad weather, storms, we had the flooding. So it's nothing new. We've always dealt with it.'

'Everyone here will tell you the same, Galway County Council has no interest in this island. Any changes that come our way, it'll just be us we're depending on.'

Islanders, 2022

8.5.2 Vulnerability

A 'web of justice, equity, and power issues are central to the climate change challenges faced by island communities' (Lazrus, 2012). Analysis in Chapter 6 of colonial legacies, post-colonial governance and internal governance identifies and traces several themes relevant to formation of resilience and vulnerability, which are further explored in Chapter 7's analysis of infrastructures. Additionally, particular discrimination as a non-Gaeltacht island

has been experienced in Inishbofin, as discussed. The removal of crania in 1890 under colonialism and the eight-year campaign leading to their repatriation in 2023 is a study of how imposition of external cultural authority impacts on Islander identities through time, yet can shift from enhancing vulnerability through discounting island values and knowledge, to engendering resilience and supporting a reclaim of identity. It also demonstrates a potency in the interplay of internal-external, or island-mainland, interactions and divergent understandings. Internal governance contributes resilience through its central tenant of fairness. That the population of the island is so reduced, that some new residents do not adopt island law or time, and that almost half of the island's houses are now seasonally occupied only, reduces the resilience output of internal governance.

The Our Living Islands 2023-2033 (OLI) policy states as a strategic objective its 'ambition ... to empower all island communities to reach their full potential' (Government of Ireland, 2023a: 48) and highlights its collaboration with island communities. However, recent resilience thinking shifts from identifying vulnerabilities that can be addressed by 'capacitybuilding' and 'empowerment' based on the idea of the 'neoliberal subject' (Chandler and Reid, 2016) 'by reflect[ing] upon the problems of actually existing neoliberalism, rearticulating complex life as the positive promise of transformative possibilities' (Chandler, 2014). In so doing, it is critical of neoliberalism 'on the basis of its 'humanist legacies' and its inability to rethink governance on the basis of unknowability' in response to the 'apparent conundrum of governing without assumptions of Cartesian certainty or Newtonian necessity' (Chandler, 2014). Therefore, traditional 'top-down' governance has become 'less relevant or effective' even while western-centric narratives of resilience prioritise 'bottom-up' through 'outside-in' incorporation of local knowledge in problem solving through processes of neoliberal governmentality (Korosteleva and Petrova, 2022). Correspondingly, Korosteleva and Petrova (2021, 2022: original emphasis) define resilience in two ways: (1) it is 'a quality of a complex adaptive system', fundamentally a way of selforganisation and self-governance, and (2) it is a 'new analytic of governance'.

The Our Living Islands (2023a: 65) strategy notes:

'It is important that island communities are aware of the implications of the projected impact of climate change on their individual islands and that they commence planning now to mitigate and adapt to the worst impacts of this development.'

Chapter 7's examination of key island services, infrastructures and livelihoods reveals a consistency across state bodies in failing to provide or maintain these services and infrastructures, and a possible prioritisation of tourists' experience of the island over ensuring the community can function at its highest capacity. For instance, the response of Úisce Éireann to elevated manganese levels and the imposition of months-long 'Do Not Consume' notices in 2022 and 2023 suggests that investigation of the drivers of the issue are subsumed by a short-term infrastructural 'fix', thus extending what Bresnihan and Hesse (2020) term 'obscured political ecological relations', and in correspondence with the findings of Anand (2017) and Gandy (2008, 2014). Another instance, the delay in the coastal erosion survey and flood risk mapping discussed earlier in this chapter, in addition to the other infrastructural challenges examined, replicates the processes of spatial injustice and slow violence. The mainlander vision, as a dominant power enacted through neoliberal governance that has historically heightened island vulnerability and the perception of vulnerability through marginalisation narratives, has yet to act to support the themes of mitigation and adaptation woven through contemporary political discourse.

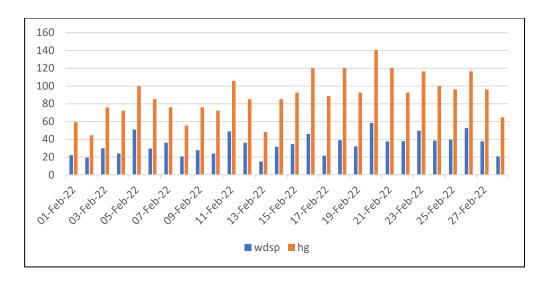


Figure 8.17: Average Windspeed (wdsp) and Highest Gust Speed (hg), Inishbofin, February 2022. Data courtesy of R. Coyne.

Source: Author (2023)

The lack of weather data and analysis for Inishbofin and other islands additionally contributes to increasing vulnerability as Islanders, planners and policy makers are without key futuring information. A precipitation record provided by Met Éireann (MÉ) has been supplied by an Inishbofin family since 1984. In addition, wind data is recorded. Acknowledged as not otherwise verifiable, data extracted from this record in Figure 8.18

illustrates the average windspeed and highest gust speeds in February 2022, during which there were three storms: Storm Dudley on the 16th, Eunice on the 18th, and on 20th February, Storm Franklin. Inishbofin regularly experiences exceptionally high gust speeds, and the persistent influence of the wind has been previously examined (Chapter 5, section 5.6). On 20th February, during Storm Franklin, MÉ (2022) documents Mace Head on the Galway coast as the location of the highest gust speed nationally, at 138 km/h. The highest gust speed recorded by the Inishbofin weather station on this date was 140.6 km/h.

Factors specific to Inishbofin impacting on the phenomena of identity that create meaning in place through community, culture and dwelling, and therefore to transformative adaptation capacities, heighten climate change vulnerability by acting to counter Islanders' resilience and futuring vision. These are identified and explored in this research as:

- 1. Failure and inconsistency of various state and local authority bodies in actions and communications, their imposition of cultural authority and policy and practice centred in mainlandness, and their discounting of local, place-based knowledge.
- 2. Colonial inheritance and pre-existing marginalisation exacerbated by post-Independence neglect contributing to contemporary lack of accessibility to essential services including drinking water, health, education, housing, employment and communications.
- 3. Local socio-ecological relationships that drive resilience including experience and knowledge of the sea and weather potentially threatened as patterns rapidly/abruptly change.
- 4. Socio-cultural changes in how local knowledge is generationally transferred.
- 5. Lack of islands weather and climate data, including historical data, and detailed climate change and SLR projections with no islands-specific climate change analysis or research, or adaptation or mitigation planning, at national level.
- 6. The creeping impacts of persistent population decline, high youth emigration, a higher than average aging population, and population shifts.
- 7. Inadequate infrastructures including a non-complete sea wall contributing to Low Road erosion on the south shore; increased East End/Cloonamore vulnerability resulting from non-repair of the Rusheen Pier; and increased risk of North Beach breach owing to erosion and shifting of the cobble bank with particular impacts for Lough Bofin and Westquarter.
- 8. A decade's delay in delivery of the coastal erosion survey and flood risk management plan.
- 9. Lacking current local biodiversity analysis.
- 10. Low trust in external authorities resulting from generational experience leading to an adversarial positioning.

The depopulation of Inishark in 1960 has contributed to resistance and resilience in Inishbofin yet many Islanders highlight an increased sense of vulnerability they experience in newly considering the Shark community's resettlement in conjunction with the outcomes of the storms of winter 2013/2014 and projected climate change impacts. In

Inishbofin today, this research therefore identifies a series of push-pull factors. The result is that, despite a finely attuned and well-tested transformative adaptation capacity generating high resilience, Inishbofin's climate change vulnerability is increased. On a pre-existing imprint of marginalisation and spatial injustice, therefore, *if* a just transition under a changing climate can be possible must be questioned. The community cannot 'climate proof' the island without the commitment of state and local authorities to its futuring vision. External governance, including the new islands strategy, continues to evidence a separation of nature and culture disassociated from the meaning and relationality of socioecological dynamics and islandness while structured on damaging top-down knowledge hierarchies. Hence, the culturally specific drivers of vulnerability, including those that are social and psychological and those that are more directly measurable, are interwoven, complex, temporal, spatial, and produced in place by local, regional, national and global actors.

8.5.3 Infrastructures of the Weatherworld

This research finds a disjuncture between perspectives and understandings originating in islandness and those of mainlandness, that corresponds with what Adger *et al.* (2011: 2) identify as a lack of recognition in policy of 'the symbolic and psychological aspects of settlements, places, and risks to them'. Reference is made in Chapter 2 to a House of Commons discussion in 1873 of the eroded and dangerous condition of Inishbofin's road as 'an injustice'. In addition to population decline, the analysis of infrastructures in this and the previous chapter illustrates how an islandness and mainlandness disjuncture becomes manifest in the present through island infrastructures. Extending this analysis to contribute further understandings of the weatherworld, this section draws on Anand's (2017) scholarship which focuses on the infrastructure of water in Mumbai. Anand (2017) contends that, in addition to geopolitical, historical and material productions, the entanglement of water infrastructure is such that it transcends these socio-cultural realms to destabilise them by producing a variety of citizenships.

Furthermore, the complexity of this entanglement of citizens, the contemporary state, colonial inheritances, technology, politics and the influence of the more than human in how water is distributed and accessed, means that infrastructure is loaded with complex dichotomies. It is central to governance yet beyond it, producing an uneven 'hydraulic citizenship' that can be revoked based on changed access, politics and/or discourse (Anand, 2017). Its temporality and spatiality are represented by a physical network and components, yet symbiotic with the availability to citizens of, and their access to, other

infrastructures such as electricity. Through iterations of connection, disconnection or being never connected, citizenships and identities are shaped (Anand, 2017). As residents must lobby, adapt and sometimes resist, yet may be partially or fully excluded from the official infrastructure at any time, the authority of governance is also at risk. Already experiencing constant 'disruption and break-down' as part of the 'ordinary features of everyday life', increasing climate change impacts requires examination of: '(i) the unequal distributions of life, (ii) the political ecology of infrastructures, (iii) the novelty of maintenance, and (iv) the difficulties of neoliberal reform in these sodden and uncertain times' (Anand, 2017: 227). The political ecology of Inishbofin's water infrastructure, and the correlation of elevated M_n levels with climate change impacts elsewhere established, is examined in Chapter 7 along with other key island infrastructures.

Infrastructural 'activities that aimed to fold Ireland into Britain's economy' (Pilz, 2023) in the west of Ireland and the islands, were largely informed by the surveys and coastal engineering strategies of Alexander Nimmo, a Scottish engineer, in building piers and roads under the Commissioners of Irish Fisheries (later subsumed into the OPW). In Inishbofin, the Old Pier was constructed in the 1880s with stone quarried from Leck on Knock Hill, and the Rusheen Pier in the 1890s (Concannon, 1993: 24). The piers were built by the Congested Districts Board (CDB), as were the sea wall along the Low Road by the Old Pier and a fish curing station at the Rusheen. Allies funded a second fish processing building near the Old Pier. These were efforts to 'develop' the island, and therefore to 'modernise' Islanders, processes continued with every new wave of infrastructure and which are, largely, welcomed. In relation to how the weatherworld of place is shaped and reshaped by external 'modernisations', it is relevant to consider a particular material: concrete. Freeman's (1958) observation that corrugated iron 'cannot stand the weather' in Inishbofin is applicable also to concrete. The Low Road, as documented since 1873 and discussed in Chapter 5 and earlier in this chapter, is representative of the constant interplay of land, ocean, wind and people.

In Inishbofin, to dwell in the islandscape means to interact with the creation of the planet we know. On Dumhach Beach, rocks that are Dalradian (Precambrian-Cambrian), more than 550 million years in age, provide a tactile resting spot. The Dumhach sediments were caught in the tectonic events that formed the island of Ireland (McCarron, 2024, personal correspondence). Correspondingly, physical contact with a supercontinent that predates Pangaea and with the ocean basin of the lapetus Ocean, percussor of the Atlantic (McCarron, 2024, personal correspondence), is an everyday reality. Apart from the ring

road, travel on foot can be across sand, meadows, tracks, bog and rock, along shores, inclines and cliffs, and so response to the topography requires that concentration is often necessarily directed only towards secure placement of the following footstep. The arrival of concrete, the engineering of the island's piers, the CDB's building of the road and their smoothness underfoot is in contrast to the monumental Earth building so immediately experienced, or to movement through the land and sea. Islanders' campaign for a deep sea pier has been previously discussed (Chapter 7), as have the sea wall and the airstrip. These new concrete places and other human introduced materials like tarmacadam and metal are enmeshed in a more recent history, geopolitics, and the future.

Here, metal is reshaped by the wind, twisted often into curiously organic forms, corroded by salt and sometimes altered directly by the power of waves. Here, concrete and brick are less than durable, as with the abrupt destruction of the Rusheen Pier and persistent erosion of the Low Road along the southern shore. Human-made infrastructure is therefore visibly subject to the rapid influence of the rest of nature and weather, requiring ongoing monitoring and maintenance. Even concrete, the ubiquitous material of globalising 'civilisation' and 'progress' endeavour, takes on different properties and meaning. Beyond the understandings and control of mainlandness, the islandscape weatherworld acts on infrastructures to expose failed policies and practices, and the ineffectiveness of the knowledge authority held within governance hierarchies. With each new infrastructural development and connection, Islanders were to be made closer to the mainland, to a modernising Ireland and Irishness, and to their future as envisaged by external authorities. Yet, implemented without an understanding of islandness, often these developments fail: subsea cables break, metal turns to rust, concrete to rubble, and roads to water. Thus, island infrastructures resist mainland authority impositions. They destabilise them. As Anand (2017) finds, therefore, infrastructure both enables connectivities and perpetrates marginalisation. In Inishbofin, it additionally challenges the prevalent natureculture binary, and a governance disconnection between islandness and mainlandness which forms on an absence of external understanding of, and response to, the island weatherworld.

8.6 Conclusion

This chapter has extended Hulme's concept of the 'weather world' in alignment with Ingold's 'dwelling' and Anand's scholarship on infrastructures to build on preceding analysis of culture, identity and socio-ecological relationships, governance, marginalisation and justice, and the condition and availability of island services and infrastructures, in

consideration of the final research question. Additionally, it consolidated the themes of the research in further responding to its main objective: exploration of the relationships between culture, identities and socio-ecological dynamics as pertaining to climate change response. Both culture and climate are continuously in flux, evidencing slow and abrupt change, yet these patterns of predictable unpredictability engender meaning and knowledge in place over time because they fluctuate within understood parameters. These components of the weatherworld variously yet symbiotically contribute to formation of resilience and vulnerability. Discussion of the experiences of the winter 2013/2014 storms and observed climate and environmental changes established the capacities of the community and its creative futuring vision, while also highlighting that mainland authorities, by consistently failing to understand the realities of islandness, serve to counter island resilience. Authorities contribute to increased climate vulnerabilities through practice, policy and narratives that impose mainlandness over islandness, thus discounting the influence and importance of the weatherworld. Islanders' futuring vision is therefore increasingly threatened by a confluence of factors, as occurred in Inishark prior to its eventual depopulation and the resettlement of its community. Its attainability, without an ideological transformation in external governance, is unlikely. The concluding chapter follows. It will reiterate the research aims, summarise and discuss key findings with particular consideration of futuring, and consider the broader implications and limitations of the research.

9. DISCUSSION AND CONCLUSION

9.1 Introduction

This research has expanded qualitative climate change study and contributed understanding of how culture mediates perceptions of and responses to climate change. As one of Europe's most remote inhabited islands, Inishbofin's location in the north east Atlantic means that it is vulnerable to current and projected climate change. An interdisciplinary framework prioritising islandness was devised from literature, theories and methods primarily drawn from geography, anthropology and island studies/nissology. Periods of ethnographic fieldwork conducted between 2017 to 2022 were aligned with examination of historical and contemporary documents.

The primary objective was:

• To expand understandings of climate change resilience and vulnerability by investigating the relationships between culture, identities and socio-ecological dynamics on Inishbofin Island.

The following research objectives were established:

- 1. What are island identities and why are they important for resilience?
- 2. How do colonial legacies and post-colonial governance contribute to climate change resilience or vulnerability?
- 3. What is the exposure of island services, infrastructures and livelihoods?
- 4. What are the lived realities of the island weatherworld including implications for the future?

Through examination of how geographical, cultural, social, historical, political, economic and psychological influences contribute to contemporary perspectives of climate change, the research expands understanding of the processes generating resilience and vulnerability with implications for climate change mitigation, adaptation and justice. Its particular significance is to contribute knowledge of how a little considered Irish island community responds to climate change under the concurrent threats of marginalisation, population decline and experience of extreme weather events. This chapter will synthesise and discuss the findings of Chapters 5, 6, 7 and 8 before evaluating the limitations and

strengths of the research. It will then propose several potential areas of future research revealed in the course of this study, and offer recommendations in practice and policy.

9.2 Discussion of the Findings

9.2.1 Research Question 1: What are island identities and why are they important for resilience? (Chapter 5)

This chapter examined the complexities of the conceptualised identity of 'The Islander' as resilient, the stereotypical nature of which is implicit in policy, literature and discourse, to examine the processes that produce resilience. It aimed to avoid the tropes of Islander identity so that understandings could form from Islanders' own perspectives and through ethnographic praxis. Many Islanders have experienced identity prejudice, particularly during mainland schooling with experiences corresponding to the bias-based-bullying examined by Walton (2018). Gender identities through traditional livelihoods were demarcated yet possibly more eglatarian compared to the mainland, in alignment with Ní Laoire's (2012) proposition of 'marginal farming' identities in the west. Within the islandscape, identities are further associated with specific villages and townlands, and with families. While connected to island and national identities, the research also recognised a global Islander identity, and an affiliation with the island populations of Scotland. Additionally, this chapter found that a new collective, seasonal identity has formed in response to tourism. Island population strata were examined in Chapter 2. As an Islander said, 'There's a lot of tolerance here.' The community welcomes and incorporates all residents, particulary those who recognise island law and time (discussed in Chapter 6), yet not all residents will be Islanders. Island identities hold many different meanings.

Islander identities are often correlated to the island's 'edge' as a 'natural delimiter' (McCall, 1994: 3) between the land and the 'omnipresence of the sea' which intensifies the 'feeling of being cut off from the rest of the world' through building a 'solid' 'maritime boundary' (Péron, 2004: 300). As Hay (2006: 22-23) proposes, with reference to Beem (1992) and Weale (1991) who argue that island identities are constructed and restrained because of this boundary, and also to scholars who argue differently for a 'shifting liminality' such as Beer (2003: 33), 'connectedness' is a more apt description as the boundary is 'the most permeable of membranes'. Hay (2006: 23-24) argues that the boundary itself may, in fact, tempt 'transgression' and exploration. Questioning if islands are 'dissolving into a terrain-denying mesh of global information networks' and if 'persistence of identity can only stand so much inward and outward movement of people', Hay (2006: 23-26) finds that though

they shift, and despite a continuance of Islander outmigration and 'new' inmigration, often now of 'wealthier people seeking scapes of romantic isolation', an underpinning constancy of island identity remains. Hay also recognises that 'in terms of how to make sense of comings and goings, and of questions relating to the tenacity of island identities, much remains in dispute'.

Building on Hay's ideas, Chapter 5 found that the social psychological identity of Islander originates in, but is not a response only to, geographical location and the demarcations of the natural world. Additionally, as illustrated by a long history of occupation including several reorganisations of pre-existing societal structures (Chapter 2), the peoples of Inishbofin have historically adapted to 'comings and goings'. Within these permeable yet recognisable boundaries rather than human-derived borders, however, identity is amplified and navigation and anchoring are required. For an Islander, the whole (is)land is 'in'. Importantly, in a smaller island and in contrast to other places, the islandscape is composed of both land and ocean, as Hayward (2012) also argues. Examination of socio-ecological systems follows from Ingold's (2011: 65, 93) ideas of 'entangled lines of life, growth and movement' contributing to formation of skill by 'the essence of action'. People are constantly enmeshed in, and influenced by, the sea. Incessantly active too, an anthropomorphic relationality forms on its horizontal and vertical states, and how it both gives and takes, resonant of the 'wet ontologies' discussed by Steinberg and Peters (2015). To be 'away' from its influence is never possible here.

Accordingly, the sea *and* its interactions with other actors including the wind, journeying of people and movement of ideas, require ongoing response. This includes land. Though it is perceived as benign, it has always been contested by the sea and influenced by the orchestration of the wind. Examination of relationality with sea, land and wind builds on ideas of 'heterogeneous entanglements or networks' (Jones, 2009) and scholarship on 'blurred liminality' as examined by Foley (2017) that counters the land-water binary (Lahiri-Dutt, 2014; Krause, 2022), and on Jackson's (1997) and Wylie's (2007) ideas of how land is variously conceptualised. These components of the islandscape require constant assessment, renavigation and adaptation yet for Islanders who hold deep place-based knowledge, they are not chaotic. As the islandscape is in constant flux through processes that are both socio-ecological and socio-cultural, identities physically and psychologically extend beyond any conceptualised boundedness or insularity defined by an 'edge'. Fluidity, therefore, is a primary characteristic of islandness.

Identities that start with geography are thus synchronously informed by the ecological, meteorological, climatological, cultural and metaphysical. All become embodied in place through inheritance and experience which engender an intimate knowledge of the islandscape as part of an integrated system (Berkes, 2017) through dwelling (Ingold, 2010). This chapter found that, as Massey (1994: 120, 121) argues, the 'very formation of the identity of a place' including its social structure, culture and political character are 'a product of its interactions', and global-local relations constitute its 'social phenomena'. Knowledge incorporates socio-ecological dynamics, history, memory, the influences of the present, and a vision for the future. Sited within this constant shifting, island identities form on both an expectation of exchange and the occurrence of change while connection to the land, though it is scarce and contested, provides stability. Therefore, a complexity of Islander identities is that they are resilient because they are produced within an islandscape equally created by a 'fixed' place, the land, and where change—sea, weather and culture—is constant. They are distinct because, notwithstanding the many commonalities of smaller islands, change is an outcome of differing influences: traditions exist in the past but are also 'actively built in the present' (Massey, 1995: 184).

Chapter 5 therefore drew on Massey's (1994, 1995) ideas of place through time, Breakwell's identities scholarship, Burholt et al.'s (2013) research on smaller Irish island identities, Hay's (2006) discussion, Ingold's (2000, 2010, 2011) theories of dwelling, and Hulme's (2017: 29) of how climate is personally understood through becoming merged with places, bodies, practices and memory, to further conceptualise two processes that contribute to resilience formation: 'hybrid memory actionality' and 'strategic remembering'. Hybrid memory actionality describes how Islander identity forms through duration of habitation, continuity of habitation, and historical ties. 'Memory' encapsulates the continuance of familial and collective historical inheritances, and 'actionality' is how these inheritances are generationally reconceptualised and acted upon. Breakwell (2021) argues that 'greater identity resilience is associated with more adaptive coping strategies in situations that involve insecurity or threat' and that resilience is influenced by 'personal histories and social positions'. Hybrid memory actionality incorporates persistent influences (for instance, external governance, and the wind) and extreme or abrupt events (such as the Cleggan Disaster, or the winter 2013/14 storms). Strategically remembering refers to ways of transmitting the knowledge required to live in this place, through socioecological and socio-cultural relationality including folklore and how it becomes reshaped.

These processes attempt to account for how island identities are continuously becoming, influenced by external and internal drivers yet connected through time to a place that is itself always becoming. Social, weather and sea changes are therefore given meaning within a 'predictable unpredictability' distinct to this place, which is transmitted through these processes as part of the socio-ecological system of this place at this time. Hence, coproductive with the expectation of change, an understanding of the domain within which change occurs is formed. Accordingly, changes and abrupt events occur within understood, or accepted, parameters formed over time through these predictable unpredictabilities underlying place knowledge. In other words, there is a recognition that great changes, including socio-cultural reorganisation or the destruction of storms and erosion, have occurred before and that Islanders overcame them. Whether historically or contemporaneously experienced, these events receive meaning within the continuum of hybrid memory actionality. Resilience of identity is 'related to threat perception and identity change' (Breakwell, 2021: 582) and in Inishbofin, as shown in Chapter 2, population decline including the defining experience of Inishark's depopulation has been an ongoing threat that fuels a vision of the future. The vagaries of the sea mean that it too can be of threat, as it is 'tricky'. Thus, this research highlights that island identities are important for resilience because of four key drivers: (1) responding to change that is ongoing, occurring slowly which enables incremental adaptation, (2) responding to change that abruptly occurs which requires active response, sometimes in difficult conditions with no external assistance, (3) an understanding of the patterns of predictable unpredictability of place, and (4) the awareness that there are always unknowns. Therefore, the resilience of island identities is produced by ongoing transformation through enmeshment within, and attachment to, a place that is always changing. This composite process, conceptualised as Island Identity Dynamics (IID), illustrates that island identities of resilience are an active in response to exchanges across time. They are effective, productive and powerful. This must be recognised in adaptation policies.

9.2.2 Research Question 2: How do colonial legacies and post-colonial governance contribute to climate change resilience or vulnerability? (Chapter 6)

Chapter 6 considered power relations and political narratives as impactful drivers of resilience and vulnerability through examination of colonial legacies and post-colonial governance. Drawing on a diversity of historical and colonialism scholarship including Gilligan (2017), Lenihan (2007), McVeigh and Rolston (2009) and Metress (1996) to explore scientific racism, and how the Irish were portrayed in British discourse (Curtis, 1971, 1984;

Ellis, 1975; Nelson, 2012; Rich, 1994; van Krieken, 2011), it recognised a confluence of historical processes as leading to a fascination with areas in the west of Ireland and the islands, both during and after colonisation. Restructuring and resettlement during earlier waves of colonisation resulted in the spatiality of Irish as the primary spoken language largely in the west, and the positioning of power and control largely in the east.

Examined as illustrating the continuing impacts of colonialism in the present for Inishbofin are: (1) the loss of the Irish language under an absolute ban attributed to the island's last, and residential, landlord, and (2) the removal in 1890 of human remains from the island graveyard, and the campaign which led to their repatriation in 2023. Both are exemplar of a continuance in the systemic imposition of external authorities through conceptualised hierarchies of power and knowledge. Inishbofin experienced Cromwellian occupation and use as a penal colony, and a series of landlords. Islanders were racialised and subjected to physical examination as the evolutionary remnants of a 'primitive Irish race'. However, because the island was later designated as outside of the Gaeltacht region, it was, and is, ineligible for the supports awarded to other areas with similar experiences in history, location and contemporary challenges. Simultaneously, islands are perceived as strongholds of Irish cultural identities (O'Sullivan, 2008). Thus, Inishbofin became subjected to a pernicious marginalisation while post-Independence Ireland strived for 'modernisation' and 'development'. The process of repatriation lasted for eight years, during which a complex structural hierarchy of knowledge and power required navigation by Islanders, contemporaneously reinforcing the original injustice and loss for many. The return of the human remains, however, is responded to as recognition of Islanders' cultural authority and place-based knowledge, and the eventual righting of an historic abuse. Therefore, through demonstrating that accountability by external authorities is meaningful (Legget, 2018) and that institutions are producing distance from their 'discredited foundational remit' (Jenkins, 2010), this chapter also highlights the importance of interrogating and addressing systemic and structural legacies. Inishbofin continues to experience disadvantage because it is not a Gaeltacht designated island, as evidenced by the criteria applied by the Department of Education in its rejection of the community's application for an island secondary school.

Accordingly, building on the scholarship of Lloyd (2001) who examines the 'cultural hybridity' of post-colonialism governance, while drawing from Castro-Gómez (2008) and Mignolo (2008) who discuss the geopolitics of knowledge as a colonisation outcome, and in alignment with Walsh's (2023) analysis of contemporary disparities in household incomes

nationally, this chapter proposed that processes of coloniality of power and knowledge, associated with neo-Liberalism and Cartesian binaries, may persist. It identified 'mainlandness'—or a mainland disconnection from the realities of islandness—in the new islands policy, particularly visible through its continuance of 'margins thinking', its strategic objective to 'empower' island communities, and the mechanisms of its development. Chapter 6 further examined several relevant EU (with reference to the findings of Moncada et al., 2010), national and local authority (with reference to Ferriter, 2018; Royle and Scott, 1996) practices, in consideration of the scholarship of Anand (2017) and Nixon (2011), to argue that these have consistently failed islands. This mainlandness perspective also likely contributes to a paucity of climate data being available for islands. In contrast, through its analysis of internal governance, or informal 'island law', that builds on island studies scholarship (Péron, 2004; Royle and Brinklow, 2018; Warrington and Milne, 2018) and examination of the concept of 'island time', Chapter 6 found that shared understandings formed through islandness, though containing tensions, contribute to identities, cohesion and security.

Thus, by analysis of this push-pull tensity, this research finds that resilience formation is subjected to opposing forces. Peripherality is itself a conception and outcome of mainlandness. The notion of peripherality, in common with ideas of the margin, can exist only in contrast to a conceptualised 'centre'. These constructed centre-periphery relations hold tensions. Colonial legacies and post-colonial governance continue the processes of marginalisation in perpetuation of similar structural hierarchies of power and knowledge. Vulnerabilities become evident through policies and practices of external governance in four ways: population decline, reduced trust in external governance, long neglect of services and infrastructure, and the current exposure of infrastructures examined in Chapter 7. If islands planning, infrastructures and services continue to be approached through mainlandness by the authorities responsible, and if Islanders must respond to an acceleration of extreme storm events and/or erosion impacts, there are increasing implications for social, environmental and climate justice including the possibility of a critical threshold being reached whereby more islands could become depopulated. Policy is required to be future-orientated. The application of a committed rights-based approach centring principles of equity must start with policies suited to place.

9.2.3 Research Question 3: What is the exposure of island services, infrastructures and livelihoods? (Chapter 7)

This chapter assessed the status and exposure of the infrastructures and services required for any population to function at its fullest extent. Islandness is a factor in availability of and accessibility to services, yet external governance was found to be a greater determinant. Examination of island housing identified that almost half of the island's housing stock is empty for approximately half of every year owing to second home ownership and the dominance of the tourism economy, constructing a skewed local rental and sales market that is amplified within the islandscape. In correspondence with the findings of O'Sullivan and Desmond (2022), this contributes to hazard including 'the loss of entire island communities'. Another exposure driven by mainlandness is that Islanders must leave aged twelve to access secondary level schooling. In contrast to criteria applied for similar island communities with Gaeltacht status, the Department of Education responded to the community's most recent secondary school submission by applying mainland eligibility criteria i.e., that new school applications require an enrolment of 600-1,000 students, thus exemplar of continuing localised impacts of the enforced loss of the Irish language during colonialism.

The chapter also considered the impacts of the delayed provision of a new island health centre promised in 2003, and adaptation of religious practice including for socio-cultural events of significance and funerals. examined such as baptisms lt telecommunications/broadband and how these have, to date, been underpinned by mainlandness practices unsuitable to an island environment, the accessibility of a deep sea pier in 1998 through processes began in 1981, and the island airstrip completed in 2008/2009 that never opened. In 1982, electricity became available via a predominately locally maintained diesel power plant, while Inishbofin was among the last places connected to the national grid in 1998. A renewable energy development project is being progressed by the community. Inishbofin was also one of the last places to receive a piped water supply in the mid-1980s, with non-usability for almost four months in 2022 and two months in 2023 attributed to unsafe levels of manganese (Mn) which, in international studies (Bertone et al., 2016; Bourg and Bertin, 1994; Howard and Chisholm, 1975; Jyväsjärvi et al., 2015; Magee and Wu, 2017; Riedel, 2019), has been correlated with climate change impacts. The Coastal Protection and Flood Risk Management Study funded in 2015 has not yet been delivered nor the Rusheen Pier reconstructed.

The island's primary livelihoods are nature-based and therefore 'weather dependent'. Thus, as Adger (2000: 353) argues with reference to coastal communities, the Inishbofin economy is 'reliant on a single coastal system'. Chapter 8 found that Islanders observe alterations in this system. Massey's (1994: 51, original emphasis) argument that geographical inequality is 'historically relative', and that a 'spatial division of labour' exists in response to the 'variation in the way in which different forms of economic activity incorporate or use the fact of spatial inequality *in order to* maximise profits', is relevant here. Maintaining fishing and farming and how to diversify the economy are local concerns. Fishing in particular, important to identities, has been undermined by a lack of equitable policy. Valued by the community for its many benefits and having created a structural financial dependence, increased tourism simultaneously leads to displacement, environmental concerns, and stress on infrastructures and services. Furthermore, in alignment also with Hay's (2006) findings, this chapter found that an accelerating tourism and second home ownership economy has become a threat to components of the island that create its distinction, and its future viability.

Recognising parallels with Anand's (2017) finding that citizenship and governance manifest through infrastructures, Chapter 7 therefore found that exposure of infrastructures and services is evidence of ongoing systemic failure to centre an islandness approach that could resolve the community's more immediate needs, and potentially enable population stability and increase. Thus, the lack of priority awarded to island services and infrastructures, and the application of mainland-centric policies, serves to create uncertainties for the community and exacerbates climate change vulnerabilities. The American Anthropological Association (AAA) Global Climate Change Task Force argues for climate change mitigation and adaptation to be 'incorporated into more immediate needs for employment, economic development, and public health' so that 'there is greater likelihood of successful mitigation and adaptation' (Fiske et al., 2015). Improved broadband and telecommunications can enable increased numbers of migrant Islanders to return and attract new incoming residents, if effectively aligned with addressing correlated challenges across housing, education, and other infrastructures and services. Historically, Islanders have been subjected to mainland perceptions and actions whereby 'modernisation' of a particular infrastructure (for instance, the old pier and fish curing station in the late 1880/90s, or an automated telephone exchange in 1987) was promoted as 'solving' island 'problems' but without a cohesive, whole-of society approach through islandness, marginalisation was continued. Distrust of external authorities and policies as an outcome

of continued failures, and that they flounder in recognising community capacities and knowledge, may also affect response to climate change policies.

9.2.4 Research Question 4: What are the lived realities of the island weatherworld including implications for the future? (Chapter 8)

This chapter, extending Hulme's (2017) theories of the 'weather world' in correspondence with Ingold's (2010) dwelling, discussed differing ideas of weather, climate and climate change with the framework of natureculture and nature/culture. Jones' (2009) and Haraway's (2008) arguments of the political importance of 'nature/culture' and 'natureculture' was drawn on to symbolically remove the 'divide' through use of 'natureculture'. Findings aligned with Hulme's (2017) recognition of the relationality of weather and how climate gains meaning as experience of this relationality over time in place. This contributes to conceptualisations for the future, and also to an understanding that there are accepted parameters within which weather and climate can act—patterns visible through local knowledge—referred to in this research as patterns of predictable unpredictability. The chapter identified that understanding and experience of these patterns contributes to formation of resilience. In contrast, politicised ideas of climate and climate change, and anthropogenic climate change, were proposed as originating in Cartesian thinking. Thus removed from relationality, these ideas contribute to uncertainties and heightened vulnerability. Underpinning island resilience, and as illustrated through analysis of past and present experiences, is a shared vision of the future centred on a continuing and expanding population in place which this research proposes is built on belief in the power of the possible. This is further aligned in Chapter 8 with theories of the VUCA (increased volatility, uncertainty, complexity and ambiguity) (Burrows and Gnad, 2018) and the complex world (Korosteleva and Petrova, 2022). Vulnerability, according to Berkes (2007), 'is registered not by exposure to hazards alone; it also resides in the resilience of the system experiencing the hazard'. Berenskoetter (2011: 663) highlights the importance of future visions in processes of identity formation, how they influence behaviour, and that they contain political implications, arguing that they can be either limiting (robust) or producers of agency (creative).

Findings also included that contesting mainland projections of place and identity follow more what Massey (1995: 184, 185) describes as 'the concept of tradition which sees in it only nostalgia' thus understanding it as 'something already completed which can now only be maintained or lost', illustrating how there can be 'different interpretations of the identity of a place ... clearly based on the different socio-geographical positions of the

groups which promote them'. Chapter 8 found that where island and mainland understandings significantly diverge is that lived resilience forms through persistent transformation within fluidity towards a vision of the future, as discussed. This is what Adger (2000: 361) describes as 'innovation, coping with change and social learning'. In contrast, however, mainlander projections of island resilience form on ideas of statis through which Islander identities are primarily conceived as unchanging and marginalised. Hence, formation of resilience is a result of experiences and outcomes within the weatherworld that are increasingly countered by mainland policies and processes. Climate change observations and projections produce a new conceptualisation of vulnerability.

This chapter further extended weatherworld analysis through the framework of infrastructures, drawing on Anand's (2017) scholarship. Starting with the 1873 House of Commons report of the condition of the island's road as an injustice, it recognised Freeman's 1958 observation of the impact of the weather on island infrastructure. It contrasted the skills of dwelling formed through interaction with the island's varied topography including Dalradian era rocks, with the smoothness of its human built infrastructure which forms a different temporal record: that of external introductions of 'modernisation' and 'development', from colonisation to contemporary governance. However, the weatherworld of the islandscape is a complex world, understood by Islanders through hybrid memory actionality. Even concrete is not immune to this complexity. The chapter found that how the sea and weather can abruptly and incrementally change infrastructures introduced by external authorities, and the socio-cultural meanings of these processes, is such that mainland governance and policies often fail. This complex island weatherworld, then, challenges the nature-culture binary underpinning governance, and acts to destabilise not just infrastructures but mainland hierarchies of power and knowledge. Furthermore, its misunderstanding through mainland perspectives acts to destabilise the relationship between mainland-based state authorities and the island community. In alignment with Anand's (2017) findings, this serves to perpetuate both connection and marginalisation, highlighting the criticality of transparent, effective governance in capacity building so that communities can cope with changes in climate and other hazards (Adger et al., 2005: 1039). These findings begin to address what Petzold and Mangan (2019) identify as a paucity of data on the many drivers of vulnerability and climate change responses on non-SIDS smaller islands, and respond to Lash's (2019: 429) call for research in Inishbofin to trace historical and thematic connections between the past and present.

Implications for the future result from how the actions of external authorities contest the community's vision and its resilience, while simultaneously separating climate and climate change from relational experience. As this chapter argued, the influence of the weatherworld is central to local understandings and place meaning, but has yet to be incorporated into the policies of external authorities. Social resilience is 'the ability of groups or communities to cope with external stresses and disturbances as a result of social, political and environmental change' (Adger, 2000). Augmented by an ongoing disconnection through mainlandness of weatherworld realities, the future in place becomes more precarious through climate change on an existing imprint of marginalisation, despite the community's high resilience and knowledge of place. Spatiality and temporality correspondingly shape the dynamics of responses to climate change including resilience, vulnerability, and adaptation capacity.

Therefore, Chapter 8 found that adaptation to the new hazard of anthropogenic climate change is threatened because: (1) the predictably unpredictable, or known within understood parameters, patterns of weather and sea upon which socio-ecological relationships have generationally formed are widely observed as altering, simultaneously with changes in the cultural practices through which knowledge is transferred including pernicious population decline, (2) in discounting the importance of understanding the influence of the weatherworld of place, authorities' actions and inactions perpetrate a marginalisation cycle historically and contemporaneously neglectful of what Mortreux et al. (2018) refer to as the 'key responsibility of states ... for the protection of their vulnerable citizens', and (3) distrust of external authorities forms in response to remembered and experienced impacts perceived to devalue islandness, history, and the community's vision of the future. Without ideological and systemic change in mainland governance structures pertaining to islands, island communities are and will be compelled to navigate a complex passageway made turbulent by oppositional forces, intensified by climate change. Additionally, well-being must be recognised as 'an end for all climate change policies', as Adger et al. (2022: 1470) illustrate, and 'communities require processes that give them some locus of control over their destinies as part of a recognition of identity and place' (Adger et al., 2011: 21). Reflective of the entangled socio-cultural and socio-ecological events leading to the depopulation of Inishark, and given an emergent political discourse of planned resettlement in response to climate change impacts, that the mainlandness underpinning islands policy discounts the lived realities of islandness is recognised in this

research as containing implications for the future well-being of the Inishbofin community, including its continued viability in place, within an increasingly altered climate.

9.3 Evaluation

The process of devising a novel framework was discussed in Chapter 4. Building on the challenges in its development previously examined, this section further briefly assesses the research framework and the interdisciplinary approach underpinning it along with its application during fieldwork, and the resultant theoretical positioning of this study. In so doing, it points to several successes and limitations of the study which additionally inform the following section and areas of potential future research, though does not propose that these successes or limitations are as yet conclusive.

9.3.1 Interdisciplinarity

The findings suggest that the research design, interdisciplinary framework and methods discussed in Chapter 4 were effective and therefore appropriate to the study. Interdisciplinarity allowed for a complex problem and islandness to be kept at the centre of the research, and for methods, theories and concepts from geography, anthropology and island studies to ground examination of the research objectives. Through interdisciplinarity, relevant learnings could also be incorporated from climate change, climatology, colonial studies, environmental psychology, history, phenomenology, and political ecologies. It is additionally hoped that the aim to prioritise a flat ontology after Marston *et al.* (2005), the ideas of the people of Inishbofin, and islandness through McCall's (1994) 'on their own terms' approach has been achieved with integrity, in acknowledgment of the authority of local and place based knowledge. Additionally, in a community where actions by external authorities and writers have resulted in a level of distrust for some, critical climate ethnography is a method that demonstrated commitment to the community and the place, which in turn, overall, supported mutual respect and knowledge sharing.

However, there are limitations in the applicability of the research framework. The first is that it requires a lengthy time commitment. This is because, drawing from three disciplines, it required the development of a wide knowledge base before implementation. This challenge may be reduced were the framework to be applied by a multi-disciplinary team rather than an individual researcher. Secondly, to yield valid findings, it must be adaptative in response to a population and place over time. Dwelling and ethnography were appropriate methods for the depth of understanding attempted, yet are also time-intensive

processes. However, they could be alternatively employed without long-term residency through shorter 'bursts', as this is praxis that opens up the possibility of immersion. Hence, the framework may have applications for any study attempting to understand complex problems from the perspectives of a community of place. Its current iteration is proposed as appropriate for study with other island communities, nationally and internationally. It may be further suitable for research with coastal and rural communities who experience similar challenges. In its overarching design, it may also appropriately serve for in-depth research with any community of place in examination of climate change adaptation, vulnerability and resilience, with islandness as the overarching framing being appropriately adapted. The framework was designed to enable flexibility within a foundational structure, and therefore 'builds in' the possibility of adaptation in response to the specificities of place and the issues of relevance for that place's inhabitants, aligned with a situated researcher or researchers.

9.3.2 Fieldwork

Being open to an emergent research design meant that the early fieldwork contributed to the overall research design as well as to the findings. The aims to respect confidentiality and maintain anonymity, as discussed in Chapter 4, have been adhered to. These efforts meant excluding data that potentially could have enhanced aspects of the findings. Choices made during fieldwork and in interpretation and analysis of the data, despite these potential limitations, ultimately reflect my ethics as a researcher and my accountability to Islanders and the island, and resulted in production of new empirical data. However, it is also recognised that preserving absolute anonymity is not possible within an environment and population the size of Inishbofin's. Quantitative study could address this challenge were it to focus on one research objective and expand across island communities, though it seems more likely that quantitative study could not engender the depth of response necessary to produce the nuanced understanding now required, while maintaining confidentiality. It could additionally perpetrate the reductionism in climate change research that this study aimed to redress, given the importance of relationality to the findings. Further to Chapter 4's consideration of positionality, it is acknowledged that dwelling and ethnography are highly relational. I have gained friendships, and a deep affection and respect for Inishbofin and its community, human and more than human. I view this as a strength of the research because relationality has enhanced understandings through participant observation, conversation, interview, documentary review, and analysis. In consolidation of the findings and writing of this thesis, critical analysis was prioritised.

The many impacts of Covid-19 in accessing both the island and all its demographic groupings, particularly older community members, are recognised as a limitation of this study, as previously considered in Chapter 4. How the restrictions of the pandemic resulted in diverse fieldwork experiences is arguably an unanticipated strength of the work, as also discussed. The scarcity of affordable island accommodation was a notable and unanticipated limitation. With an extended residency in a central location enabling further opportunity to engage with the seasonal shifts of island life and its varying population compositions, it is likely that a greater engagement with all age groups could have contributed additional findings.

As a potential limitation of the study, I acknowledge that it is purposefully one-sided in its approach as it prioritised the voices of Islanders. The significance of focussing on Islanders' experiences and understandings is that it produces knowledge contextualised by the perceptions, responses and meanings that form from the past through the present and into the future in this place. Examination of infrastructures in this research therefore recognises that they 'operate on differing levels simultaneously, generating multiple forms of address, and that any particular set of intellectual questions will have to select which of these levels to examine' (Larkin, 2013). Islanders' responses on many issues may conflict with those of the authorities responsible for the narratives, services and infrastructures under contestation, now and in the future. Thus, examining these non-Islander perspectives may have provided a 'fuller' picture of Inishbofin and climate change.

Additionally, this research could but *should not* be interpreted as contending that there is, or as attempting to present, a homologous 'Islander viewpoint'. It acknowledges some aggregation of 'inhabitant categories' in Chapter 2 as a response to the complexity of island community make-up. While the research considers experiences of islandness from predominately Islander and long-term resident perspectives, and while these are identifiable yet fluid categories within a cohesive community, neither is absolute and not all people share the same responses. Additional research would be required to fully explore the views of, for instance, the island's children and young adults, more recent full-time residents, long-term seasonal residents, and second home owners. Also recognised is that this research, though it is highly cognisant of the significance of the entanglement of all entities within the islandscape, or Ingold's meshwork, primarily analysed only human responses in this place.

9.3.3 Theoretical

Theoretically, the research aligns with a structuralist ontology and its modes of analysis, including its interest in social justice, emergent design in response to concepts of importance to the community, the contention that marginalisation is a social construct, and in its acknowledgment of personal relationality. Additionally, drawing on Mertens (2007), it firmly aligns with the transformative paradigm in recognising and confronting injustices, considering asymmetric power relationships and the impacts of political narratives, and prioritising those who have experienced discrimination. A theoretical challenge was to reject Cartesian binaries and bottom-up/top-down hierarchies while applying a post-humanism approach prioritising a 'flat ontology', dwelling, islandness, and relational entanglement/assemblage conceptualisations in response to a problem that, as argued, has resulted from and is enacted through the divides the theoretical framework is rejecting. It is suggested, tentatively, that some success has followed.

Central to Ingold's thesis is that humans and non-human life are 'continually creating the conditions for each other's existence' unless one is 'already situated in an environment of human and non-human others' whereby humans live 'on one side of a boundary between society and nature' 'and non-humans ... on the other', meaning that 'the concept of nature is thus inherently political' (Ingold, 2005). Through extending Hulme and Ingold's theories, including applying dwelling as a method, this research found that people are living in a field of relations—referred to in this study as *islandness* and the *weatherworld*—but that the dominant political narrative, its policies and its control of resources that also shape how people live—referred to herein as *mainlandness* and *margins thinking*—is separated from and negligent of relationality. This thesis therefore proposes that a mainlandness 'generalised conception' (Ingold, 2005: 502) originates in the nature-culture dichotomy, discussed in Chapter 3 with particular reference to Glacken's research.

The effect is what Ingold (2005: 502) describes as:

'... the experience of having to weave a path through a medley of structures built by others for you to live in, according to designs that answer not to your particular background and circumstances, but to some generalised conception of pan-human need.'

Furthermore, contributing a novel interpretation regarding governance structures in Ireland, it is proposed that this conception may be partially continued in Ireland through an inherited structural legacy of power and knowledge, associated with coloniality. This is

discussed in Chapter 6 with reference to Lloyd (2001), Castro-Gómez (2008) and Mignolo (2008), and identified as an area of enquiry warranting further analysis. It considers theories of justice, notably Nixon's (2011) idea of 'slow violence' being evident in 'delayed destruction' which this research contends is materialised as ongoing population decline for the islands, and the contention by Adger *et al.* (2011) that the importance of place and identity be recognised under climate change policy. It draws from other scholars including Massey (1994, 1995, 1996) and Hulme (2011, 2017), and Anand's (2017) infrastructures scholarship, to extend these ideas into consideration of the phenomenon of the 'weatherworld'.

In this research, the idea of the weatherworld serves different theoretical functions. The first is that it is employed as an analytical framework in consideration of the natureculture/nature-culture question, in alignment with Hulme's (2017) contention that climate is 'an idea of the human mind', thus following on from Hulme's theories to establish through analysis of the phenomenon within a particular environment that the meaning of weather through time in place, as it is transmitted by memory and adapted by experience, becomes understood climate. The stability of the weatherworld is articulated as forming on structures that are stable only within, and gaining meaning through, parameters of unpredictability. Additionally, human-environment dynamics are proposed as a core social structure. This is not to suggest determinism, but rather that socioecological relationships are one component, along with several others analysed, of a complex system that the research attempts to examine through a 'lived realities' as well as a relationality premise.

The weatherworld is also understood as a model for the whole of society as it is experienced through dwelling, consisting of identifiable components that contribute to production of the experience of this place at this time, and which become manifest in contemporary push-pull tensions underpinning resilience and vulnerability formation. Identities, socio-ecological relationships, and governance are proposed as key components of the weatherworld. This builds on Massey's ideas of place through time, Burholt *et al.*'s 2013 analysis of smaller Irish islands identities, infrastructures theories (Anand, 2017; Gandy, 2014; Larkin, 2013) and a diversity of identity theory particularly following Breakwell, in proposing the processes of hybrid memory actionality and strategic remembering. Cognisant of Breakwell's ([1986] 2015: 2) caution that 'there is a danger in using examples to illustrate a theory' as often 'the theory is too closely identified with the exemplars', and the importance of finding the balance between 'over-simplification and

over-generalisation', specific events are analysed in detail to explore the idea of hybrid memory actionality and its drivers in alignment with ongoing socio-cultural processes.

Additionally, contiguous relationships with the ocean, land, shore, wind and sky are interrogated, in consideration of ideas including hybrid spaces and fluidity (Foley, Hayward, Krause, Lahiri-Dutt, Royle and Brinklow), responses to the ocean (Baldacchino, Gee, Steinberg) and land (Jackson, Slater, Wiley), and the conception of entanglement (Haraway, Ingold, Latour) in the weatherworld (Hulme, Ingold) with the rest of nature (Guthrie, Steinberg and Peters). Other components of the weatherworld are examined in Chapter 6, as mentioned, through governance and justice perspectives, drawing on theories from scholars including Lloyd (2001) and Warrington and Milne (2018), and the interlinkedness of socio-ecological relationships in considering resilience and vulnerability (Adger, 2000, 2005). Socio-ecological systems (SES) theory contributes to the analysis, notably consideration of work by Abel (2003), Becken (2005), Bunce *et al.* (2009), Carpenter *et al.* (2001), Connell (2013), Delgado, Marin and Pérez-Orellana (2020), Folke (2006), Gunderson and Holling (2002), Meerow *et al.* (2016), Olsson and Folke (2001) and Walker *et al.* (2002).

These components are those that contribute to formation of resilience and vulnerability through socio-cultural processes. Framing the research through the theoretical underpinnings of islandness, or the study of islands 'on their own terms' (McCall, 1994), has enabled nuanced, in-depth analysis. A 'contested fault line within island studies', Hay (2006) suggests, is the question 'of whether islands are characterised by vulnerability or resilience' and if they are 'victims of change' or 'uniquely resourceful', while Stratford (2003) argues that islands are 'bounded but porous'; 'isolated, connected'; 'colonised, postcolonial'; 'vulnerable and robust'; and 'utopian and dystopian'. Theory from island studies/nissology has thus greatly influenced this research, in extension of the scholarship of Baldacchino, Hay, McCall, Péron, Stratford and others. Through its focus on one of Ireland's islands in particular, it draws from and builds on the scholarship of Royle.

Accordingly, a theoretical contribution, introduced here as *Island Identity Dynamics* (IID), is formed on the integration of nature-culture conceptual and theoretical frameworks through application of the lived, relational theory of Ingold's dwelling as a method, in recognition of smaller islands as places of distinction. Building on theories on the characteristics of islands, relationality and SES, and the concept of hybrid memory actionality discussed earlier, it is thus proposed that island identities of resilience are actively constructed through multi-scalar, fluid assemblages that span multiple

generations, weather, ocean, land, and external influences. This concept, therefore, recognises island resilience identities as being actively rather than passively formed. Resilience is not only an outcome of experience, in this case, nor solely a result of attachment to the place of origin itself, but rather from active engagement with history, networks, symbols, practices, external forces, imaginings of the future in place, and the socio-ecological systems of place. This theory may offer a nuanced way to understand how these identities of resilience are dynamic, with relevance for climate change adaptation.

9.4 Recommendations

9.4.1 Future Research

9.4.1.1 Island Natureculture Research Centres

The academic conceptualisation of the island as laboratory has been previously mentioned. Recognising the potential dangers inherent in any similar conceptualisation, an implication of this study is that Ireland's islands including Inishbofin are greatly undervalued as sites of significance for both qualitative and quantitative climate and climate change study. The existing paucity of data belies the significance of island communities' understanding of weather, land and ocean and their interplay; Islanders' extraordinary processes of transformative resilience and adaptive capacity; their knowledge that is so pertinent to contemporary societal challenges; their generosity in sharing this knowledge, culture and heritage; and the characteristics of islandness. These characteristics including geographical location produce suitability for climate research and renewable energy initiatives, and additionally in Inishbofin include investigation of the potential association of elevated levels of manganese (M_n) in drinking water with a changing climate, as has been identified in international studies. It includes exploration of impacts for previously resettled island communities as with the people of Inishark. Future study could therefore recognise Ireland's islands as places of natureculture importance through development of island based research centres.

In so doing, the imperative would be to centre islandness so that islands and their entangled communities directly benefit. Desirable outcomes would be recognition of Islanders' cultural authority and the value of local knowledge, generation of income locally, diversification of employment, increased access to local education opportunities for island communities, and propitious investigation leading to compilation and application of the data now required and that will be further required in development of effective climate change mitigation and adaptation policies ranging across the local, regional, national and

international. Additionally, islands are sites of geological significance. For instance, the rock comprising Inishbofin is Precambrian (4,600-541 Ma) and the island is 'a textbook locality for the recognition of coastal erosion features' with 'long palaeoecological records stretching back to the Ice Age' (Meehan *et al.*, 2019). As previously discussed, Inishbofin is also a protected site for biodiversity. Importantly, regarding history, culture and heritage, and as Ferriter (2018: 5) contends, islands 'magnify fundamental themes relevant to the wider Irish historical experience' including 'the relationship between the centre and the periphery'. These themes and relationship must be further analysed and understood, if increased equity and justice, including successful mitigation and adaptation, are to be achieved. All of these factors and the urgency of understanding climate change processes contribute to the validity of development of island natureculture research centres.

9.4.1.2 Biodiversity

Aligned with the potential of the island as an important research centre, there are areas of ecological research required. These include examination of the impact of the breach of Lough Bofin on the status of the endangered European eel, if the threatened/near threatened Isotes echinospoa/Spring Quillwort survives at Lough Fawna, the potential impact of observed invasive species such as the New Zealand flatworm and Gunnera tinctoria, and assessment of the status of pollinators and other native species. Based on the observation of a now deceased long-term resident and marine biologist, investigation is also warranted regarding jellyfish species native to the Mediterranean being observed reproducing in the Pool in Bofin Harbour. Changes are observed in the numbers and locations of fish species, and the island is a site of importance for the protected basking shark and other marine animals. In addition to the corncrake, the island is also an important site for at risk or declining bird species that are seasonal or year-round inhabitants including barnacle geese, lapwings and skylarks. Understanding distribution changes and decline in these and other species, and intervention in collaboration with the (human) community that integrates societal needs including housing, could enhance outcomes for many species.

9.4.1.3 'Creeping' Population Decline

Population decline within identified spatial and temporal parameters presents as an issue of global concern across rural and urban areas in both more (MEDCs) and less (LEDCs) economically developed countries, and is correspondingly analysed using a variety of cross disciplinary and methodological approaches. For example, Chang and Kuo (2021) examine 'loss of youth and talent' from Pinglin District in Taiwan as 'one of the most pressing social

injustices'. Draus *et al.* (2018), identifying 'an alternation of apocalyptic and utopian perspectives' in a depopulated Detroit neighbourhood, examine community subsistence practices, perspectives and 'first-hand accounts' to 'contend that the complex reality of life on the ground should inform efforts to craft policy'. Dax and Fischer (2017) argue that approximately one-third of rural Austria experiences 'negative population change' impacting 'on economic performance, income levels and well-being patterns'. Haase (2009: 235) questions the extent to which rural poverty in Ireland can 'explain weak demography' or if poverty in rural Ireland is an outcome of reduced populations. Stain *et al.* (2011) argue that the health impacts of 'chronic environmental adversity' do not receive 'sufficient attention'.

"... our outlook is very poor. Already emigration has started yet again and an awful lot of our young people have gone even in the last twelve months ... And these are the people who should be the backbone of this community which is, I think, slowly dying."

Inishbofin Islander Margaret Murray, 1st April 1987

In Census 1986, Inishbofin's population was 177 people. Ergo, the issue then of primary concern, as illustrated by the 1987 RTÉ television news interview (Fahy, 1987) quoted above, endures as the question of how to sustain and increase the island's population has yet to be effectively addressed through policy. This research proposes that population decline should be investigated as a slow violence with questions of spatial justice at its core, and further analysed as a slow onset hazard. In common with other pervasive hazards such as drought, population decline results from a combination of the prevailing socioecological and socio-cultural systems in a specific place including governance. This reconceptualisation could investigate if the adversity of this persistent threat results in psychological distress or concern, contributes to perception and understanding of risk, impacts on community and place connectedness, interacts with socio-economic factors, influences resilience or vulnerability, and/or contributes to climate change and other policy response. The resultant production of empirical knowledge, including possible development of a population decline risk index incorporating hazard and vulnerability indices combined with collation of accurate demographic data, particularly if enhanced by development of a census appropriate for complex island populations, would engender for island and other communities and policy makers an increased potential to optimise

futuring scenarios and outcomes for the places thus impacted. Importantly, any such study must prioritise islandness and the wellbeing of island communities.

9.4.1.4 Contemporary Impacts of Colonisation within Governance

Gaps in the literature have been discussed in Chapters 2 and 3. Of these, findings specific to Inishbofin revealed areas of future research relevant to other places and with national and local governance implications. The first is examination of the impacts to island communities that had a residential landlord during colonisation, and how this residency has shaped contemporary outcomes. In this thesis, themes traced from colonisation through contemporary governance demonstrate a direct correlation in mainlandness imposition of 'modernisation' narratives that resulted in marginalisation. A connected area of research is the discrimination of some islands because of their non-Gaeltacht designation which may be efficaciously explored through an infrastructures focus. This research could align with investigation of how the practices and policies of various local authorities with responsibility for islands have had potentially differing outcomes.

'Some islands off the coastline suffered discrimination because the population was not Irish speaking. I hope that day is long gone.'

PJ Sheehan, TD, Houses of the Oireachtas, 7th March 1996

In Chapter 6, it is suggested that the historical conceptual origins of the margin have endured as an idea from the centring of colonial rule in the east, the physical and psychological construction of the Pale, and the forced relocation of Irish nobles to the west of the country and associated displacement. By shaping the areas where Irish survived as the primary spoken language, these historical events also shaped a fascination with remote areas including islands in the west under scientific racism in the late 1800s and early 1900s, and post-Independence ideas of islands as both marginalised and 'magicalised'. This research proposes that external impositions of power and knowledge within conceptualised hierarchies of cultural authority, building on Lloyd's (2001) theories and Ferriter's (2018) findings, may underpin contemporary policy. Correspondingly, these are potentially interlinked lines of possible future enquiry: the proposed colonial origins of the margin in contemporary discourse, practices of identity prejudice, the outcomes of Gaeltacht designation for otherwise similar communities including population decline and/or stability, and post-Independence hierarchical perceptions of power and knowledge.

9.4.1.5 Vulnerability Under Climate Change 'Managed Retreat' Strategies

This area of possible future research concerns the confluence of marginalisation effects reproduced across state and local authorities in interactions with Inishbofin, including the ten year delay and equivocation by the OPW, GCC and Department of Rural and Community Development regarding the island's 'Coastal Protection and Flood Risk Management Study' with no repair to the Rusheen Pier (discussed in Chapter 7, section 7.7), and the disconnect evidenced between government analysis of services that prioritises quantitative assessment over islandness and community (for instance, the review of ferry services discussed in the same section). In October 2023, the Minister for Housing, Local Government and Heritage, and the Minister of State with responsibility for the Office of Public Works (OPW), published the Report of the Inter Departmental Group on National Coastal Change Management Strategy, Ireland's first national planning framework in response to coastal erosion and sea level rise. The report states: 'it is inevitable that, as a State, we will be faced in some circumstances with the need to coordinate a managed retreat strategy, as the safest, most appropriate response in certain cases'. Recommendation 15 of the report is that the Steering Group should identify 'the most appropriate measures and mechanisms required to support a managed retreat option for communities ...' as preferable to emergency response 'immediately following or during major coastal storm events' (Government of Ireland, 2023: 70, 15). Thus, this area of research concerns analysis of if, under neo-liberalist governance, certain communities, particularly those already marginalised through policy and/or distance to the conceptualised 'centre', are or will be politicised as vulnerable to sacrifice.

9.4.2 Practice and Policy

This study acknowledges that the supports, subsidies and funding accessible to the community are valued and important, as are positive community relationships with individual representatives of several state authorities. A finding throughout this research, however, is that islands are distinct to the mainland. It seems unsurprising that policies and practice developed for mainland communities have proved ineffectual for island communities, and as mainland governance does not incorporate an understanding of island realities. What is surprising is that this has yet to be fully acknowledged or acted upon in a manner that could lead to more positive outcomes for Ireland's island communities, despite release of an aspirational new islands strategy in 2023 (Government of Ireland, 2023a). This lack of appropriate policy and action has resulted in the marginalisation of Ireland's island communities and is most immediately evidenced in the ongoing population

decline examined in Chapter 2 of this thesis. Though of great urgency, it is not climate alone that shapes the future (Hulme, 2023). As complex systems always contain uncertainties, adaptive management is required which means that decision makers should 'continuously monitor and integrate appropriate ecological, social, and economic information' into policy and management, and incorporate the resilience-building potential of differing knowledge systems (Berkes, Colding and Folke (eds.), 2002: 187, 371). Historically, this has not been the approach in governance of Ireland's islands, and it is not yet evident in the current islands policy which has been primarily formed on mainland policy approaches. Analysis in this research identified a pattern of neglect, delay and deferral that has contributed to population decline in Inishbofin. Pervasive population decline is evidence of a spatial injustice partially resulting from this island's non-Gaeltacht status, which was a result of colonial violence. 'States may have responsibilities to provide adaptation as a remedy for climate vulnerability caused by colonial violence' (Bordner, Barnett and Waters, 2023). Marginalisation continued from colonial to post-Independence control of the island must be acknowledged and redressed so that the community can implement climate change mitigation and adaptation from a position of strength rather than ongoing marginalisation.

Traditional 'top-down' governance, even when framed as 'bottom-up' through 'outside-in' approaches, is less effective than transparent collaboration and equity in integration of local knowledge when addressing problems like population decline and climate change. The optimal commitment by government in delivery of an islandness approach and policies specific to islands, and developed with their communities and representative bodies, would be creation of a new ministerial position. It would hold responsibility for the islands as part of government's already publicised 'positive discrimination' aim, at least until islands are 'climate proofed' and preexisting neglect and injustice has been ameliorated. The evidence of success will be a sustained increase in full-time residency within island populations including the return of Islander migrants and relocation of people of family-formation age, and ultimately in generational renewal. The intended outcomes of implementing the two recommendations that follow would be to increase the sustainability of island communities while reducing their climate change vulnerabilities.

9.4.2.1 Climate Change Risk Assessment and Policy Through a Flat Ontology Approach Ireland's islands are geographically located in areas of high climate change risk, and particularly subjected to the impacts of sea level rise and altered weather patterns. While each island is distinct, and some have bridge connections to or are located at less distance

from the mainland, increased climate change vulnerability is a geographic commonality of island realities. To redress the historic neglect in compilation of ocean, weather and climate data for the islands, and the lack of socio-cultural data that centres islandness and thus increases in-depth understandings of island vulnerability to climate change, research leading to a focussed climate change risk assessment should be formed on both qualitative and quantitative study for each island. Island populations should be active participants. Findings should be then applied in support of development of appropriate mitigation and adaptation policy that centres islandness and incorporates the proven resilience and adaptive capacities of Islanders, with their full participation, framed within a 'flat ontology' (Martson *et al.*, 2007) whereby hierarchies of knowledge and power are renounced so that island communities are effectively and sustainably resourced.

9.4.2.2 Delivery of Islands Infrastructures and Services through an Islandness Approach

This recommendation is to deliver and complete the infrastructures and services already committed to by several authorities, to maintain them, and to assess in active collaboration with island communities what they need through an islandness 'lived realities' perspective formed from local, place-based knowledge rather than a mainlandness 'prescriptive' perspective formed from hierarchical positioning. Policy initiatives must additionally centre a 'whole of island' approach. In Inishbofin, and likely for additional islands, this includes completion of sea walls and revetments, and repair of infrastructures damaged during previous storms and/or erosion and flood. It includes a focus on development and maintenance of island-mainland piers as connectivity is crucial for island communities. It also includes delivery of health, education, communications and housing infrastructures, and local emergency services. The Our Living Islands, National Islands Policy 2023-2033 strategy acknowledges many of these challenges though contains little policy specifically developed for islands. Housing has been identified as a particular crisis for islands, and this strategy does contain initiatives to address this. To be successful, island-focused policies must engage transparently and directly with communities in recognition of their cultural authority and expertise, thus requiring a genuine shift from a hierarchical mainlandness to an inclusive islandness perspective.

9.5 Concluding Remarks

Islands are of land, ocean and people. Island communities globally, including Inishbofin and the rest of Ireland's islands, and coastal communities, must adapt to heightened climate change risk compared to the majority of mainland places. In Ireland, this risk is yet to be

effectively responded to in national or local policy, or state body or local authority practice. Rather, as this research finds, mainland-originating policy regularly acts in opposition to the inherent capacities of Inishbofin's community, impeding its vision of a sustainable future. The processes that create resilience locally are therefore tempered by policy that prioritises hierarchies of power and knowledge. Additionally, policies are founded on a perspective of resilience that presumes statis while lived resilience, driven by knowledge and experience of ongoing and abrupt change, and the recognition that there are unknowns, emerges through the capacity for continuous transformation.

To understand our future, we must understand our past and our present, which necessitates examination of previously accepted conceptualisations, as evidenced throughout this thesis. While weather is an immediate bodily and sensory experience, climate is a shifting idea variously known through memory, myth, and/or mathematics. The idea of climate that gains meaning for people forms through knowledge of weather in place over time, which contributes to social stability. Climate change, as it is now experienced and will be experienced, is a result of human behaviour and actions. Climate change adaptation cannot be separated from preexisting socio-cultural realities including marginalisation and associated exposure of services and infrastructures. Therefore, climate and social justice are intersecting challenges that can be equitably addressed through examination of the root causes of marginalisation. By being reframed through relationality in application of increased interdisciplinary study so that qualitative and quantitative study equally inform decision making, climate policy can gain similar meaningfulness as weather potentially engender invigorated societal response. Correspondingly, in a reconceptualisation of the dominant discourse, climate change adaptation policy must respond to long-term patterns of both weather and culture.

APPENDICES

A: Paths of Movement in the Weatherworld of Inishbofin

'Wayfarers walk at once in the air and on the ground' in a process of 'thinking and knowing' whereby 'knowledge is formed along paths of movement in the weather-world' (Ingold, 2010: 121). Ingold proposes that experiencing weather is 'at the root of our moods and motivations ... at the very temperament of our being', and that weather is therefore 'critical to the relation between bodily movement and the formation of knowledge'. Therefore, how knowledge is made is not as a construction but rather as an 'improvisatory movement' that is 'open-ended and knows no final destination' (Ingold, 2010: 121). The weather is an 'all-enveloping infusion which steeps [the] entire being' (Ingold, 2010: 131) in Inishbofin, through embodied movement and relationality within the islandscape meshwork. Figure 5 illustrates paths taken, with those demarcated in grey mainly travelled during winter, and those in orange accessible and travelled in spring and summer.

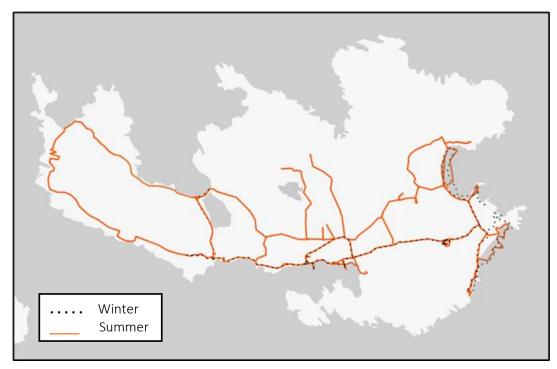
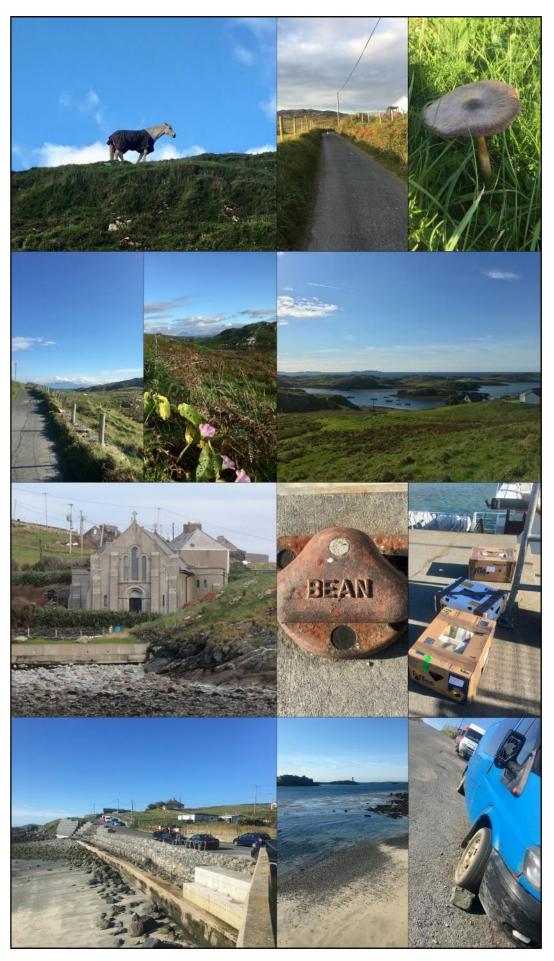


Figure 5: Outline of Inishbofin illustrating paths of movement. Source: Author (2023)

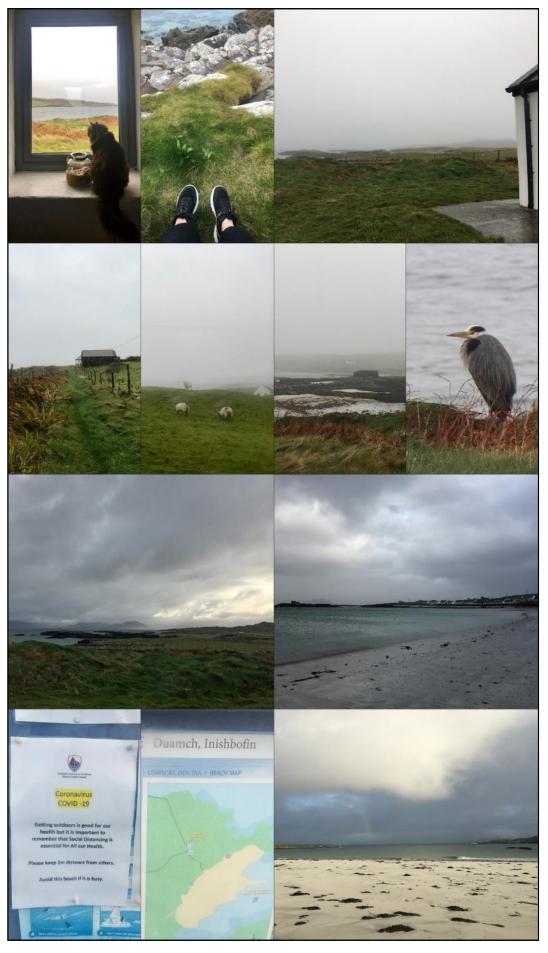
The images within the section to follow, while acknowledged as uni-sensory, are therefore an attempt to visually communicate a personal experience of paths of movement within the islandscape. The images included were taken primarily between October to December 2020 during Covid-19 restrictions, on my paths to the shop, East End beach and Dumhach

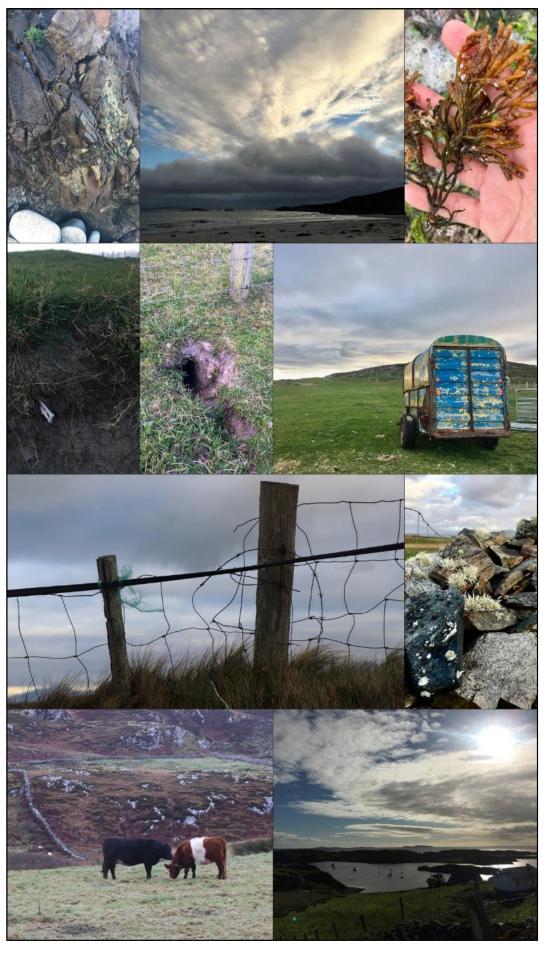
beach (marked in grey in Figure 5). As mentioned, this became a time of learning how to live here through growing knowledge of this place by entering its entangled web of relations. Thus, these images attempt to communicate the weather, other than human life, socio-cultural and socio-ecological entwinement, enmeshment, spatiality and temporality, as how humans create a conceptual representation of the external world, including weather and the rest of nature, is removed from any divide between nature and culture. Several locations well-known to me that I see every day are represented in various weather conditions in an attempt to illustrate how the characteristics of islandness merge with weather in constant creation of new meaning through transformation and fluidity, illustrative of the patterns of predictable unpredictability discussed in Chapter 8. Often, disproving mainland notions of the 'edge' of the island, a path leads off the outline of the map and beyond the land-water binary. 'Being at home in the world entails action and perception, and to act and perceive one must move about' (Ingold, 2005: 507). Therefore, relationality persists yet, never static, it is always becoming as paths of movement are influenced by climate, weather and season, past and present human shaping of land, the rest of nature and other than human entities.

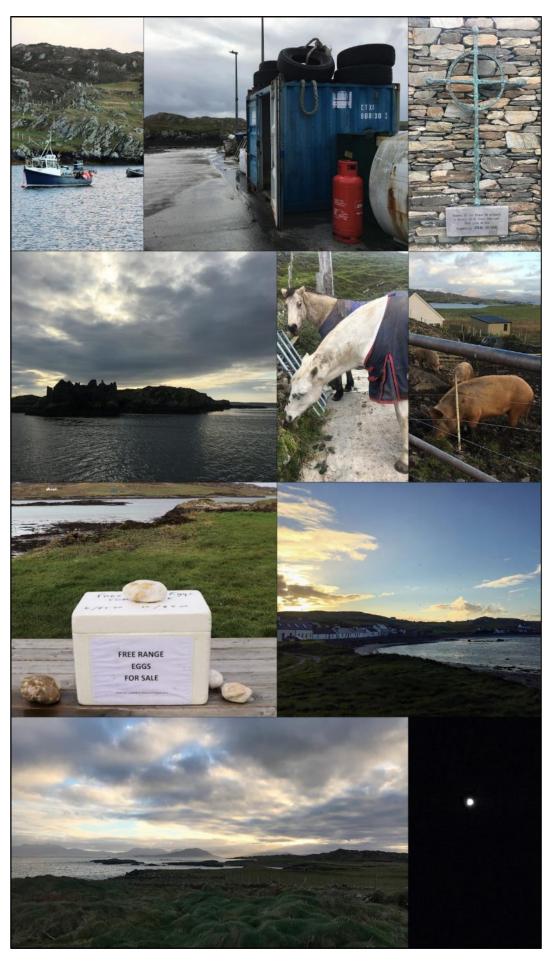


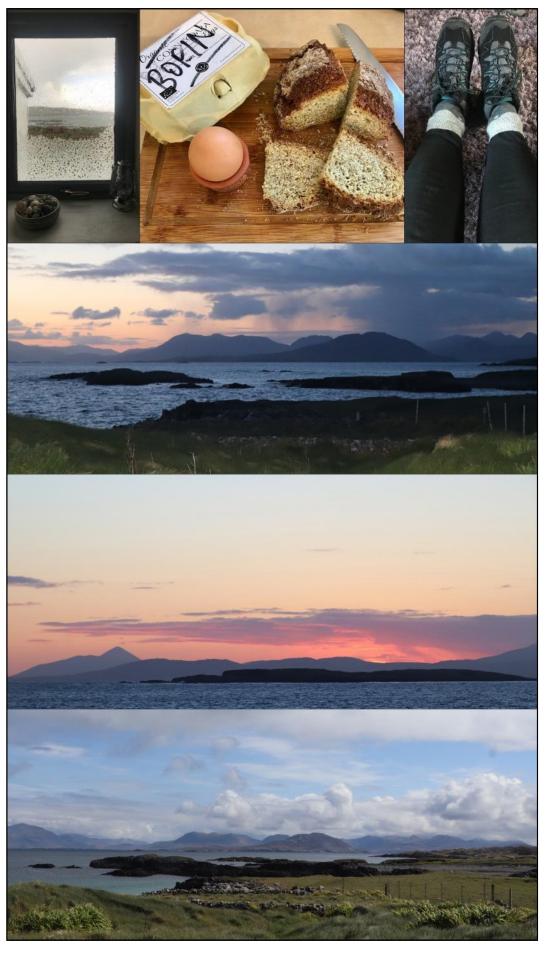


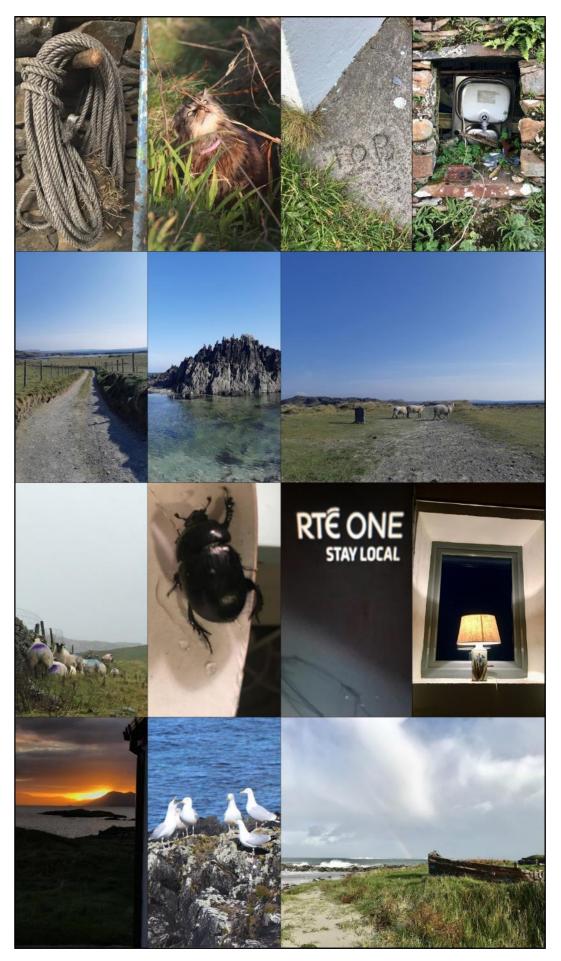


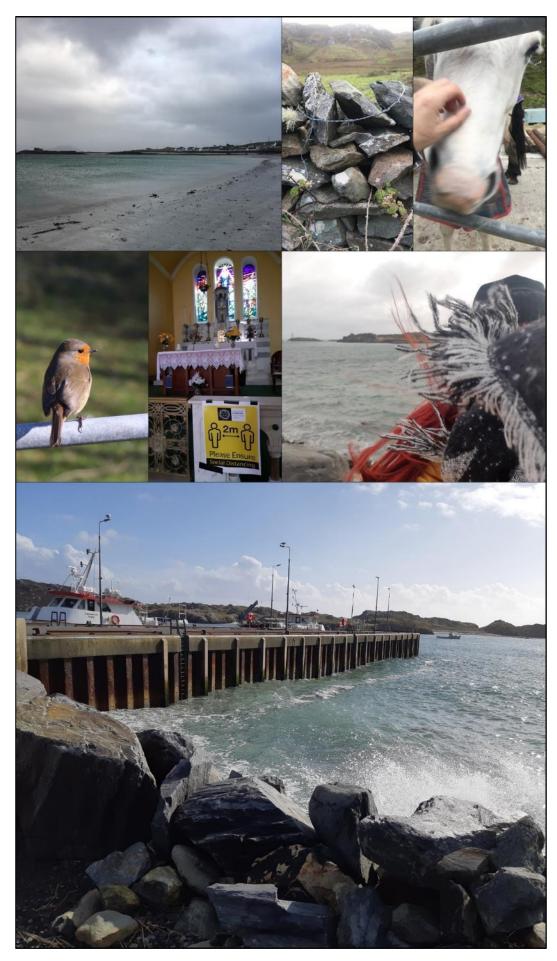


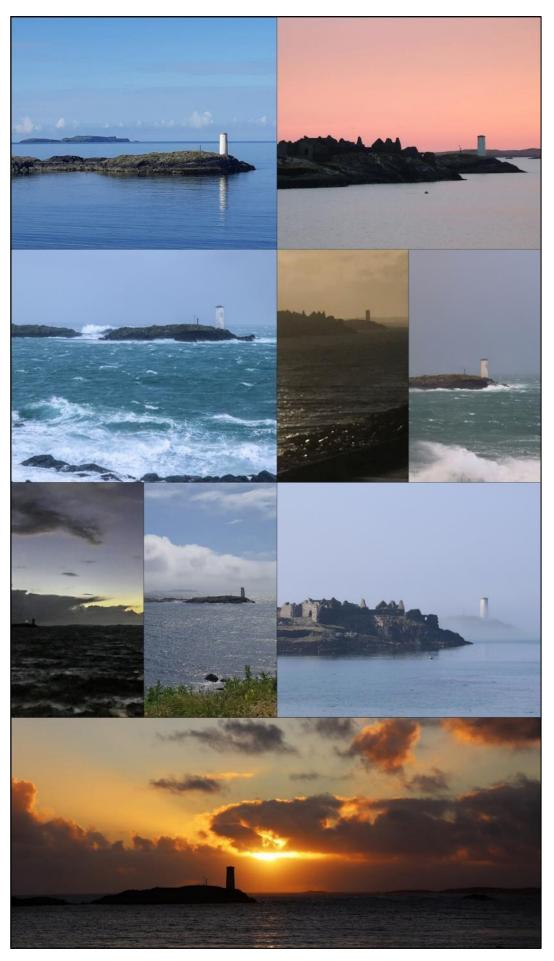












B: Participant Information Form (UG)

INFORMATION REGARDING RESEARCH PARTICIPATION:

INISHBOFIN ISLAND

Thank you very much for agreeing to be interviewed as part of my BA research. As a third year student of anthropology and geography at Maynooth University, my research is concerned with cultural change as a result of weather or climate events that may be attributed to anthropogenic/human-made climate change. In Ireland, research into how global climate change may influence local culture change, or how culture influences perceptions of climate change, is not yet sizable, resulting in a knowledge gap. I hope to start bridging this gap while contributing to the growing body of international work.

Your participation takes the form of an interview or interviews, at a time/s and location/s convenient for you. I will make an audio recording and/or take notes to be used to inform my work (and support my memory!). Comments, opinions or thoughts you express may be quoted, attributed to you or referred to in my thesis/project or in other work I may produce in relation to this research. You may opt for such inclusions to be referenced anonymously. I also may request to take your photo for inclusion in my thesis/project and you may, of course, decline this.

Your participation in this research is voluntary, and the right to withdraw or discontinue participation at any time without giving a reason remains yours. It must be recognised that, in some circumstances, confidentiality of research data and records may be overridden by courts in the event of litigation or in the course of investigation by lawful authority. In such circumstances the University will take all reasonable steps within law to ensure that confidentiality is maintained to the greatest possible extent.

If during your participation in this study you feel the information and guidelines that you were given have been neglected or disregarded in any way, or if you are unhappy about the process, please contact my Supervisors (contact details below) and/or the Secretary of the National University of Ireland Maynooth Ethics Committee at research.ethics@mu.ie or 01 708 6019. Please be assured that your concerns will be dealt with in a sensitive manner.

My Thesis Supervisors in the Department of Anthropology are:

- Dr Steve Coleman | steve.coleman@mu.ie | 01 708 3932.
- Dr Thomas Strong | thomas.strong@mu.ie | 01 708 6719.

My Geography Department module Supervisor is:

- Dr Adrian Kavanagh | adrian.p.kavanagh@mu.ie | 01 708 6014.

I greatly value and appreciate your time and your contribution, and look forward to the opportunity to learn about your experiences, observations and insights.

With thanks,

Shirley Howe

October 2017

shirley.howe.2016@mumail.ie | 087

C: Consent Form (UG)

CONSENT FORM

RESEARCH PARTICIPATION: INISHBOFIN ISLAND, 2017

NAME:

I agree to participate in an interview or interviews with Shirley Howe as part of her BA research

projects in the Departments of Anthropology and Geography at Maynooth University on culture and

climate change on Inishbofin Island, Co Galway.

I confirm receipt of an Information Sheet that includes contact details of the Secretary of the

National University of Ireland Maynooth Ethics Committee, those of Shirley's academic

Supervisors in Maynooth University, her contact details, and additional information that I have

read and understood regarding my participation in this research.

I understand that my participation in this research is voluntary and the right to withdraw or

discontinue participation at any time without giving a reason remains mine.

Please circle your choices:

I agree/do not agree that my contributions may be audio recorded.

I agree/do not agree that my contributions may be quoted/attributed to me.

Signed:

Date:

D: Participant Information Form



INFORMATION REGARDING PHD RESEARCH PARTICIPATION

INTRODUCTION I would like to invite you to take part in a research study. My name is Shirley Howe. I am a PhD student with ICARUS, the Irish Climate and Research Institute, Department of Geography, Maynooth University (MU), Maynooth, County Kildare. The working title of my research project is 'Of Land and Ocean: Culture and Climate on Ireland's Islands'. I have received funding for this research under the Hume Scholarship at MU, and from the Irish Research Council and the Environmental Protection Agency through the Government of Ireland Postgraduate Scholarships.

Before deciding if you would like to take part in this research, it is important that you have information about it and what it would involve for you. Please read this information carefully and do not hesitate to ask me any questions if there are any parts that are unclear or that you'd like more information on.

WHAT IS THIS RESEARCH ABOUT? This research is about weather, climate and Ireland's islands. Weather and climate change studies with communities in Ireland, especially island communities, is lacking. People living in smaller islands are recognised as being very resilient, with strong community networks and cultures that support how they deal with the weather and sea events (and other events) they experience. Inishbofin Island has recently experienced extreme weather events including the storms of 2013/2014. Many members of the community have previously shared their insights with me about these storms and their impacts (when I visited in November 2017) which contributed to my projects as an undergraduate student at MU. This PhD research is building on the 2017 visit to try to understand more about how society and culture contribute to how people manage and perceive extreme weather and/or climate change impacts, how community resilience is formed, and if they have any concerns for the present or the future that are related to climate change including impacts on local culture. The research is conducted through methods researchers use in both Geography and Anthropology. The main method, or approach, is ethnography. This means that I will be living on the island, participating in everyday events, and conducting interviews to try to understand what people think and feel about the topic.

WHAT HAPPENS IF YOU DECIDE TO TAKE PART IN THIS STUDY? Participants will be asked to share their experiences, memories, knowledge, opinions, thoughts and feelings about living on the island, island culture, and weather and climate with me through conversational, informal (semi-structured) interviews. You may also be asked if you would like to be photographed, and/or to contribute your own photographs, sketches or images. I will take notes during our interviews and other everyday activities. If you agree, I may take audio recordings. Participants will be provided with this information sheet and a consent form upon their first interview. They will be asked to sign the consent from, which I will keep. During subsequent interviews, I will remind you about consent and that I am a researcher. I will always ensure to prioritise participants' wellbeing and to respect their dignity, participation and collaboration in this research.

CAN YOU CHANGE YOUR MIND, IF YOU DO DECIDE TO TAKE PART? Taking part in this research is completely voluntary. You can change your mind if you do decide you'd like to take part. This is referred to as withdrawing consent and you can do this before an interview, during an interview, or afterwards, with no reason provided and with no repercussions or consequences for you.

ARE THERE ANY POSSIBLE BENEFITS OR RISKS IN TAKING PART? While there may be no direct personal benefits, your participation may offer the opportunity to contribute to meaningful research about how communities in Ireland, particularly island communities, experience and respond to weather and climate events, to the gathering of local knowledge about culture and history, and potentially to informing future research and climate adaptation and policy development. While there may be no direct personal risks, there is a time commitment involved. Additionally, some of the topics covered may lead to emotional discomfort or distress; for instance, discussion about past extreme events such as storms may lead into discussion about drownings. Should discomfort occur, the interview can be stopped at any time. Another unintended consequence to recognise is that sharing opinions or information could affect your relationships within the community or family/friend groupings. Also, within the community, complete anonymity may not be possible. If you feel uncomfortable, you can withdraw consent at any time. For the researcher, a benefit could be that contributions included in the thesis may contribute to the requirements specified toward award of a PhD degree.

COVID-19 ASSESSMENT I understand that there are many older and vulnerable community members present and am committed to meeting the highest standards of Covid-19 preventative measures. I will self-impose a quarantine on my arrival/s, and will be exemplary in my hygiene practices. I have an infrared thermometer, medical grade masks, and hand sanitiser. I will practice social distancing so that any physical transmission risk is minimised. I will monitor the situation via the HSE and Government sites and strictly follow public health guidelines throughout my stay/s. All government policies will be adhered to.

WILL YOUR NAME AND CONTACT DETAILS BE RECORDED? Pseudonyms, or fictitious names, will be used during data gathering (e.g. in notes). No personally identifiable information (e.g. names, descriptions) will be included in any of the data gathered nor in the thesis nor in any associated works. Complete anonymity cannot be fully guaranteed in this research project because the data will be gathered here and as this is a smaller community with strong ties and networks. The anonymised data in interview notes and transcripts will be retained as part of the research process. Any audio recordings are retained as part of the research process. The non-anonymised data in signed consent forms (e.g. name and contact details) are also retained. Retention practices are in accordance with Maynooth University policies. It must also be recognised that, in some circumstances, confidentiality of research data and records may be overridden by courts in the event of litigation or in the course of investigation by lawful authority. In such circumstances, the University will take all reasonable steps within law to ensure that confidentiality is maintained to the greatest possible extent. If there is a serious risk of harm or danger to either the participant or another individual, or if a serious crime has been committed, anonymity may not be possible.

HOW WILL DATA BE STORED? During fieldwork, all reasonable precautions will be taken in storage and protection of hard copy forms, recordings and anonymised data (e.g. notes). During and after fieldwork, the anonymised data will be stored on the MU drive online in secure locations. My PhD Supervisors and I, and other authorised MU staff only, will have access. My laptop is encrypted by MU with authentications required to access it. My phone is also password protected. Documents will be additionally password encrypted as necessary.

WHAT HAPPENS AFTER THE RESEARCH IS COMPLETED? I may contact you afterwards by email and/or phone to double check that I have correctly included any quotations or data you provided. The research will contribute to my PhD thesis which may be published. It may contribute to other work such as papers that will be presented at conferences and other events or published, or academic or media interviews, or talks, presentations and lectures, or other work I produce and disseminate in relation to this and future research. Following finalisation and approval of the thesis subject to examination and University processes, copies will be made available on request and the thesis will be hosted on the Maynooth University thesis repository online.

HOW CAN YOU CONTACT ME TO FIND OUT MORE ABOUT THE RESEARCH?

Please feel free to stop me for a chat at any time when you see me out and about. My contact details are:

• Email: shirley.howe@mu.ie

• Phone: 087

WHAT IF YOU WANT TO TALK WITH SOMEONE ELSE AT THE UNIVERSITY? This research will prioritise the principles of Maynooth University's ethics policy. These include respect for human dignity, minimising risk, the right of confidentiality, informed consent, and ethics in research dissemination. If during your participation in this study you feel the information and guidelines that you were given have been neglected or disregarded in any way, or if you are unhappy about the process, please contact my PhD Supervisors Prof Conor Murphy and Dr Chandana Mathur, and/or the Research Ethics Committee at MU.

Their contact details are:

- Prof Conor Murphy, ICARUS, Department of Geography
 - o conor.murphy@mu.ie / 01 708 3494
- Dr Chandana Mathur, Department of Anthropology
 - o chandana.mathur@mu.ie / 01 708 6083
- Research Ethics Committee
 - o research.ethics@mu.ie / 01 708 6019

Please be assured that any concerns will be dealt with in a sensitive manner.

THANK YOU.

Thank you for taking the time to read this information, and for considering participating in this research.

Shirley Howe

Maynooth University PhD Student

E: Consent Form



RESEARCH CONSENT FORM

FIRST NAME______SURNAME_____

This consent form relates to PhD research being conducted on Inishbofin Isla	nd by Shirley Howe.
I consent to the following:	Please tick yes (\forall) or no (X) on each line.
I have been provided with a participant information form and a consent form.	
I have had the opportunity to ask questions about the research.	
I have sufficient information about the research to enable me to decide whether or not to participate.	
I understand that my participation is voluntary, and that I can withdraw from this research at any time without providing a reason and without consequences or penalty.	
Are you willing to take part in the research?	
Are you aware that notes will be taken during interviews, conversations, and other activities?	
Are you willing to be audio recorded during interviews?	
Are you willing that your anonymised quotes and other anonymised contributions can be used in the study including in the thesis, papers, presentations and/or any other work that may result from the research?	
On the basis of the statements above, I agree to participate in this research:	
NAMEDATE	
EMAIL	
PHONE	
SIGNATURE	

F: Information Poster

Do you think about local ...

Weather. Storms. Erosion. Rain. Climate change. Sea level. Growing season. Tides. Culture.

I am from Maynooth University, and I'm asking if and how these affect life here on Bofin.

This is about what **you** think, know, and see.

Everyone from the island is invited to contribute and be part of this research.

All you need is the willingness to share some time, conversation, and cups of tea.

Text/call me on 087 or email shirley.howe@mu.ie

Or you'll see me out and about. I'm yer one with the red hair!

I am a PhD researcher at Maynooth University, County Kildare where I'm based in ICARUS, the Irish climate analysis and research centre in the Geography Department.

University approvals are available, and I will send on details and additional information to anyone who'd like to contribute to this research or who'd like to know more.

My PhD research is supported by the Irish Research Council. The working title is: "Of Land and Ocean: Culture and Climate on Ireland's Islands."

In so far as is reasonably possible, efforts will be made to ensure anonymity. No names will be noted on any information recorded as part of this research

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