

Moving Beyond 'Common Sense' Discourses of Nature-
Culture in The Scottish Highlands: A Critical Ethnography of
Wester Ross UNESCO Biosphere Reserve

Zoe Russell

Thesis submitted for the degree of
Doctor of Philosophy

University of Stirling

June 2022

Declaration

I declare that this thesis has been composed by myself, and that it embodies the results of my own research. I acknowledge that to the best of my knowledge this thesis contains no material written or published by another person, except where due reference to such is made.

Signature:

A handwritten signature in black ink, appearing to be 'L. D. M.', written in a cursive style.

Date: 21st December 2022

Abstract

This thesis is an interdisciplinary study of a UNESCO Biosphere Reserve in Wester Ross. It concerns nature-culture relations in a rural region of north-west Scotland which received biosphere designation in 2016. Biospheres are part of a global network of sites which exist to model sustainable development and conserve natural and cultural heritage. Drawing on heritage studies, environmental politics and sociology, this study examines the biosphere model in discourse and practice through critical ethnographic methods used in-person and online. It focuses on how the Wester Ross model, which is community-led, works to connect people with nature and move beyond the 'common sense' of the nature-culture dichotomy and neoliberal ideologies.

The biosphere is introduced as a designation, organisation and lens for place-making, illustrating how the model translates from concept to reality, and has been interpreted locally in practice. Assemblage theory is used as a way to conceptualise the community-led nature of biosphere as a rhizome. A range of contexts are drawn upon to show how actors in this assemblage negotiate and contest nature-culture relations relevant to communities, heritage and sustainability. Specific attention is given to regional conditions of unsustainability and practices of heritage-making which are perceived as important in Wester Ross. This includes crofting – an agricultural practice and form of land tenure – as well as the Gaelic language both of which are endangered.

The thesis points to the complexity of working with change and challenges for future-making, situating the negotiation of nature-culture relations within a broader multi-scalar context. This includes drawing attention to the influence of scale, landownership and governance and using critical theories of place and power to unpack the 'common sense' neoliberal ideologies. Finally, the thesis suggests how alternative approaches to nature-culture relations, including biocultural heritage, could support the development of more just and sustainable futures.

Table of Contents

Chapter 1: An Interdisciplinary Qualitative Study of Nature-Culture Relations in a Biosphere	1
A Global Approach to Nature-Culture Relations	2
Moving Beyond 'Common Sense'	3
Studying a Scottish Biosphere Reserve	5
Research Questions and Framework	7
Research Context: Historical and Contemporary Background	8
Thesis Overview	15
Chapter 2: An Interdisciplinary Review of the Literature	18
Theorising Nature-Culture Relations	19
Biosphere Reserves: Theory and Practice	28
Communities, Heritage and Landscape in the Scottish Highlands	43
Conclusion	51
Chapter 3: A Critical Ethnographic Methodology	53
Critical Epistemology and Ontology: Ways of Knowing and Seeing	53
Critical Ethnographic Praxis	55
Conducting a Multi-Sited Critical Ethnography	57
Multi-Method Data Collection	63
Ethnographic Writing and Analysis	70
Ethical Considerations	72
Conclusion	77
Chapter 4: Biosphere as Designation, Organisation and Place-Making Lens	78
The Biosphere as Designation	78
The Biosphere as Organisation	86
The Biosphere as Lens for Place-Making	93
Conclusion	108
Chapter 5: Negotiating Nature-Culture Relations in Discourse and Practice	111
The Interconnection of Natural and Cultural Heritage	111
A Model Region for Sustainable Development?	116
Conserving Cultural Landscapes and Heritage	127
Conclusion	140
Chapter 6: The Past, Present and Futures of Crofting and Gaelic in the Biosphere	143
The Heritage of Crofting as Loss and Abandonment	143
Contemporary Crofting in Practice	147

Gaelic in Wester Ross: <i>Gàidhlig ann an Ros an Iar</i>	160
Place-Based Future-Making? Across the Crofting-Gaelic Divide	173
Conclusion	174
Chapter 7: The Politics of Scale: A Myriad of Spatialities	176
Think Global, Act Local	177
Enacting Regional Sustainable Development	185
Scalar Politics in Nature Conservation	194
A Multi-Scalar, Participatory Governance Model for Connecting People and Nature	202
Conclusion	206
Chapter 8: The Politics of Land Use and Ownership in the Biosphere	207
Land Use and Ownership in Wester Ross: The Good, The Bad and The Ugly	207
Empowering Communities to Deliver Sustainable Development	213
Balancing Individual/Collective and Public/Private Interests	218
‘One of the Only Prerequisites of Being a Trustee is That You Don’t Live Here’	225
WRB: Between Micro and Macro Land Politics	230
Conclusion	232
Chapter 9: Conclusions: Many Alternatives for Just and Sustainable Futures	235
Summary of Findings	235
Biosphere as Alternative	241
Biosphere as Assemblage	244
Biosphere as Anti-Dichotomy	247
Implications for Politics, Policy and Practice	249
Research Limitations and Future Directions	255
Thesis Conclusion	256
References	259
Appendix 1: Interview Guide Examples	295
Appendix 2: Visualisations of Nodes in NVivo	297
Appendix 3: Ethical Approval Confirmation	299
Appendix 4: Participant List	300

List of Figures

Figure 1 Wester Ross Biosphere Reserve in North-West Scotland.....	9
Figure 2 Biosphere Zonation Model	38
Figure 3 Critical Ethnography Dialogical Triangulation	56
Figure 4 Location of Isle of Man Biosphere	58
Figure 5 Fieldwork Locations in Wester Ross Biosphere Reserve.....	59
Figure 6 Conceptual Map of Fieldwork Activities	60
Figure 7 WRB Board of Directors 2019	64
Figure 8 WRB Board of Directors 2022	65
Figure 9 Biosphere Organisation Activity Timeline During Research.....	66
Figure 10 Table of Volunteer Activities.....	67
Figure 11 Applecross Estate Boundaries and Applecross Wild Land Area.....	80
Figure 12 Wester Ross Biosphere Zones	83
Figure 13 WRB Working Groups.	91
Figure 14 Gairloch Community from the Auchtercairn Archaeology Trail.....	97
Figure 15 Auchtercairn Archaeology Trail Roundhouse Remains.....	97
Figure 16 Boathouse on Loch Broom.....	98
Figure 17 Sense of Place Tree Activity.	100
Figure 18 Gairloch Harbour.....	104
Figure 19 Marine Recreation and Tourism - Gairloch Harbour.	105
Figure 20 Native Woodland Regeneration on Applecross Estate.....	117
Figure 21 Contemporary and Historic Industrialised Forestry in Wester Ross.....	121
Figure 22 Applecross Heritage Centre – Emigrations From Applecross.	130
Figure 23 Heritage Interpretation of Military Presence.....	130
Figure 24 Am Bàta Project.	137
Figure 25 Traditional Skill Interpretation - Applecross Heritage Centre.....	139
Figure 26 Crafts Using Wool and Plant Dyes - Applecross Heritage Centre.....	139
Figure 27 Ruined Vernacular Building and Bracken-filled Landscape in Applecross.	144
Figure 28 Blackhouse Ruin and New Croft House in Applecross.	144
Figure 29 Glenarigolach Township in the Valley of Allt a Ghlinne	145
Figure 30 Historic Crofting Tools - Gairloch Museum.	146
Figure 31 Plockton Village Interpretation Board - Balmacara Estate.	147
Figure 32 Interpretation of Crofting Using Local Perspectives.	148
Figure 33 Example of Grazed and Neglected Land in Applecross.....	149
Figure 34 Sheep Grazing in Wester Ross.	151
Figure 35 Gaelic Place Names Collected in Applecross.....	169
Figure 36 Phoebe Presenting on SDGs - Upland Management in Scotland Conference	178
Figure 37 Posts for SDGs 4, 7 and 8	179
Figure 38 EU-funded Path Network in Wester Ross	190
Figure 39 Land Ownership in Scotland	208
Figure 40 Wester Ross Estates for Sale Advertised Online.	221
Figure 41 Seaweed on the Beach in Gairloch.	245
Figure 42 Biocultural Heritage 'Spectrum'	252

List of Abbreviations

ACC	Applecross Community Company
AHD	Authorised Heritage Discourse
BCH	Biocultural Heritage
BCHT	Biocultural Heritage Territory
BR	Biosphere Reserve
CGC	Common Grazings Committee
CE	Critical Ethnography
CHS	Critical Heritage Studies
CPR	Common Pool Resources
DMP	Destination Management Plan
EU	European Union
GALE	Gairloch and Loch Ewe Action Forum
HES	Historic Environment Scotland
HIDB	Highlands and Islands Development Board
HIE	Highlands and Islands Enterprise
ICH	Intangible Cultural Heritage
JMT	John Muir Trust
MAB	Man and Biosphere Programme
NNR	National Nature Reserve
NSA	National Scenic Area
NTS	National Trust for Scotland
RLUP	Regional Land Use Partnership
SCF	Scottish Crofting Federation
SCFF	Scottish Creel Fishermen's Federation
SES	Socio-Ecological Systems
SSSI	Site of Special Scientific Interest
SLC	Scottish Land Commission
UNESCO	United Nations Education, Science and Culture Organisation
WG	Working Group
WNBR	World Network of Biosphere Reserves
WRB	Wester Ross Biosphere Ltd

Acknowledgements

This research was funded by the Economic and Social Research Council on an interdisciplinary award, administered by the Scottish Graduate School of Social Science. I would like to thank these organisations for funding my work, granting necessary extensions to cope with the Covid-19 pandemic and for support with training and career development activities.

I was co-supervised across the Faculty of Social Sciences and the Faculty of Arts and Humanities at the University of Stirling. I thank my supervisors, Professor Samantha Punch and Professor Siân Jones for their continued support throughout the PhD. Guidance was offered on the thesis, and opportunities for career development. I appreciate the time I spent with each individually in roles related to research and teaching and working together as an interdisciplinary team.

There are many challenges and opportunities associated with doing interdisciplinarity in doctoral research. To navigate this process, myself and others co-founded a network of peer support called the Interdisciplinary Research Network. As a small core team managing the network, we wrote a collaborative paper (Blake et al. 2021) where we shared experiences of doing an interdisciplinary PhD. I would like to acknowledge the ongoing peer support I had from others in this network.

There are many people without whom substantial elements of this PhD would not have been possible. I would like to acknowledge the hospitality of Cyril Jones during my pilot study in the Isle of Man and Jo Overty for her dedication to support this pilot work. I thank my participants from the Wester Ross UNESCO Biosphere, especially the general manager, who not only welcomed me into their organisation but extended friendship and kindness. Additionally, I thank the board of directors for being open to my observations and contributions to their organisation. I thank all others in Wester Ross who welcomed me into their homes and lives whilst completing my research for their generosity, hospitality and honesty.

I acknowledge those from within the University of Stirling including Miriam Snellgrove, Sarah Wilson and Richard Simmons who have supported and encouraged me in different ways before and during the PhD. I would also like to thank Chris Dalglish for hosting me at the Inherit Institute for a 3-month internship, and his enthusiasm for working collaboratively on the subject of biocultural heritage in the UK.

Finally, I would like to thank my partner and close family for supporting me as I completed this PhD.

Chapter 1: An Interdisciplinary Qualitative Study of Nature-Culture Relations in a Biosphere

Out of the UNESCO Man and Biosphere Programme emerged a vision for,

...a world where people are conscious of their common future and interaction with our planet, and act collectively and responsibly to build thriving societies in harmony within the biosphere. (UNESCO 2017)

A World Network of over 727 Biosphere Reserves (BRs) are working towards this vision acting as learning sites for conservation and sustainable development (UNESCO 2021b). BRs provide 'local solutions to global challenges' at a regional scale, nominated by national governments (UNESCO 2021a). This includes in Wester Ross, a rural region of northwest Scotland that was designated in 2016 as a 'community-led' model, which is rather unique in the World Network. Here, a small but dedicated group of community members are working together to implement the designation and address locally and regionally specific sustainability challenges. This has brought the communities, heritage, and landscapes of Wester Ross into a global initiative for change, and as one member of the biosphere organisation put it, 'we are thinking globally, while we're acting locally.'

This thesis contributes to the overarching question of how to live sustainably within planetary boundaries. It focuses on moving beyond the 'common sense' separation of nature and culture and neoliberal capitalist ideologies through a critical ethnographic study of a community-led BR in the Scottish Highlands. The research concerns what BR designation means for communities, heritage and sustainability in Wester Ross as understood by local actors. It also explores how actors managing the BR negotiate nature-culture in discourse and practice, and considers the influence of scale, governance, and landownership on both of these questions. A central aim of the work is to consider how to move towards more just and sustainable futures.

This introductory chapter outlines the key research context, starting with a global approach to nature-culture, what it means to move beyond 'common sense', and researching a BR in the Scottish Highlands. The chapter then introduces the research questions and framework and historical and contemporary background relevant to communities, heritage and landscapes in Wester Ross. The chapter concludes with an overview of the thesis.

A Global Approach to Nature-Culture Relations

The contemporary moment is defined by awareness of a world experiencing significant transformations on a planetary scale (DeSilvey et al. 2020). Human activity has brought about fundamental changes in environmental conditions, leading to the characterisation of a new epoch, the Anthropocene. Such conditions include the loss of biological and cultural diversity around the world which informs the increased focus on understanding 'nature-culture relations' as a means to 'bolster sustainable practices at all scales' (Merçon et al. 2019, p. 1). Although few places on earth are unaffected by human action, changes can be both positive and negative in all landscapes (Moran and Brondízio 2013). Importantly, Ellis et al. (2021, p. 7) show that it is not the cultural shaping and use of landscape that has caused current extinction crises nor is it the 'conversion of untouched wildlands', but rather the 'appropriation, colonization, and intensifying use of lands already inhabited, used, and reshaped by current and prior societies.'

The Anthropocene brings into question current ways on living on the planet (Guattari 2001) and evokes considerations of world-making; including how 'learning to die' as a civilisation invites us to learn how to 'live well' rather than better (Savransky 2022, p. 16). This concerns the requirements of life beyond 'modern' notions of progress and the 'ideal of civilisation' (ibid, p. 1). Savransky (2022, p. 3) defines this as a challenge of the 'political imagination', to imagine and enact the 'after' of a 'capitalist, growth-obsessed and ecocidal civilisation' which requires a 'radical transformation of the very foundations of human collective life'.

From a heritage perspective, Sterling and Harrison (2020, p. 38) suggest that we must 'deterritorialize the future', embracing 'multiplicity to encourage new ways of imagining and engaging with the past in the present to shape alternative futures.' Through the act of deterritorialization, relations are undone and decontextualised, creating space for new relations to occur, and although such processes are inherently part of capitalism, they can also be pursued as a way to make the future 'less beholden to the present, less dependent on the now' (ibid, p. 31). Following Deleuze and Guattari, DeLanda (2006) positions deterritorialization and territorialization as processes of change through which new assemblages can emerge.

This is the context in which I approach the UNESCO BR in Wester Ross, as a possible model for more just and sustainable futures. I follow the logic of MacKinnon et al. (2018, n.p.) that European imperialism is a 'generative force in the development of the Anthropocene'. In contrast, the lifeways and worldviews of indigenous and colonized peoples are a potential source of 'insights by which to negotiate the Anthropocene and challenge and change habits of thought and action that have led us to its threshold' (ibid). I therefore pursue 'cross-world dialogue' (Punch 2015, p. 689), an interdisciplinary approach which produces valuable learning by blurring the boundaries between the Majority and Minority Worlds (Punch 2016). I bring together literature on communities, heritage and sustainability from diverse global contexts, which aligns well with the idea of BRs as a platform for comparative, international and interdisciplinary research (Reed and Price 2020a).

Chapter 2 creates dialogue between many disciplinary literatures, including sociology, heritage studies and environmental politics, denoting an interdisciplinarity based on synthesising critical qualitative knowledges across global contexts. This approach is challenging but is productive as a way to contribute learning to, and learn from, the World Network of Biosphere Reserves (WNBR). Across global literatures, boundaries were relatively porous, with cross-fertilisation occurring due to complementary concepts (place, landscape, community, sustainability, power, scale) and critical theories. My theoretical perspective is influenced by a critical ontological and epistemological approach utilising Gramscian, post-modern and anarchist theory to advance the aim of moving beyond 'common sense'.

Moving Beyond 'Common Sense'

'Common sense', refers to Gramsci's (1971, p. 322) notion of everyday thinking, described by translators Hoare and Smith, as the 'uncritical and largely unconscious way of perceiving and understanding the world that has become "common" in any given epoch.' Common sense sits within Gramsci's (1971) theory of hegemony, language and philosophy of praxis, which also positions nature and society 'as inseparable, active relations', and concerns 'forging critical conceptions of the world' (Wainwright 2013, p. 169). Common sense is not singular, it differs in time and space (Gramsci 1971), however, 'a hegemonic discourse articulates and prioritizes some

common senses to the detriment of others' (Kallis 2018, p. 138). This is tied to an understanding of how our consciousness is shaped within 'specific cultural worlds at specific historical moments' (Crehan 2011, p. 277).

Gramsci's work has been used effectively by Hall (1987; 1991) to highlight an expanded notion of politics, power and authority, and to critique neoliberalism in the UK (Hall and O'Shea 2015). His work helps to explain 'the relationship between culture and power and how culture serves a constitutive role in the establishment and reproduction of social and political domination' (Garner and Hancock 2014, p. 433). Importantly, because common sense and hegemony are never fixed, but rather made through struggle, change is always possible (ibid). Common senses are transformed through 'good senses', which are also heterogenous and plural, contextually specific and defined through political struggle (Snir 2016). Such notions accommodate the complex interrelation of structure and agency, discourse and practice, alongside diffuse notions of power.

In previous work, influenced by neo-Gramscian approaches to conservation, I examined discourses of Scottish nature conservation designations (Russell 2021a). I was concerned with the exclusion of people from natural resources as part of 'common sense' hegemonic agendas and ideologies of conservation and sustainable development (see Brockington et al. 2008; Igoe et al. 2010). For example, capital accumulation is pursued through privatisation and enclosure (Kelly 2011; Harvey 2004), strategies which undermine the common property resources of marginalised groups (Sugden and Punch 2014). Moreover, such literatures point to ongoing processes surrounding the neoliberalisation of nature, including how concepts such as ecosystem services become part of the 'common sense' that renders nature visible to capitalism (see Adams et al. 2014; Brockington 2011).

These are relevant in Scotland where historic dispossessions of people from land for capitalist 'improvement' were followed by conservation of these same landscapes described as wild and natural. Moreover, the call to decolonize conservation in Scotland reflects an acceptance that historical land dispossessions have a direct link to contemporary land ownership conditions (Toogood 2003). In my previous work I found that Gaelic understandings of landscape andcrofting practices especially, were also

being marginalised by the production of the nature-culture dichotomy in national designations such as wild land areas and national nature reserves (Russell 2021a). However, the UNESCO BR designation appeared to go beyond this 'common sense', articulating a more explicit view of people *in* nature, certainly in discourse. This suggested the need for research to consider whether a BR can support the move beyond 'common sense' nature-culture relations.

Building on earlier work, in this thesis, I research the Wester Ross BR ethnographically, considering what it means for communities, heritage and sustainability, and examining the complexity of nature-culture relations in practice. Moving beyond policy discourses, I explore 'common sense' and hegemonic agendas as part of a nuanced understanding of the complex and paradoxical politics of the state (see Newman and Clarke 2015). Moreover, I adopt a 'heritage sensibility' for nature-culture relations, which Harvey (2015) has shown is particularly productive at the heritage-landscape interface. Extending this to nature-culture relations aligns well with viewing heritage as connected with other social, economic, political and ecological issues (Harrison 2015). A heritage sensibility for moving beyond 'common sense', informed by critical theory, is also about transcending 'authorised heritage discourses' (Smith 2006). These are the dominant elite perspectives and ideologies which can obscure alternative ways of seeing and doing heritage. Regarding prospects for more just and sustainable futures, I follow Wichterich (2015, p.83) in that 'there are many alternatives' to western, colonial forms of development in the global North. I focus on if, and how a UNESCO BR in Scotland creates such alternatives.

Studying a Scottish Biosphere Reserve

My study of Wester Ross was informed by arguments pertaining to the opportunities and challenges of the BR model. Although it is argued BRs could support the reversal of, or increase resilience in, the Anthropocene (Moreno-Ramos and Müller 2020, p. 266), there is also concerns about a 'concept-reality' gap (Hockings et al. 2020). The implementation and effectiveness of BRs varies globally in practice and although it appears holistic, it must be examined in practice in specific local and regional contexts. Very few studies exist of BRs in the UK, and there are varied governance models

including the Isle of Man's entire nation approach (Price 2020; Russell 2022) and Wester Ross as community-led (Price 2017).

The community-led model in particular is interesting given that Stoll-Kleeman and O' Riordan (2017) suggest more must be done to ensure people are placed at the heart of BRs in the Anthropocene. The Wester Ross BR could offer important learning on how to achieve this in practice, supporting the implementation of participatory governance with communities elsewhere. Moreover, as a community-led international designation implemented in a regional and national context, the Wester Ross BR is an exciting case to examine the politics of scale (Lähdesmäki et al. 2019; Harvey 2015) and a 'progressive sense of place' (Massey 2005b). These are important to move beyond reifications of BRs, towards more nuanced understandings of power relations associated with territorialisation and governance in the negotiation of nature-culture relations. Territory and scale are also a vital component of the political landscape under capitalism (Cox 2013), and I would argue critical to understanding the 'multi-scalar' BR governance model (Wilkes 2022). In the Scottish context, this is connected with challenging land use and ownership conditions and land is central to questions of futures in the Highlands and Islands. Such issues, which are nationally significant have yet to be explored in the regional context of a BR.

With a remit for sustainability innovation and cultural landscape conservation, another challenge for BRs is negotiating ambiguity and narratives that may be difficult to reconcile (Aschenbrand and Michler 2021). This is about managing change and complexity in nature-culture relations, which is also important in heritage futures research, concerning processes of transformation in natural and cultural heritage conservation (see Bartolini 2020; DeSilvey et al. 2020). Bargheer (2014) has shown that the Man and Biosphere programme is underpinned by the endangerment sensibility (Vidal and Dias 2014), which concerns 'vulnerability, scarcity, loss and sustainability' (Sterling and Harrison 2022, p. 23). This is important in terms of what comes to be defined as heritage and few studies have considered this sensibility in a BR. This is especially relevant to the futures of endangered forms of community, heritage and landscape in the BR and research of these can help expand our 'collective imagination'

as part of 'thinking differently about the temporalities and territories of heritage' (ibid, p. 22).

Research Questions and Framework

Research is needed which draws attention to the spaces 'between natural and cultural heritage; the tangible and the intangible; the hyphens of landscape-heritage and heritage-landscape' (Harvey 2013, p. 153). Arguably, such spaces are examined through this research of nature-culture relations in a Scottish BR that addresses four main research questions (RQs):

1. What does the biosphere reserve designation mean for communities, heritage and sustainability in Wester Ross, according to local actors?
2. How are Wester Ross Biosphere (WRB) actors negotiating and contesting different discourses and practices of nature-culture?
3. In what ways do the politics of scale, governance and land ownership influence communities, heritage and sustainability in Wester Ross and WRB actors?
4. How might alternative approaches create opportunities to achieve more just and sustainable futures?

These are sequential and each addresses a specific gap in the current knowledge and literature whilst building on what is already known theoretically and empirically about BRs, communities, heritage and sustainability in the Scottish Highlands (see [Chapter 2](#)). My approach to the RQs is informed by critical theory, especially how relations are 'negotiated' and 'contested' in discourse and practice and shaped by power. As Foucault argues on the productive nature of power, we must analyse power in its effects (Nash 2010). He explains 'forms of power are heterogenous' and must be 'localized in their historical and geographical specificity' (Foucault 2007, p. 156). Such thinking can also be applied to BRs.

I follow Purcell's (2012, p. 512) formulation for radical geography, which advocates the possibility to hold 'in productive tension' Gramscian hegemonic politics and Deleuze and Guattari's non-hegemonic politics. The former concerns how power operates through hegemony and 'common sense', requiring counter-hegemonic movements from the bottom-up against the top-down. The latter, insists on resisting 'becoming majoritarian' emphasising horizontal and autonomous networks (ibid). As a 'both/and'

approach this is helpful for researching nuance, multiplicity and complexity within discourse and practice, and to 'connect up multiple elements and hold them in tension, but still allow them to remain distinct' (ibid, p. 516).

Theoretical pluralism allows inclusion of relevant concepts and critical theories in specific contexts where they add analytic value. This is part of the logic of critical ethnography, which is a qualitative methodology based on theorisations of cultural practice and the relationship between knowledge and power (see [Chapter 3](#)). I chose methods of participant observation, interviewing and documentary analysis which are common in ethnography and aligned with my RQs. The research was completed in-person and online between 2019 and 2022 with adaptations to the Covid-19 pandemic. I also completed a pilot study in the Isle of Man BR in 2019, and a three-month internship with the Inherit Institute on biocultural heritage in 2021, both of which informed this thesis, but are published separately.

Research Context: Historical and Contemporary Background

The RQs and my approach to answering them are shaped by historical and contemporary context across governance and politics, conservation and development and the land question. There are ongoing issues that emerge in each area that provide background for my research of nature-culture in the Wester Ross BR.

Wester Ross BR in the Scottish Highlands is one of only two in Scotland. It was originally designated in 1976, covering Beinn Eighe National Nature Reserve (NNR), before it was 'reterritorialised' in 2016 (Price 2017). Re-territorialisation refers to 'changes in conservation's territorial claims' (Adams et al. 2014, p. 576), in this case, updated UNESCO BR criteria, which required extension or delisting of many sites (see Price 2020). In Wester Ross, the BR became 100 times larger (Price 2017) bringing surrounding communities into new regional boundaries (see Figure 1). This occurred through a participatory process before 2016, which is the temporal starting point for this research.



Figure 1 Wester Ross Biosphere Reserve in North-West Scotland. OS Base Map & NatureScot data (Open Licence v.3)

Governance and Politics

The biosphere designation introduced a new territory of community and place in a regional context without a strong identity (ibid). Whilst introducing a BR in such a manner is challenging, it can also legitimise action at a scale undefined administratively (Mathevet and Cibien 2020). Wester Ross is subsumed in larger administrative areas, part of the county of Ross-shire, and today within the UK parliamentary constituency of Lochaber, Skye and Wester Ross and the Scottish parliamentary constituency area of Caithness, Sutherland and Ross. The ‘local government’ is Highland Council authority, which covers a geographic area the size of Belgium (Riddoch 2013). As an ‘executive arm of central government’, this offers little scope for local democratic decision making (Bryden et al. 2015, p. 106). A sense of remoteness and lack of power is characteristic of political governance (ibid), and especially relevant for community councils,

Scotland's lowest tier of democracy. The BR has seventeen community councils¹, alongside community development trusts and local museums, who play varied roles pertaining to heritage and sustainability in their areas. This multiplicity of groups reinforces the heterogeneity within Wester Ross and informed my use of multi-sited ethnography.

Such actors are part of the broader multi-scalar relations of politics and governance that shape conditions for biosphere governance (see [Chapter 2](#)) in rural Wester Ross. Rural governance increasingly involves the development of governing networks of state and non-state actors and ideas of vertical and horizontal networks (see Milbourne et al. 2006; Murdoch 2006). Understanding what the UNESCO Biosphere Reserve designation means for rural governance in Wester Ross thus requires attention to the politics of scale and power relations that are embedded in the development trajectories of regions. For example, as shown by Yang et al. (2015) in their analysis of multi-level governance in the Scottish context, lack of regional autonomy can prevent actors working at a regional scale from prioritising local needs. It is important here to avoid taking any 'governmentally determined region' or associated territorial unit as a 'naturally given container' that has internal coherence for governance purposes (Harvey et al. 2011).

Moreover, given the community-led governance model in this BR context, literatures on the relationship between communities and state agencies (see Mackinnon 2001, 2002) can also offer useful insights into ongoing challenges. This includes Dinnie and Fischer's (2020) research which notes how policies have often mobilised community actors through formal organisations who represent communities in multi-level governance partnership. Such policies often fail to recognise the multitude of meanings associated with rural communities which has implications for rural governance, community empowerment and resilience (ibid).

¹ Applecross, Aultbea, Coigach, Dornie and District, Gairloch, Garve and District, Glenelg and Arnisdale, Kinlochewe and Torridon, Kyle, Lochalsh, Lochbroom, Lochcarron, Lochduich, Plockton, Shildaig, Stromeferry, Wester Loch Ewe.

Conservation and Development

Biosphere designation is premised on the existence of already protected areas (Bargheer 2014) and Wester Ross has numerous, including: the UK's largest National Scenic Area, Beinn Eighe NNR, Sites of Special Scientific Interest, Marine Protected Areas, Wild Land Areas, Special Areas of Conservation and Special Protected Areas. The Association for the Protection of Rural Scotland also identified Wester Ross as a possible site for a National Park. Some claim Scotland has too many designations and that there is extensive proliferation and overlap within a complex system (Moir 1997; Warren 2009). This raises questions including, what does a UNESCO BR mean for an already heavily conserved area? How does it interact with other designations? What does it mean for communities, heritage, and sustainability?

The nomination form to UNESCO describes how the biosphere area is sparsely populated, with a density of 'less than two people per square kilometre, one of the lowest in Europe.'² There are four main settlements in the BR, Ullapool, Lochcarron, Gairloch and Kyle of Lochalsh, with communities mostly spread along the coast. How and where people live in the region, and their relationship to land and heritage, has been shaped by the Highland Clearances, which are described under historical land use in the BR nomination papers.

The Highland Clearances of the 18th and 19th centuries, dispossessed people from land to make way for capitalist 'Improvement' (Womack 1989, p. 2). Large-scale sheep farming was introduced and today, there remains more sheep than people in some parts of the region. Townships were broken up (Devine 1994) and people were moved to the coast, or they emigrated from Scotland. This was a period of significant socio-material transformation linked to British internal colonisation (MacKinnon 2017), and the eradication of Gaelic society and culture (Devine 1994). Alongside land dispossessions, from the 18th century Highland landscapes were romanticised as Sublime wilderness (Womack 1989). The failure to see such 'wild' and 'natural'

² The population of between 8000-10,000 is around 4.6% of the total Highland population and only 0.2% of the Scottish population.

landscapes as a product of clearing people and culture, feeds into contemporary critiques of conservation as colonialism in the Highlands (Toogood 2003).

Following 'Improvement and Romance' (Womack 1989), the 'Highland Problem' saw the region conceptualised from the 19th century by the British state as a 'development problem' (Munro and Hart 2000). Gaels were often blamed for the lack of commercialism and considered a barrier to progress (Devine 1994). They had to be integrated into the national economy, and their language as a symbol of cultural difference removed (ibid). Ongoing regional development challenges included depopulation, poverty, employment, and later, retaining cultural practices (including Gaelic and crofting) whilst pursuing 'modern' development.

By the mid-20th century, the Highlands and Islands Development Board was established to tackle these problems with emphasis on land reform and industrial development (Munro and Hart 2000). The board's successor Highlands and Islands Enterprise still exists today, and linguistic and cultural difference has come to be seen more positively as a source of development (ibid). McCullough (2018) argues that partly as a result of EU investment, the region is less 'problem' and more success, offering an example for other 'peripheral' regions in Europe. However, development challenges remain, especially around social, cultural, environmental and economic sustainability.

Tourism is identified in the UNESCO BR nomination form as the dominant sector in the Highlands and Islands, and accounts for around 35% of the economy of Wester Ross. This affects housing provision with 23.1% of local housing stock used as second or holiday homes, compared with 6.2% across the Highland region as a whole (Tourism and Leisure Solutions 2015). Lack of livelihood and housing opportunities for young people is a persistent challenge, which frames sustainable development priorities and concerns about a viable future for the region. Additionally, how to balance tourism development with conservation is an ongoing challenge.

In many BRs, ecotourism initiatives are pursued to try to balance conservation and development, and research has examined impacts for communities, livelihoods and value productions (see Mondino and Beery 2019; Olson 2012; Singh et al. 2009; Wilkinson 2019; Yuan et al. 2008). However, key challenges, as identified in a South

African BR, include how neoliberal discourses shape the economy, environment, and tourism industry within a broader context of ‘top-down planning and unequal power distributions’ (Lyon and Hunter-Jones 2019, p. 974). The complexities of tourism for communities, heritage and landscape have yet to be studied in Wester Ross BR.

The Land Question

The ‘land question’ captures the challenges of Scotland’s highly concentrated private land ownership which is not only a historical matter but a ‘living issue’ for the Highlands and Islands (Grigor 2000, p. 10). Land ownership has been problematised at a national level in Scotland with the introduction of land reform and community empowerment legislation (see Ross 2019; Sellar 2006; Warren and McKee 2011). The Scottish Land Commission has also produced recommendations to address the scale and concentration of ownership and the lack of ‘opportunities for local people to influence decisions’ regarding land-use change (Glenn et al. 2019). Community land and asset purchases have steadily risen in the Highlands and Islands within this broader legislative agenda (see Bryden and Geisler 2007; Hoffman 2013; Ross 2019; Warren and McKee 2011).

However, in Wester Ross, as described in the nomination forms to UNESCO, large privately owned estates are still ‘the most significant form of land holding’. Whilst public bodies, conservation charities and communities also own land, lack of transparency around private ownership is a challenge, exacerbated by absenteeism.³ There are approximately 79 estates covering 1,059,139 acres in Wester Ross.⁴ The largest estate is Letterewe, Heights of Kinlochewe and Tournaig, covering the area known as ‘The Last Wilderness of Scotland’ with an owner based in the Netherlands. Many estates in Wester Ross depend on activities such as deer stalking and fishing,

³ A total of 430,921 acres is owned by those with addresses registered outside of Scotland, 237,815 acres being registered to owners in England (around 55.1%), 68,436 in Jersey and Guernsey, 9,293 in Panama, and 111,002 in the Netherlands.

⁴ I relied on the work of Andy Wightman and his who owns Scotland website to determine this, using his map and a list of estate names and owners. Some of this information is likely to be outdated as it is 10-15 years old. I manually compiled a list of the estates within the biosphere boundaries to identify these landowners.

operating as sporting estates, or may pursue rewilding/environmental initiatives. The politics of land use and ownership is highly significant for communities, heritage and sustainability in Wester Ross and possibilities for BR collaborative governance.

The land question also invokes contested relations around land and crofting (see Devine 1994; MacPhail 1989). Crofting is an agricultural practice and form of land tenure created out of the Clearances in the 19th Century, replacing earlier forms of customary tenure in Gaelic society. Crofting covers around 25% of the land area of the Highlands and Islands (Scottish Crofting Federation 2022). It is regulated by the Crofting Commission, who describe it as important for culture, community, rural economy, land and environment. This includes population retention, stewardship of land and connection to Gaelic cultural heritage.

There are just under 3000 individual crofts in Wester Ross, predominantly spread along the coast.⁵ Crofting also includes ‘common grazings’, the most widespread form of common land remaining in Scotland (Brown 2006). Chapter 2 introduces literature on contemporary crofting which has been analysed as ‘heritage from below’ and linked to sustainable rural development. Crofting has yet to be researched in a BR, and there is scope to add to current understandings by focusing on contemporary interpretations of crofting in relation to communities, heritage and sustainability.

Connecting Past, Present and Future

Environmental problems are often analysed ‘ahistorically’ by conservationists, land managers and policy makers who fail to attend to how contemporary initiatives (e.g. BRs) can be ‘layered on top of already existing and unresolved contradictions inherited from the past’ (Mathevet et al. 2015, n.p.). Following Mathevet et al.’s (2015) Gramscian approach to historical political ecology in a French BR, throughout the thesis I remain conscious of the importance of historical dynamics for contemporary nature-culture relations in Wester Ross. The characterisation of the Highlands and Islands as a marginalised ‘periphery’ region in Scotland that has suffered population displacement

⁵ Based on filtering the Crofting Commission’s Register of Croft Holdings data by Parish.

and relations of inequality and colonisation, is relevant to contemporary communities, heritage and landscapes as has been shown in different contexts.

Jones (2012) highlights the power of the Highland Clearances in contemporary narratives of place, within a broader metanarrative of loss that frames contemporary marginalisation. Moreover, Course (2018, p. 51) suggests, 'current pressures of depopulation, unemployment, poverty, and ever-tighter conservation legislation are perceived as continuous with the tragedies of the Clearances and beyond.' Colonial legacies of past and present landownership were evidenced in a report on connections between landowners in the West Highlands and plantation slavery (MacKinnon and MacKillop 2020). The Clearances are also brought into public discourses around 'rewilding' or 'repeopling' the Highlands. Whilst some argue that rewilding is necessary to restore degraded landscapes that have suffered under decades of overexploitation within the estate system, others emphasise that people are the regions' most important resource for the future. This is often polarised in unproductive ways, and a BR as a designation for connecting people and nature might be a space to explore a more nuanced perspective.

Finally, those advocating for alternative futures for communities in the Highlands often argue for redress of historical and colonial legacies whilst proposing new positive relations between people and place (see Camshron 2021; McFadyen and Sandilands 2021). Hence, interpretations of the past in the present frame efforts to create more just and sustainable futures in the Highlands, and to 'deterritorialise the future' (Harrison and Sterling 2020). As will be discussed in Chapter 2, such perspectives are part of how different pasts are mobilised in the present which has been an ongoing area of importance in literatures on nostalgia and around concepts of loss, endangerment, and heritage from below.

Thesis Overview

This thesis contains nine chapters. Chapter 1 introduces the research context both theoretically and empirically and the RQs. Chapter 2 provides a review of the relevant academic literatures. As an interdisciplinary review, it brings together critical heritage studies, political ecology, sociology, and geography in a 'cross-world dialogue' to

elucidate nature-culture relations, the BR model, and literature on communities, heritage and sustainability in Highlands and Islands. Chapter 3 details the research methodology, including the critical ontology and epistemology, the critical and multi-sited ethnography, details of methods and participants, data analysis and ethical considerations.

Chapters, 4, 5, 6, 7 and 8 are the findings chapters. Chapter 4 introduces the biosphere as designation, organisation and lens for place-making, addressing the first RQ. The chapter considers zoning as territorialising practice, assemblage thinking, and place-making as part of ethnographic analysis of the biosphere. It lays the foundations for subsequent chapters. Chapter 5 examines how BR actors negotiate nature-culture relations in discourse and practice, focusing on the core imperatives to integrate natural and cultural heritage, act as a model region for sustainable development and conserve traditional cultural landscapes. Various case studies are used to illustrate the dynamics within the BR organisation and beyond and contribute to answering the second RQ.

Chapter 6 concerns crofting and Gaelic in discourse and practice in the BR. Each is presented as a case study focusing on representations as heritage and contemporary sustainability challenges in Wester Ross. This chapter brings in actors beyond the BR organisation and contributes to answering the first and second RQ. It draws on theories from heritage futures, relevant to managing change and narratives of loss and unsustainability.

Chapter 7 focuses on conservation and development, picking up threads from earlier chapters to examine the BR as a multi-scalar assemblage. This brings in global, national and regional contexts and relations between the Wester Ross BR and others in the WNBR. It also concerns relations with key national and regional stakeholders and how organisations' discourses and practices affect possibilities in Wester Ross. The chapter unpacks what scale does in practice and addresses the third RQ.

Chapter 8 examines the politics of land use and ownership in the BR. It brings to the fore perspectives of local actors, alongside private landowners and conservation charities in Wester Ross. The chapter addresses the third RQ, emphasising themes of

sustainable development and land reform, community empowerment, and the balancing of individual/collective interests. The chapter considers different models of land-use decision making, comparing the BR to other models in Scotland.

Each of the chapters contributes to the final RQ which is addressed explicitly in Chapter 9 on many alternatives for more just and sustainable futures. It outlines the main academic and practice contributions of the research and identifies limitations and future directions for Wester Ross, Scotland and beyond.

Chapter 2: An Interdisciplinary Review of the Literature

Following the logic of ‘cross-world dialogue’ (see [Chapter 1](#)), this interdisciplinary review of literature brings together a body of work from diverse settings, and disciplines which informed the development of the research questions. Three overarching themes structure the chapter: theorising the complexity of nature-culture relations and heritage; the UNESCO Biosphere Reserve in theory and practice, and the communities, heritage and landscapes of Wester Ross. The literature herein is a rich body of thought that incorporates thinking from anthropology, geography, heritage studies, political ecology, sociology and beyond. Together, it acts as the theoretical and empirical foundations of this research, from which I add new contributions addressing gaps, build on existing knowledge, and combine insights from synthesis and dialogue across complementary fields.

There are many conceptual and theoretical lenses concerning human-environment interaction. In this review, I prioritise those that align with my critical epistemological, ontological and theoretical influences, whilst also seeking to situate the thesis within broader sub-fields of research. Moreover, the literatures included herein are those which are most relevant to the ethnographic material of the thesis and can help to open up new meanings. In a critical dialogical approach, such literatures are not always identified *a priori* as one might expect of a ‘systematic’ literature review but can emerge later in the research process.

An important framing of this research and the literature in this chapter, is the dialectic and iterative relationship between theory and data (see Chapter 3). I use theoretical literatures and concepts in ways which reflect the nature of interdisciplinarity and critical ethnography. On the former, there is a flexibility needed to incorporate tools and approaches based on the research questions, rather than methodological constraints or disciplinary hegemonies (Cerwonka 2007). On the latter, it is about the

‘movement’ between empirical material and theory to make sense of what is being observed in the ethnography (ibid, p. 15).⁶

At the planning stages, I began with the language of socio-natural relationships that aligned well with the ‘socio-ecological systems’ literatures; an etic framework. However, through ethnographic encounters natural and cultural heritage and nature-culture relations emerged as a prominent emic discourse and organisational structure. This shaped renewed emphasis on literatures in critical heritage studies, and reflects the ongoing boundary work of interdisciplinary research (see Blake et al. 2021; Hinrichs 2008) carried out by the researcher through interactions with the field and academic literatures.⁷ Although the review is interdisciplinary, new literatures were added strategically and pragmatically, rather than seeking to cover every possible disciplinary perspective, this was necessary to remain within the physical scope of the thesis and provide a foundation for the specific research questions I sought to address.

Theorising Nature-Culture Relations

The nature-culture dichotomy is an ‘ontological marker of Western modernity’ which captures the separation of the natural and cultural along with dominance of society/culture over nature (Byrne et al. 2013, p. 1). Ingold (1993) conveyed this dichotomy in the ‘globe’ perspective, where humans act upon the world as if they exist outside of it. In contrast, the ‘sphere’, denotes humans acting within the world, as an integral part of it (ibid). The latter is common in indigenous ontologies that comprise more holistic and interconnected worldviews including ‘relational, embodied engagements with place’ (Barker and Pickerill 2020, p. 11).

The nature-culture dichotomy is often reproduced in nature conservation. As Hviding (2006) explains, despite ‘mutual relationships’ between people and land in the Marovo Lagoon, environmentalists interpreted the area as ‘pristine’, rather than ‘man-made’ and rich in cultural heritage. Similarly, wilderness ideologies and national parks erased

⁶ See also Voyer and Trondman (2013)

⁷ Such an approach to theory is common in ethnographic works such as Jones and Yarrow (2022) and MacDonald (2013).

Native Americans from the landscape (Cronon 1996). A significant body of research in political ecology therefore critiques forms of ‘fortress conservation’ which separate people from nature (see Brockington 2002; Büscher 2016; Hartter and Goldman 2011; Siurua 2006; Vaccaro et al. 2013). Whilst most of the focus of this work has been conducted outside of Scotland, as discussed in Chapter 1, I applied such thinking to nature conservation in Scotland (Russell 2021a).

In Scotland, as elsewhere, contemporary conservation of so-called ‘natural’ landscapes, which have been cleared of people and culture, are critiqued as part of colonial and capitalist processes (Adams and Mulligan 2003; Toogood 2003). The ‘unpopulated character’ of Highland landscapes is as much a symbol of ‘eradication of human communities’ as it is ‘suggestive of wild nature’ (Hunter 2014, n.p.). This contextualises the ongoing conflict between local land users and conservationists (Macdonald 1998). Seeking to move beyond such tensions, Hunter (2014, n.p.) suggests ‘people and nature can co-exist in ways which will benefit both.’ Whether the Highlands only BR contributes to this aim is at the heart of this research.

Transcending Heritage Dichotomies: Natural and Cultural, Tangible and Intangible

The nature-culture dichotomy is also problematised in heritage conservation, especially within critical heritage studies (CHS). CHS is concerned with ‘why and how some things come to count as ‘heritage’ and the consequences that flow from this’ (Macdonald 2013, p. 17). Heritage is socially constructed through processes involving different agents in which something can only be considered heritage through recognition within a set of cultural or social values and practices (Alonso Gonzalez 2014; Kansa 2013; Smith 2006). Heritage thus has no inherent or fixed value in and of itself (Smith and Akagawa 2009).

Smith’s (2006) elucidation of an ‘authorised heritage discourse’ (AHD) details the Eurocentric, professional discourse that naturalises specific understandings of heritage and value, tending to emphasise ‘materiality and universality’ (Smith and Campbell 2017, p. 3). The AHD (re)produces tangible-intangible and natural-cultural dichotomies and ultimately the flawed dualism of ‘soul/matter’ (Alonso Gonzalez 2014, p. 373). These are colonial and western ways of thinking and being (Harrison 2013), which fail

to recognise that heritage is always both tangible and intangible (Smith and Campbell 2017). Heritage dichotomies are embedded in policy and practice, part of the AHD as produced through (inter)national frameworks and institutions (Harrison 2013). For example, the separation of natural and cultural heritage in the World Heritage Convention (ibid). Tangible and intangible heritages are also dealt with separately, with the latter becoming more prominent since the UNESCO Convention on Safeguarding Intangible Cultural Heritage in 2003 (Ahmad 2006). Intangible cultural heritage (ICH) denotes cultural expressions, passed through generations, which reinforces the values of living communities within a broader scalar politics of the state (Kuutma 2019). Alongside research of ICH, Jones (2017) also draws attention to the social values of heritage, understanding and inclusion of which require changes to professional heritage practice.

Although the UK government has not ratified the ICH Convention, an inventory has been created in Scotland (McCleery and Bowers 2017). However, there remains gaps in ICH heritage practice, especially the two UNESCO domains of understandings of nature and the universe and traditional craftsmanship (Local Voices CIC 2021). Protecting ICH in Scotland and the communities that produce it is therefore an ongoing issue. Other gaps result from the separation of natural and cultural heritage in Scotland, which are the remit of NatureScot and Historic Environment Scotland respectively who operate largely in isolation (Dalglish 2018; Russell 2021b). This creates challenges for a more complex approach to nature-culture relations in policy and practice. However, when focused on values rather than specific objects/phenomena it can be possible to bring nature and culture together in practical management decisions (Konsa 2016). Moreover, although often existing in different domains in practice, natural and cultural heritage are underpinned by similar discourses and processes.

Harrison's (2015) dialogical model of heritage has introduced possibilities for heritage when the dissolution of boundaries between the natural and cultural is taken as given, proposing 'common processes' underlying heritage-making practices as categorizing, curating, conserving, and communicating. Similarly, Bartolini (2020, p. 375) suggests that emphasising 'process' works to 'blur the distinction between natural and cultural heritage.' Harrison's (2013; 2015) theorisation utilises a 'connectivity ontology' which

is informed by work with indigenous peoples and rejects dichotomies in favour of notions of 'becoming' (Harrison and Rose 2010). Not only do these theorisations point to a more nuanced understanding of heritage, but they create space for connecting heritage with a broader array of social, political and environmental issues (Harrison 2015). This argument is well suited to interdisciplinarity, and I follow this argument to explore these issues not as separate domains but as 'interconnected in fundamental and complex ways' (ibid, p. 31).

Natural and cultural heritage are endangered by the same forces (Lowenthal 2004) and a vast range of entities are coming to be 'perceived as essentially vulnerable' (Vidal and Dias 2014, p. 1). Narratives of loss and 'endangerment' are linked to thinking about past, present and futures in the Anthropocene and protecting heritages from detrimental change. Vidal and Dias' (2014) edited volume unpacks how the 'endangerment sensibility' has emerged and its various forms, including practices such as inventorying, ranking, and listing. These are part of a complex relation of 'knowledge, values, affects and interests' which form the imperative to preserve and protect that which is threatened (ibid, p. 2). Although Bargheer (2014) identifies this sensibility within the UNESCO Man and Biosphere programme, no studies have examined this in a BR in practice, which limits understanding of how 'the local and the global mutually determine each other in the appearance of endangerment sensibilities' (Vidal and Dias 2014, p. 113).

The endangerment sensibility should be contextualised within discussions of 'transforming loss' (see Bartolini and DeSilvey 2020), collective memory and productive or radical nostalgia (see Blunt 2003; Bonnett 2009). These contribute to a critical understanding of how 'the past is endlessly constructed in and through the present' (Urry 1995, p. 48). It has been shown across a range of heritage settings that certain pasts are memorialised, and others forgotten (see Carter et al. 2019). Connecting this to sustainability, Auclair and Fairclough's (2015, p. 10) edited volume contributes a 'cultural engagement' with sustainability through understanding the inheritance of the past. How actors negotiate and (re)interpret such pasts in the present is central to future-making practices.

Nostalgia has been understood in radical politics differently over time; often considered with hostility as anti-modernism (Bonnett 2009). The marginalisation of nostalgia has been replaced by a more nuanced approach to understanding the politics of loss as a space of negotiation (ibid). Nostalgia is 'a potentially productive, positive and future-oriented process which mobilises emotions drawing on the past to do something in the present... oriented to influencing the future' (Smith and Campbell 2017 cited by Campbell et al. 2017, p. 610). This draws attention to the emotive nature of heritage politics (see Tolia-Kelly et al. 2017) and the associated construction and changing nature of community identity which have been illustrated in some recent case studies of practice.

Lang (2017, p. 628) describes how in a fishing colony in Brazil, nostalgia 'mediates the tension between tradition and progress', part of the performance of heritage. In Native American communities, Orr (2017) also explores the complexities of different forms of nostalgia and emotions about the past. He points in particular to examples of restorative and reflective nostalgia (see Boym 2001), the former being indicative of motivations for 'return' of that which is lost, whilst the latter evokes a longing or dwelling; a desire for remembering. Orr (2017) draws critical attention to how nostalgia has more commonly been associated with non-Native forms of remembering Natives, whilst 'tradition' is the language used to create conditions for Native rights claims and political power. Finally, Griffin (2018) working in the context of histories of protest in Britain, importantly highlights the interplay between forgetting and remembering, which are both part of the 'spectrum' of actions by communities in the 'aftermath'. These studies provide a foundation for considering how pasts are understood and mobilised in the Scottish context (see below). They draw attention to the 'specific conditions of existence of particular discourses and practices of heritage' (Urry 1995, p. 53) and complement critical literatures on the politics of loss and endangerment sensibility.

Another important area of CHS literature is the use of critical theories to examine the places and spaces of heritage in a globalised world. The decline of the state and the emergence of globalisation (Meskell 2009), draws attention to how 'natural and cultural heritage are imagined in particular local and national ways... influenced and

impacted upon by global organisations and mandates’ (Meskell 2016, p. 486). A body of research has been concerned with the dynamics associated with territories, temporalities and scalar configurations, which can be subsumed within the concept of the ‘politics of scale’. In the heritagization process, ‘scaling’ imposes particular hierarchies and relations of power (Lähdesmäki et al. 2019) and as Harvey (2015) suggests, considering what scale does in practice is important.

This is mirrored in environmental governance and political ecology literature, where research of society-environment relations is ‘improved by analysing varying scalar configurations of interaction’ (Mauro 2009, p. 116). As in CHS, scale is not treated as a ‘container for human activity’ but as a ‘product of human activity’; the relationship between processes and places (O’ Lear 2010, pp. 7-8). For example, Nightingale’s (2015) analysis of communities and climate change in Scotland and Nepal, explains ‘scale mismatch’ in understandings of resilience and that scale can act as limitation and emancipation. Both temporal and spatial scales are also central considerations for commons management and socio-ecological systems research (see Ostrom 2009; Randhir 2019). A key issue identified by Ostrom (2012) is the ‘matching’ of scales of governance with specific types of collective action problems. This raises important issues regarding multi-scalar and polycentric governance which are discussed below in relation to BR governance. From a critical theoretical perspective, territory and scale, as argued by Cox (2013) are central to the political landscape and should be understood in the context of capitalism.

As well as applying the politics of scale to biospheres, I also take inspiration from the work of Deleuze and Guattari on concepts of territorialisation, which feature in heritage futures research (see Harrison et al. 2020). For example, Bartolini (2020, p. 375) shows how spatialisation strategies work to establish ‘distinct territories’ as part of managing ambiguity in landscapes of rewilding and ruination. She argues how territories are understood and (re)configured invokes notions of place-making and the ways in which ‘naturecultures are assembled’ (ibid, p. 376). As a way to theorise complexity and relationality, this is a productive conceptual approach for BRs.

Moreover, in Harrison and Sterling’s (2020) edited volume, they address the subject of heritage in, with and after the Anthropocene. They argue territories are more than

topographical, describing ‘all forms of social, organic and political organisation’ (Sterling and Harrison 2020, p. 30). As such, the act of ‘deterritorialization’ refers to how a ‘set of relations is undone or decontextualized, allowing new relations to occur’, hence the call to ‘deterritorialize the future’. Anarchists also make use of the concepts of (de)territorialisation in terms of building new societies in the shell of the old (Ince 2012). Taken together, CHS and anarchist thinking offer a way to examine power, politics and governance, and consider how new futures can be imagined and enacted in the present, informed by the past. These critical approaches are much needed in the literature on BRs.

Biocultural Heritage

The above literature offers a foundation to theorise nature-culture relations in productive ways, accounting for complexity and power relations. Alongside this work, literatures on biocultural paradigms raise key issues and conceptualisations relevant for studying a UNESCO BR. At a global scale, there has been rapid loss of biological and cultural diversity, which together can be understood as ‘biocultural diversity’ (Eriksson 2018; Merçon et al. 2019). Biocultural diversity offers a bridge across the nature-culture divide (Harmon 2007),⁸ and posits that moving towards a sustainable future means maintaining and nurturing the diversity and historical interdependencies of nature-culture (Newton 2009). The decline of biocultural diversity has been less rapid in territories managed by indigenous peoples and local communities (ICCA 2021). This challenges the notion that abandoning cultural landscapes in favour of ‘natural’ ones is intrinsically good for conservation (Agnoletti and Rotherham 2015, p. 3158). Hence, biocultural concepts have much to contribute to local and global sustainability (Merçon et al. 2019) including the integration of biodiversity conservation with cultural heritage revitalisation (see Maffi and Woodley 2010; Gavin et al. 2015; Maffi 2018).

⁸ See Bridgewater and Rotherham (2019) for how this concept has been understood in nature and heritage conservation. Also see Franco (2022) for an overview of how the terminology of ‘biocultural’ actually originated in anthropology as ‘biocultural studies’ – where bio refers to human biology and compared to how in biocultural diversity scholarship, bio refers to biodiversity.

An associated concept is biocultural heritage (BCH) which emerged from the practice of indigenous peoples (Swiderska and Argumedo 2017) and as an academic framework applied in diverse contexts (Ekblom et al. 2019; Lindholm and Ekblom 2019). In the early 2000s, the International Institute for Environment and Development (IIED) published on work with indigenous communities in Peru to create 'biocultural heritage territories' (BCHT); a bottom-up model to safeguard collective biocultural heritage (Swiderska 2006). BCH encompasses the natural-cultural components of human-environment interactions including knowledge, practices and innovation (Ekblom et al. 2019). Initiatives to protect BCH can involve revitalising customary practices, especially around landscape management, which also affirm endogenous governance (ibid).

Efforts to 'sustain biocultural heritage' are 'crucial to the survival and wellbeing of peoples directly dependent on natural resources and especially vulnerable to socioeconomic and environmental changes' (Maffi 2018, p. 11). Bridgewater and Rotherham (2019) argue the cultural landscapes inscribed under the World Heritage Convention are examples of BCH, and Hill et al.'s (2011) study in Australia shows how communities were empowered to reverse biocultural diversity loss in such a context. This was possible through indigenous governance in the nomination process, and conditions which allowed space for their concepts within heritage discourses and control over interactions with their knowledge systems pertaining to linkage of nature and culture.

The BCH model outlined by Swiderska and Argumedo (2017) centres the creation of resilient livelihoods as a product of interlinkages between biodiversity, landscapes, traditional knowledge, cultural and spiritual values, and customary laws. I proposed this model for the UK with minor adaptations based on case studies and interviews with policymakers (Russell 2021b). Another model is by Lindholm and Ekblom (2019, p. 2) who outline BCH in a five-fold framework: ecosystem memories, landscape memories, place-based memories, integrated landscape analysis and stewardship and change. The first three help to describe and understand BCH and are useful to consider as part of a study of nature-culture relations and heritage in Wester Ross.

The BCH approach is argued to overcome the juxtaposition in fields of rural development and conservation between heritage values and development goals (ibid).

Moreover, for Poole (2018, p. 57) it can address insufficient emphasis on the ‘dynamic interrelation between culture and environment’ within the Sustainable Development Goals. She argues,

...more explicit recognition of the culture, values and heritage of diverse peoples and their relationships with the land must be prioritised in policy language [...] without such recognition, stewardship as a praxis or way of life will remain overlooked as a fundamental driver of sustainability.
(ibid)

Thus far BCH has been applied in a variety of global contexts, predominantly those involving indigenous peoples (Eriksson 2018), but encompasses values and practices relevant to all societies (Cocks and Wiersum 2014). It is often overlooked because certain cultures ‘do not explicitly acknowledge the human-nature relationship within their fundamental values’ (Poole 2018, p. 62). Whilst biocultural diversity appears in UNESCO BR research (see Reed and Price 2020a), BCH is less well utilised and offers a new way to theorise and examine nature-culture relations.

BCH can be contextualised in common pool resource management and governance literatures (especially Matose et al. 2019; Monterroso et al. 2019), discussed in the next section on BRs. Rather than following traditional property models, BCH is rooted in commons governance and processes of commoning which reflect a collective, place-based heritage (see Russell 2021b; Swiderska 2009; Winkel et al. 2020). The emphasis on resilience and adaptation in BCH is consistent with commons scholarship on the long-term dynamics of commons in the past, and the recognition of the importance of collective governance regimes for the 21st century (De Moor 2019).

BCH can also be positioned in critical scholarship on commons governance including: anarchism, heritage and commons (see Alonso Gonzalez 2014; Graham 2017a, 2017b; Morgan 2021), communing in radical geographies (Shantz 2013; Springer 2014a, 2014b, 2020), political ecology/moral ecology (see Apostolopoulou et al. 2022; Griffin et al. 2019; Wichterich 2015) and non-state space and prefiguration as discussed in collaborative anarchist archaeologies (Angelbeck and Jones 2019; Borake 2019; Flexner 2018; Gonzalez-Tennant 2018). Collectively, such literatures contribute to new pathways for commons (as socio-material practice) to transcend the hierarchies and inequalities of state power, neoliberal capitalism and colonialism. These have rarely

been applied in the study of biosphere reserves despite clear relevance to matters of governance, communities and nature-culture relations.

Biosphere Reserves: Theory and Practice

Biosphere Reserves (BRs) are a UNESCO designation of the Man and Biosphere (MAB) Programme (see Bridgewater 2016). There is a World Network of Biosphere Reserves (WNBR), 727 sites across 131 countries (UNESCO 2021b). BRs are layered on top of existing designations, which has been described as the 'mille-feuille' effect; an 'indigestible pile-up of specific layers and functional zonings' which accumulate over time (Mathevet and Cibien 2020, p. 121). The spatial development of BRs has been premised on the 'availability of already protected spaces' (Bargheer 2014, p. 131) and in 1982, 84% of BRs overlaid national parks and other kinds of protected area (PA) (Miller 1983). This meant BRs were not always significantly different from traditional PAs including lack of involvement from local people (Reed 2020).

MAB has evolved significantly over time, adapting to changing logics (Bargheer 2014) and international discourses and agendas (Fiske 2022). Whilst historically BRs were envisioned as 'field laboratories for sustainable development', they became shaped by biodiversity conservation imperatives underpinned by the 'endangerment sensibility' (Bargheer 2014). BRs 'promote solutions reconciling the conservation of biodiversity with its sustainable use' (UNESCO 2021a). From 1995, MAB practitioners emphasised BRs should serve local people, with sustainable development denoting the need to protect 'local livelihoods and cultural diversity, while maintaining ecological integrity' (Reed 2020, p. 21). MAB's evolution has created different 'generations' of BR, which have been more or less 'conservation' or 'development' focused (Torralba et al. 2020). Winkler's (2019) analysis of three German BRs, designated pre-1995, showed how these were engaged in 'top-down, monocentric governance' which did not align with the 'conceptual shift in conservation'. Not only are these BR administrations struggling to adopt roles as moderators and facilitators rather than implementers, but local community involvement is elusive, and the BRs are problematically indistinct from national parks. Part of the ongoing challenge for BRs, well evidenced in the literature, is thus implementation of the model in practice and the idea of a concept-reality gap.

With changes to BR criteria, there was a process of ‘serious reflection, withdrawal and reconfiguration of BRs’ in the UK (Reed and Price 2020a, p. 4) during periods of national review over a number of decades (see Price 2020). BRs were delisted or expanded to include areas of human habitation and mechanisms for community involvement. Between 2009 and 2016, two BRs in Scotland were extended, Galloway and Southern Ayrshire and Beinn Eighe in Wester Ross (Price 2020). Price’s (2017) work on the ‘re-territorialisation’ of the biosphere in Wester Ross explains in detail the process by which the extension was carried out including the stakeholders involved and key concerns pre-designation. With a BR already in place covering Beinn Eighe NNR, and a National Scenic Area covering a large proportion of Wester Ross, issues considered were: ‘local sensitivities’ related to existing conservation policy and practice; the relatively weak sense of ‘cohesive regional identity’ in the area; a lack of joint working at a regional scale; and where the new boundaries should be (ibid, pp.35-37). This is the only research of the Wester Ross Biosphere and I build on this by focusing on the BR post-designation. There are few relevant qualitative studies of UK BRs post-designation, namely, Hernes and Metzger’s (2017) work on community perceptions of Galloway and Southern Ayrshire BR and Kirsop-Taylor et al.’s (2020) work on governance in North Devon BR.⁹ I discuss each contextualised in the broader international BR research to illustrate ongoing challenges and opportunities.

Perceptions of BRs

Hernes and Metzger’s (2017) survey in Galloway and Southern Ayrshire Biosphere in Scotland surveyed local communities’ perceptions of the BR designation using a constructivist and interpretive, mixed-methods approach, capturing different stakeholder groups. Their conclusions included: the BR designation can be misunderstood; the need for more community participation in BR management; and the need to examine the wider setting of local communities and the underlying

⁹ Other studies using North Devon Biosphere as a case study but beyond the theoretical, substantive or practical scope of this review include those on sustainable marine management following Covid-19; environmental art as a medium of environmental education; natural capital methodologies and coastal defence; ecosystem services and sensitivity assessment; Brighton and Lewes Down Biosphere was also one initiative discussed within a study of urban sustainability transitions in Brighton and Hove area.

interests of stakeholder groups. Although a useful mapping of perceptions of a Scottish BR, I would argue that a more critical and ethnographic approach is needed for assessing perceptions of a BR as part of the broader power relations and ideologies shaping nature-culture relations in discourse and practice.

The fact that BRs can be misunderstood as a designation, being equated with national parks for example (Hernes and Metzger 2017) is widely reported in international BR literature (see Mathevet and Cibien 2020; Moreno-Ramos and Müller 2020). Moreover, BRs are seen as relatively unknown (Reed and Price 2020a). The majority of a population is often unaware they live in a biosphere and wider stakeholders, such as local government, can be unsure how BRs fit into their own policies and territorial management (Moreno-Ramos and Müller 2020). These are key challenges because lack of visibility in their respective regions can leave BRs with weak legitimacy to act (Mathevet and Cibien 2020). This highlights the importance of examining how the designation in Wester Ross is understood and perceived by different stakeholders, including residents and organisations with governance and policy remit in the BR.

Governance and Management

Studies of BR governance are often contextualised within a broader field of research on the governance of socio-ecological systems (SES) (see De Lucio and Seijo 2021; Negev et al. 2019; Olsson et al. 2007; Shultz et al. 2018; Shultz et al. 2020; Taggart-Hodge and Schoon 2016; Torralba et al. 2020; Vasseur 2020). Indeed, Bouamrane et al. (2017) describe BRs as examples of SES. The concept of SES is well developed in the academic literature (see Berkes and Folkes 1998; Hinkel et al. 2014; Janssen and Ostrom 2006; McGinnis and Ostrom 2014; Ostrom 2009; Young 2012) and is central in sustainability and governance research (see Armitage et al. 2017; Fischer et al. 2015; Folke et al. 2016; Folke et al. 2021; Hinkel et al. 2015; Newig et al. 2007). SES are complex and dynamic (Young 2012) and the challenges of governing for sustainability (see Newig et al. 2007) and the rapid change that characterises the Anthropocene, requires adaptive governance (Berkes 2017). To operationalise adaptive governance, people and environment must be conceptualised together as part of integrated SES, there must be mechanisms for collaborative learning, and consideration of resilience in multi-level complex systems (ibid).

A number of scholars have focused on the dynamics of ‘adaptive’ governance, or ‘adaptive co-management’ in BRs (see Baird et al. 2018; Plummer et al. 2017; Plummer et al. 2020; Schultz et al. 2011; Schultz et al. 2020). An important finding in Baird et al. (2018, p. 409) is that BRs can create ‘novel spaces for interaction’ through activities involving a range of stakeholders covering both implementation and decision-making; fostering both vertical and horizontal connections between actors. More broadly studies have been concerned with the dynamics of ‘bridging’ in BRs as part of multi-level governance of SES drawing on concepts of social capital¹⁰ (see García-Amado et al. 2012; Olsson et al. 2007; Schultz et al. 2018). In a Swedish BR, bridging was particularly important for the mobilisation of loosely connected networks of actors with differing interests and knowledges as part of building resilience for adaptive governance (Olsson et al. 2007). Importantly, the act of bridging is political and far from being a neutral process requires consideration of how BRs are located, and locate themselves, in the governance landscape and which actors are included and excluded (see Schultz et al. 2018). BRs can be conceptualised as having an ‘in between’ role (Schultz et al. 2018) or working in the ‘messy middle’ (Wilkes 2022) in governance terms, and there is a need for BRs to adopt an ‘integrated approach’ encompassing top-down, bottom-up and outside-in dimensions (Alfaré et al. 2020).

However, research evidence highlights lack of multi-scalar governance as one of the central challenges for BRs in practice. Schliep and Stoll-Kleemann’s (2010) analysis of BRs in Central Europe focuses on the strengths and weaknesses of modes of governance. They found a significant ‘structural administrative gap between the national and local levels’, which is also replicated at the MAB level (ibid, p. 926). This means that BRs can remain ‘isolated’ and disconnected from various spatial and temporal policies and processes, diminishing BR ability to act as a co-ordinator and facilitator of regional development (ibid). In order to bridge what they call the ‘governance gap’ between the national and local they pinpoint strategic issues of

¹⁰ Social capital is also linked to institutional capacity in the institutionalist approaches often applied to BRs (see George and Reed 2016; Müller 2008; Pollock et al. 2007; Teneggi and Zandonai 2017) and features in studies using ‘capitals’ frameworks (see Butler 2021; Butler and Current 2021).

communication, participation, capacity building, education, and public awareness as key to garnering support at a regional scale (ibid). As indicated in Chapter 1, and above in the heritage literatures, this reinforces the importance of understanding the politics of scale and governance associated with the Wester Ross BR.

One of the challenges for BR governance can be a lack of dedicated BR implementation system (see Alfaré et al. 2020). Hence, BRs like those in the Isle of Man can be seen positively as examples of using governance and management processes to create institutional spaces to negotiate biosphere identity among key stakeholders (see Russell 2022). Whilst research findings do often emphasise the benefits of a particular model of governance, such as the social enterprise approach (see George and Reed 2016; Teneggi and Zandonai 2017), the flexibility of a BR approach to governance is seen beneficially as allowing for integration with existing land management systems and opportunities to manage multifunctional landscapes (Hedden-Dunkhorst and Schmitt 2020).

BR governance and management should be participatory and collaborative, as solidified in the Lima Action Plan for BRs approved in 2016 (Price 2017). BRs seek opportunities to ‘collaborate for mutual benefit, working across scales of influence and sectors’ (Reed and Price 2020b, p. 322). They can accommodate diverging interests, knowledge, and values of stakeholders (Nölting and Mann 2018) and generate ‘regional added value’ through new local networks, alliances, partnerships or cooperatives’ (Walk et al. 2020, p. 300). Much BR research focuses on examining the unique circumstances of participation and collaborative governance in respective contexts, because BRs are implemented in diverse ways in practice, adapting to differing circumstances (Elbakidze et al. 2013).

Studies of BR governance have been carried out in Canada (see Donevska 2020; Ferreira et al. 2018; George and Reed 2016; Pollock 2004; Pollock et al. 2007; Plummer et al. 2020), Africa (see Fritz-Vietta et al. 2009; Hedden-Dunkhorst and Schmitt 2020; Müller 2008), Brazil (see Ferreira et al. 2018) and parts of Europe and the Mediterranean (see Alfaré et al. 2020; Donevska 2020; Kirsop-Taylor et al. 2020; Plummer et al. 2020; Schliep and Stoll-Kleeman 2010; Winkler 2019; Winkler and Hauck 2019). Such studies reinforce the importance of analyses that consider how

specific geographical contexts and national governance regimes are part of the conditions that shape the success (or otherwise) of BR governance. Herein, the pilot study in the Isle of Man BR, enabled comparison of where differing geographic and political conditions in the UK shape BR governance.

The only existing study in a UK setting to consider governance is Kirsop-Taylor et al. (2020) who examined collaborative environmental governance under austerity in North Devon Biosphere Reserve in England. Adopting a critical approach, they used qualitative interviewing to understand the perceptions of stakeholders involved in the BR regarding the impact of austerity for organisational structure and relationships with the state.¹¹ The findings reveal how austerity and its associated changes have led stakeholders to perceive the state negatively as ‘a collaborative partner and patron’ (ibid, p. 12). Whilst partially explained theoretically through ‘state retreat’, they argued the findings align more with ideas of ‘state transformation’, especially in light of seeing the ‘deauthorisation of the biosphere reserve and the reauthorisation of the state’ (ibid).

Given these findings, it is important to appreciate how biosphere governance models are shaped by a broader socio-political context including the role of the state and its agencies. Although the UK national context is relevant to Wester Ross in terms of broader austerity politics, Scottish national politics and local government arrangements will be more relevant, alongside regional agencies specific to the Highlands and Islands. My focus is also broader than austerity as part of moving beyond ‘common sense’ neoliberal capitalist nature-culture relations. Finally, Wester Ross, has a different model of participation and collaboration which is ‘community-led’, requiring consideration of what this specific kind of multi-scalar governance means in practice.

Alongside studies of BR governance models, there is also some coverage in the research literature on the management of common pool resources including testing

¹¹ A related paper by Kirsop-Taylor (2019) is also based on interviews with biosphere stakeholders and concerns the responses of the individual voluntary sector environmental organisations to austerity.

the applicability of, and seeking to develop associated theoretical frameworks (see Brunckhorst 2001; Campbell and Sacchetti 2017; Chacón et al. 2018; García-Amado et al. 2012; Mbereko et al. 2017; Mishkin and Kiker 2021; Oldekop et al. 2013; Těšitel and Kušová 2010). A number of studies have outlined the dynamics of commons governance in different BR contexts outside of the UK focusing especially on case studies of resource users in farming, forestry and fishing (see Brossette et al. 2022; Bray et al. 2012; Butler and Current 2021; Carías Vega 2019; Eid and Haller 2018; Loaiza et al. 2016; Méndez-Medina et al. 2020; Mendoza-Carranza et al. 2013; Qomar et al. 2016; Taye 2019; Taylor 2010). Such studies, usefully chart the dynamics of specific collective action problems related to CPRs within BRs, including more novel considerations such as under-use contexts (Brossette et al. 2022), the role of secondary level community organisations (Taylor 2010), and new economic activities like whale watching (see Mayer et al. 2018).

However, of those working on CPR and BRs, there is varying focus on the implications of the BR designation itself for governance. Many studies are set within, rather than focused on the BR and how its management affects land uses and ownership. Additionally, there are no studies that go beyond analyses of specific cases of CPR into the literatures on commoning as relations or post-political praxis (see Chatterton and Pusey 2019; Martin 2009). Literatures inspired by anarchist, decolonial and critical theoretical approaches (See Federici 2018; Pickerill 2016; Shantz 2013; Wichterich 2015) can make a useful addition to research on commons in BRs, especially in contexts such as the UK where 'new' commons may need to be created in order to reconnect people with nature (see Rodgers and MacKay 2018). Such approaches can contribute to the normative critiques of CPR, part of 'critical commons scholarship' (see Quintana and Campbell 2019). They help to shift emphasis beyond institutional approaches to natural resource management to consider the socio-cultural and historical conditions in which commons and commoning can occur.

Communities and Participation

There are few (if any) cases globally where a BR is described as community-led, making Wester Ross particularly interesting to examine community participation in a BR in practice. Communities feature prominently in the BR literature and participatory

governance and collaborative decision making are argued to enable local communities and producers to become key drivers of BR management (Stoll-Kleemann et al. 2010). Community participation should allow BRs to understand and meet community needs such as opportunities for alternative and diversified livelihoods (Méndez-Contreras et al. 2008). This is just one example of how participatory governance of a BR should aim to develop practical solutions to concrete problems and context-specific questions (Walk et al. 2020, p. 301). Participation is also linked to the legitimacy of BR governance, and Mohedano Roldán et al. (2019) found that this is primarily generated through 'practice-based participation', with the involvement of local resource users having the greatest effect on legitimacy.

There are numerous challenges regarding the participation of local communities and indigenous peoples within BRs. While each BR develops its own network of actors, meaning strategies for inclusion and participation will differ in practice, the literature highlights common challenges likely to affect Western Ross (see Durand et al. 2014). For example, Young (1999) shows how centralised approaches to nature protection stymie community-based conservation in Mexico, even though the latter is adopted as rhetoric. Community empowerment discourses are nationally prominent in Scotland, including recent legislative reforms. However, the extent to which this reduces centralisation in favour of community-based approaches to conservation and development must be critically examined.

Another challenge is how BRs approach different types of knowledges within governance and management. As 'learning sites' BRs aim to co-produce socio-ecological knowledge (Reed 2020) and integrate 'scientific, local and indigenous forms of knowledge' (Hockings et al. 2020, p. 150). This recognises that place-based traditional and local ecological knowledges, and associated cultural practices are a vital contribution to 'understanding of past and present changes while helping to analyse future issues' (Vasseur 2020, p. 130). Hence co-created knowledge and knowledge generated in practice support collective learning around sustainability generating new actions in situ and offering inspiration to other BRs (Onaindia et al. 2020). However, as Hockings et al. (2020) identify, it can be hugely challenging to integrate knowledges due to cultural barriers between stakeholders, mistrust and logistic challenges.

Integration, according to Hockings et al. (2020), requires a ‘third cultural space’ where different kinds of knowledge co-exist as an alternative to subsuming local community/indigenous knowledges into a ‘dominant’ scientific paradigm. The latter is a form of ‘grafting’, where indigenous culture can be instrumentalised and incorporated into dominant ways of thinking and being (including capitalist and educational spaces) not as a mutual exercise but as assimilation (Ahenakew 2016).¹² This is an important issue in the Scottish context because studies in the Highlands and Islands identify failures to accommodate local knowledges and especially Gaelic cultural knowledges within mainstream conservation approaches (Ní Mhathúna 2021; Russell 2021b). As Toogood (2003, p. 163) also noted, conservation designations based on scientific conceptions of nature can be disconnected from ‘the immediate experience of nature’ in Gaelic culture. This also connects to the critique introduced in Chapter 1 on how discourses of neoliberal conservation (such as nature as service provider) reinforce western scientific knowledge and frameworks that render nature visible to capitalism (see Adams et al. 2014).

Hence, how Wester Ross BR approach the inclusion of different knowledges in theory and practice is important, as are broader strategies of inclusion and exclusion. Elsewhere it has been shown there are inequalities of power between BR administrations and communities as well as issues around trust and communication (see Durand et al. 2014; Méndez-Contreras et al. 2008). Although Wester Ross BR is community-led, this does not eliminate issues around power relations and inequalities between stakeholders.

Power, Ideology and Landownership

Power, ideology and landownership are not overly dominant in BR research but emerge strongly in Lyon and Hunter-Jones’ (2019) study of a South African BR. They unpack the power of dominant and hegemonic discourses and ideologies surrounding sustainable development and tourism (ibid). Given how particular visions of

¹² See also Hviding’s (2006) discussion of biodiversity conservation in the Marovo Lagoon where scientists ‘descend on a tropical local with pre-existing views that hold little room for new (and possibly chaotic) influences’ denying ‘themselves a mutual engagement with the people of the place’.

sustainable development can be mobilised by powerful actors, it is important to be attuned to the specific ideologies that are invoked in sustainability discourses, akin to my focus on 'common sense' discourses. They also found challenges regarding divisions within communities that affect participation in sustainability initiatives, and landownership problems that exacerbate inequalities (ibid). For example, land reclamations have been carried out but there remains lack of access to land which limits livelihood possibilities. This draws attention to the complex relationship between communities and land and how giving the latter to the former can fail to address disenfranchisement in a broader context of marginalisation and lack of voice, power and influence.

In BR research, some point to the need for capacity building as a prerequisite to enable full and effective participation of communities and indigenous peoples in the development of 'a common vision and actions for the sustainability of a BR' (Vasseur 2020, p. 316). However, a critical approach is needed to avoid viewing community development as a matter of internal community dynamics to the exclusion of structural constraints, ideologies and power relations. Such thinking is increasingly prominent in the Scottish context (see Revell and Dinnie 2020) where legacies of landowning power are problematised in the Scottish Highlands.

An Effective Approach in Practice? Zoning and Land Use

Challenges around land use and ownership are part of the complexity of how a BR is implemented in practice. The designation itself does not bring specific powers and BRs are not officially PAs (Reed and Price 2020b). They do adopt a 'territorial approach' (Moreno-Ramos and Müller 2020, p. 260), but use soft law and soft boundaries because the designated area does not create land use restrictions nor does management come with its own legal mandate (Hockings et al. 2020). The creation of a BR, although layered onto existing designations, does create three new zones, core, buffer and transition which align with the core functions of the designation (see Figure 2); conservation, sustainable development and research and capacity building (Vasseur 2020).

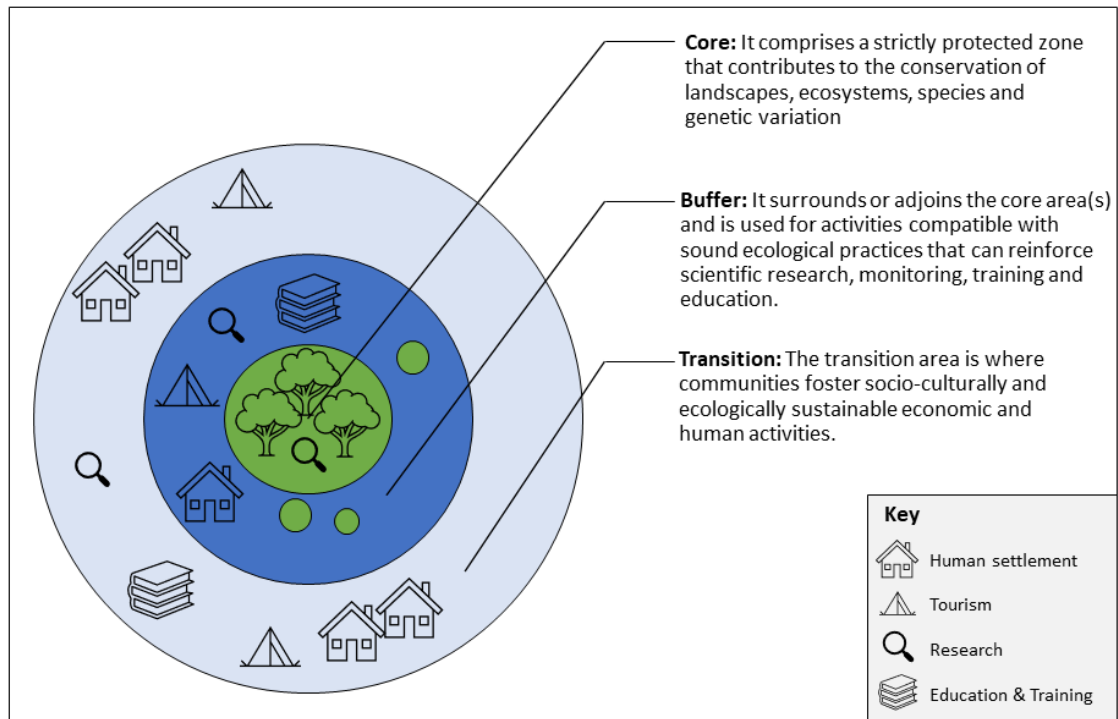


Figure 2 Biosphere Zonation Model, adapted from UNESCO (2021a).

In terms of land use, the ‘gradient of intensity of land uses’ associated with zonation, is what made BRs different from PAs (Moreno-Ramos and Müller 2020, p. 256). However, critiquing BR zonation, Bargheer (2014, p. 131) suggests different objectives operate in parallel in different areas, rather than being integrated, the equivalent of establishing three separate reserves. He is critical that ‘spatial proximity’ compensates for ‘lack of conceptual integration’. How BR zones are created and managed is an important consideration in terms of the effectiveness of the designation in practice. Research suggests that ‘management of the different zones can be in conflict with, or impact on, the others’, for example socio-economic development can put pressure on ecosystems inside and outside of the core areas (Vasseur 2020, p. 310). In some BRs, there is evidence of overemphasis on activities within the core areas (Moreno-Ramos and Müller 2020) which means operating no differently to traditional PAs, with BR managers paying ‘lip service to management of the whole site’ (Hockings et al. 2020, pp. 245-246).

In terms of landownership, most BRs include multiple landownership patterns (Hockings et al. 2020). Despite having no legal mandate over management, the designation of the biosphere zones should ‘create an expectation of more intensive

engagement with the communities that occupy these zones’ and ideally lead to collaborative governance arrangements (ibid, p. 245). Many BRs, such as those in Lebanon and Canada, are managed by local NGOs with no jurisdiction over natural resources (Matar and Anthony 2020), and a key challenge is having the authority to act in privately owned areas within the BR (ibid), which can be key to successful implementation (Van Cuong et al. 2017). Given the extensive private landownership in the Wester Ross context, considerations of landownership and the ability of the BR to influence land use decision-making is of crucial importance.

Whether BRs are effective in practice, namely, to create action to fulfil their remit, has been of much interest in research. Coetzer et al. (2014) question whether BRs are simply a ‘bureaucratic label’ rather than an effective tool for conservation and in respects, a BR is ‘international recognition’ which is mostly a ‘cherry on the cake’ for a region (Mathevet and Cibien 2020, p. 122). However, a BR can also be a ‘tool for legitimising action’ in a specific region which is not already part of an administrative or cultural ‘unit’ and used as a ‘symbolic and strategic lever’ (ibid). Given the diversity of conditions in which BRs are implemented, their effectiveness in practice will vary globally. The strengths and limitations of BR implementation are shaped by legislation and governance, political agendas and local contexts specific to the BR’s geographic location (Torralba et al. 2020). This study will contribute to understanding this effectiveness in a context where the BR model is community-led.

Connecting People and Nature

BRs have been characterised as sites to build solidarities between people, societies and nature (Mathevet and Cibien 2020), implying a shift of paradigm where people no longer control and dominate nature but consider themselves part of it. Moreno-Ramos and Müller (2020, p. 265) describe how BRs as ‘territories that facilitate holistic approaches to human development, are ideal for recovering the connections of people with nature’ including awareness of ‘planetary citizenship and a community of life’

where 'all beings are connected'.¹³ For them, BRs could be places to demonstrate solutions to global challenges, where the 'full implementation' of the concept is achieved (ibid). Part of the challenge for BRs in practice is how to accommodate multiplicity and complexity, which has been elucidated in some BR case studies.

In Germany, Aschenbrand and Michler (2021) explain that compared with the clear message of nature protection in national parks, BRs have more ambiguous narratives. This is partly because of the combination of 'innovation' for sustainability and preservation of cultural landscapes which are difficult to reconcile (ibid). In Cape Horn BR in Chile, Berghoefer et al. (2010) identified multiple forms of relationships between humans and nature. Rather than mediating between multiple perspectives on a singular nature, the challenge is to show 'how different modes of living in the physical world engender different natures' and that the 'making of nature' is a 'political act' that occurs through power struggles (ibid, n.p.). In Guatemala, Posocco (2008, p. 221) notes the contrasting perspectives of UNESCO 'environmental cosmopolitanism' and local cosmovisions as 'discrepant and vernacular cosmopolitanism', concluding that the key challenge is making sense of 'relativization, pluralization, and complexity' and accounting for 'ambiguity'.

The above studies are theoretically useful for approaching BRs as a complex, multi-scalar phenomenon and will be relevant to this research in Wester Ross BR. They also connect with studies on the interplay of UNESCO discourses and practices in specific local contexts, for example, Horowitz' (2016) work on the complex hybridisation of UNESCO world heritage and community activism in New Caledonia. Moreover, they invoke the spaces of 'creative friction' that are the focus of Harrison's (2013) work in CHS on the relations between local actors and global processes including UNESCO. It suggests scope to add nuance to the complexity of understanding nature-culture relations through the study of a multi-scalar BR which is both internationally shaped by

¹³ They argue this is crucial in a context where thresholds have been exceeded in planetary boundaries (Folke et al. 2021) and suggest research should examine if BRs are part of the problem or are acting as 'sites for regeneration of planetary conditions' (Moreno-Ramos and Müller 2020, p. 265).

a UNESCO ethos and implemented in practice by a local community in a regional context.

A Critical, Ethnographic Lens

Across the literature on BRs a common theme is how the model works in theory and practice, with recognition of a 'concept-reality' gap (Coetzer et al. 2014; Hockings et al. 2020). BR governance and management can be affected by a lack of understanding of how the model 'should work on the ground to achieve the goals of sustainability by harmonising interactions between people and the environment across the landscape' (Van Cuong et al. 2017, p. 9). Hence, it is important to ask questions such as those posed by Matar and Anthony (2020, p. 135) in Lebanon, namely, how the BR concept and sustainable development itself have been 'interpreted and applied locally over time'. I follow this thinking in my first research question and in so doing, address the gap in how BRs have been applied and understood in the Scottish Highlands context.

Whilst existing studies illustrate some of the ongoing opportunities and challenges for BR governance, they also indicate that findings are contextually specific and may not be transferrable. Despite a significant spread of BRs globally, some sites have received significantly more attention, and there are only a handful of studies that consider BR governance in Western Europe. Much of the governance literature has also applied quantitative methodologies and institutional approaches to BRs. Qualitative ethnographic approaches are less common especially those informed by critical theory. The latter approaches when applied to BRs can help to better understand the complex power dynamics between stakeholders and the nuance of how actors engage in a contextually (and historically) specific negotiation of discourses around place-making and governance across scales.

Schultz et al. (2020, p. 296) identify a dearth of understanding regarding the ways that adaptive governance 'emerges through the daily decision and practices of imperfect people, struggling to get work done in confusing and demanding situations'. They propose greater emphasis on the 'agential' nature of governance, with 'people, politics and practice' emphasising the 'active nature of 'doing' adaptive governance' (ibid). I concur with this analysis and add cultural dimensions (including heritage making) as in

need of emphasis. Hence, my focus on a deeply contextual approach that does not take people, politics and practice for granted and the explicit connection to critical theoretical approaches through an ethnographic lens to contextualise biosphere governance as part of the negotiation of nature-culture relations and processes of heritage and place making by communities.

Critical theory can help elucidate the kinds of power relationships rooted in particular ideological manifestations of 'common sense', which are underexplored in the governance literatures of BRs but prominent in political ecological studies using Gramscian theories of hegemony. This is important because as Brand and Görg (2013, p. 110) argue, institutionalist approaches often fail to consider 'questions concerning the root causes of problems, power, and domination'. A more critical approach can also engage with critiques of governance from a decolonising perspective, important in contexts with indigenous peoples. For example, Grey and Kuokkanen (2019) explain that co-management undermines indigenous self-determination, compared with how the biocultural heritage territory can safeguard cultural heritage. An indigenous governance approach takes seriously the challenges associated with the loss of, and threats to biocultural heritage that communities 'may wish to revitalise to address present-day challenges' (Swiderska et al. 2022, p. 14). This is particularly relevant to the conditions in the Scottish Highlands and my focus on understanding how communities are engaged in heritage and place-making over time and the power relations and 'common sense' discourses that shape possibilities for alternative post-neoliberal futures.

Alongside addressing the gap in research on Scotland's BRs, my critical ethnographic approach contributes to an agenda for BR research that pushes the parameters of the field beyond SES and 'sustainability science' to engage more deeply with the arts and humanities. This research is conducted collaboratively in, and with the Wester Ross Biosphere and offers a comprehensive qualitative study of nature-culture relations in situ. It draws explicitly on nature-culture relations and heritage literature from a critical theory perspective, working with conceptual approaches informed by post-structuralism and anarchism, which are uncommon in BR research. BRs are complex and there is a need to unpack the designation, organisation and the meaning for

communities, heritage and sustainability. 'Assemblage' thinking is useful here because it 'insists that we be wary of taking particular objects or categories for granted' instead prompting the investigation of 'specific instances' (Macdonald 2013, p. 6). It can add nuance and richness to the understanding of what a BR does in specific contexts, especially when set within a broader critical ethnography of nature-culture relations in discourse and practice.

Communities, Heritage and Landscape in the Scottish Highlands

The historical, geographic and social conditions of the Scottish Highlands over time have warranted significant research interest. Particularly in relation to the Highland Clearances (see Gourievidis 2016; MacKinnon 2017; Richards 2000; Tindley 2021) and contemporary legacies including the 'post-memory' held within local communities (Jones 2012). Gourievidis (2016) shows how the Clearances have become politicised as part of collective memory work and have been used in contemporary critiques of property and landownership. As well as drawing attention to the importance of understanding how the past is used in the present, for the future, as described above, Gourievidis (2016) illustrates how collective memory can embody cultural trauma.

This connects with another key focus of research, understanding the effects of colonialism in terms of relations within Scotland and with the rest of the UK. Debates are ongoing as to the utility and appropriateness of a post-colonial lens (see Connell 2004; Sommerville 2016; Toogood 1995, 2003), however it is frequently part of the framing of those thinkers working within and about the *Gàidhealtachd*, the Gaelic-speaking communities of the Highlands and Islands (Camshron 2021; MacKinnon 2017; MacPherson 2020). Despite claims of racism and essentialism (Armstrong et al. 2022), these writers do not see the *Gàidhealtachd*, as a 'homogenous, singular or undifferentiated place', and taking the essence of the term to mean 'the place of the

Gàidheal reinforces a relational approach to place, people and language/culture (Oliver and MacKinnon 2021, p. 150).¹⁴

MacKinnon (2014; 2017; 2018; 2019) discusses internal or domestic colonialisation which refers not only to spatial dynamics, but how colonial power can shape individuals' cultural and psychological experience and identity, leading to collective and individual disintegration. He charts a 750-year history of the *Gàidheal* as a history of colonisation where structures of domination have been imposed by wider polities in Scotland and England (ibid). One outcome has been the 'decommonising' of crofting systems which is not just externally driven but occurs within the minds of crofters. He suggests colonial projects carried out in the late modern *Gàidhealtachd* correspond to other colonial situations globally, suggesting value in connecting the history and present of Gaels in Scotland within an indigenous research paradigm (ibid).

Gaelic Language and Culture

McFadyen and Sandilands (2021, p. 163) draw attention to the contemporary legacies of colonial power which have been 'destructive in a myriad of ways.' A clear example is the fate of the Gaelic language and culture which suffered serious oppression and persecution. Gaelic is currently 'endangered' and classed as a 'minority' language alongside others in the world (Glaser 2007). Key challenges to address include weak intergenerational transmission within a broader context of 'crisis' in the Gaelic vernacular communities (see Ó Giollagáin et al. 2020).

Much research into Gaelic in Scotland has considered the state of, and attitudes towards the language, framed around the politics of identity and nationalism (see Bechhofer and McCrone 2014; Macdonald 1997). However, I am most interested in Gaelic language as part of nature-culture relations. Camshron's (2021, p. 242) work is fruitful because it situates language as Gaelic development in the *Gàidhealtachd*,

¹⁴ Such relationships are explored in Oliver and MacKinnon's (2021) special issue of *Scottish Affairs*, framed under the heading of '*Gàidhealtachd* futures' which focuses on the 'plurality inherent in the language of 'futures'' and aims to 'capture a sense of cultural agency and ownership, and a hopefulness, in prompting the future as a space of possibility for multiple and mutual ways of making meaning and ways of being in the *Gàidhealtachd*'.

‘bound up with economy, place, employment, resilience, culture and sustainability’. Additionally, studies of Gaelic heritage and cultural worldviews of landscape, draw attention to aspects of relationality and connectivity, akin to the ontologies of indigenous peoples.

Bateman (2009, pp. 150-1) for example, on the ‘landscape of the Gaelic imagination’, highlights mutually beneficial relations between nature and society. Even Gaelic colour words, as a response to landscapes, are argued to ‘open up one’s environmental perceptions’ as part of the relational complexity of Gaelic, which ‘makes salient exploration of being in the world’ (Macdonald 2010, p. 3). Research in Harris also shows how communities draw on Gaelic culture, tangible and intangible, to ‘define, imagine, create, contest and conserve’ island landscapes (Robertson 2009, p. 154). For Robertson (2009, p. 160) community-based heritage models are an important way to further explore and make connections between ‘the past, the present, people, places, the landscape and the *Gàidhlig* language.’

Communities, heritage and landscape can also be connected through the Gaelic concept of *dùthchas*. It conveys sense of place and ‘belonging linked to stewardship of the land’ alongside connotations associated with customary land tenure in the *Gàidhealtachd* (McFadyen and Sandilands 2021, p. 166). For McFadyen and Sandilands (2012, p. 173) there is much to learn from *dùthchas* as ‘a cultural, ethical and reciprocal relationship with place.’ Ní Mhathúna (2021, p. 259) describes *dùthchas* as a ‘place-based way of knowing’ which can be understood through the lens of traditional ecological knowledge. Her research concluded that this ‘distinct and richly nuanced worldview is not yet reconciled with the meta-narrative of conservation and sustainability’ (ibid). This is supported by my own research that demonstrates how conservation at land and sea excludes ontologies of local crofters and fishers from mainstream policy discourses (Russell 2021a, 2021b). This is a problem that the BR could be well placed to address given the remit for knowledge integration across scientific and indigenous concepts (see above). Research thus draws attention to the importance of being attuned to alternatives ways of seeing and being in the world relevant to understanding nature-culture relations.

Crofting

An important theme for this study of communities, heritage and landscape in Wester Ross is crofting. Crofting emerged as a distinct form of land tenure from the Highland Clearances (Hunter 1976) replacing earlier forms of customary systems. Landlords of Highland estates, evicted people from their homes to create extensive sheep farming, and moved them overseas or to poorer, marginal land (Shucksmith and Rønningen 2011). Building on the background provided in Chapter 1, and the above literatures, research of crofting can be understood in relation to concepts of colonialism, and class-based property relations.

Crofts as tenanted small holdings were purposefully insufficient for subsistence meaning crofters were a source of wage labour for landlords (ibid). Crofters have been conceptualised as a collective based on social class identity and within the context of landowning power (Hunter 1976). They have also been framed since the 1990s through the lens of ethnicity and indigeneity (MacDonald 1999; MacKinnon 2008; MacKinnon 2019). I follow Kenrick's (2011, p. 201) position that there are,

...parallels between the concept of the working class and of indigenous peoples. Both can be best understood – not as some essentialised naturalised identity or category – but as a consequence of relationships of structural inequality.

Crofting has been marginalised under dominant hegemonic discourses and practices. Such conclusions feed into the conceptualisation of crofting as counter hegemonic. Macdonald (1998) for example, explains how a crofting version of Highland ecology acts as a 'counter-claim' to dominant conservation ideologies, the tourist gaze and the sporting estate. More recently, Robertson and Webster (2017) analyse crofting as 'heritage from below' which denotes a practice embedded in everyday performance; the active and co-constitutive role of non-elites in making and maintaining landscapes (Robertson 2015). Blackhouse ruination, in particular, represents 'hardscrabble heritage', a manifestation of struggle and a 'mental and material resource base for being in the world' (ibid, p. 994).

This work in Scotland also speaks to the themes of the politics of loss, remembrance of the past and nostalgia as introduced above. Robertson and Webster (2017) assert that there are 'expressions of heritage that draw on perspectives from below and which offer the possibility of alternative constructions of the past to that of the hegemonic'.

Such everyday forms of practice and memory work have the power to make landscapes and heritage from below from a 'situated and contextual way of knowing' which contrasts with the AHD (Robertson 2015).¹⁵

However, Robertson (2018, p. 175) acknowledges that, frequently, heritage from below 'serves less to counter AHD and the power structures it supports and manifests, and more to expand' interpretations of heritage and the past. Hence, analyses of crofting should move beyond heritage from below, creating space for alternative theorisations that bring in other important dimensions of contemporary crofting. In the BR context, questions of sustainability are key and highlight the need to understand how crofting (its pasts, presents and futures) are (re)interpreted. Moir (1997) explains how depictions of crofting have changed over time, from archaic practice doomed for extinction in the 1950s towards a beacon of sustainable land use in the 1990s. A critical analysis attuned to change over time is thus a vital component of this research to contribute to exploring the difference a BR might make to crofting as a sustainable form of land use and ownership in Wester Ross.

Making sense of crofting as part of rural sustainability has been a key focus of recent research in the Highlands and Islands (see Rennie 2007; Rennie and Billing 2015; Shucksmith and Rønningen 2011). In the Isle of Lewis, Rennie (2007) explains that local perceptions of the declining sustainability of crofting are linked to less active land use. Moreover, he shows how creating a sustainable rural community, meant rejecting broader trends including the industrialisation of agriculture, the loss of traditional values, corporate ownership of agricultural firms and lack of ecological models for production. The low-intensity practice of crofting as small-scale farming model is positively discussed as part of an 'alternative, post-neoliberal future for upland communities' (Shucksmith and Rønningen 2011, p. 287). However, the variability of crofting across the Highlands and Islands means that just like BRs, how crofting is

¹⁵ Similarly, in Scandinavia, crofting heritage is explored in the concept of 'marginal lifescapes'; seen as existing beyond the AHD (Svensson et al. 2018).

practiced in Wester Ross and associated implications for sustainability requires contextually specific research.

Alongside sustainability, research points to the importance of understanding crofting as a social system. Changes over time in crofting include how an earlier indigenous population has been replaced by 'diverse communities' in which 'active crofters' may be in a minority (Busby and Macleod 2010). Crofting common grazings are also being framed as a resource to benefit all residents and not just formal rights holders, increasingly valued in diverse ways (Brown 2006, 2007). Brown (2007, p. 513) identifies property claims being asserted across moral axes of identity, practices, objectives, and places and spaces; who counts as a crofter, what counts as crofting, what is the purpose of crofting, and where are such roles, practices and purposes acceptable. These are pertinent to the micropolitics of crofting as a social system and form of land use, with ongoing tensions associated with who should have rights to make what decisions about crofting land and practice.

Crofting is an example in the Wester Ross BR of a system that could be conceptualised through literatures on CPRs and commons governance (see above). Some references have already been made for instance to Ostrom's work in crofting research (Brown 2006; MacKinnon 2018). Importantly though, Brown (2008) has shown that in Wester Ross, there has been a decline in collective agricultural activity linked to the decline of crofting in general. This suggests an 'under use' context which has only recently been examined through the lens of CPR by Brossette et al. (2022) regarding common pasture grazing in a German BR. I approach the complexity of the situation for crofting in Highlands, following Brown (2007, p. 512) who argues the enactment of property relations is a 'site of contestation and struggle incorporating a multiplicity of overlapping and sometimes contradictory claims'.

Micropolitics must also be connected to politics at larger scales, to make sense of arguments that 'the crofting system... is in a bad way' (MacKinnon 2020, p. 351). Not only are there issues with the legal system, but commons are underused, many crofters are absent from their holdings, and many crofts are in poor condition (ibid). Simultaneously, national actors, such as the Scottish Government have been arguing that crofting can contribute to pressing national and global challenges such as the

climate crisis. How the politics of crofting play out in a BR, has yet to be explored, and I consider this as part of nature-culture relations in Wester Ross. There are pertinent, multi-faceted issues facing crofting and critical analysis could contribute towards the development of just and sustainable crofting futures and identify what difference a UNESCO BR makes.

Land Ownership

As suggested above for BRs, and in Chapter 1 on the land question in Scotland, land ownership is of crucial importance for this research. Alongside studies of crofting and land reform¹⁶, studies of community land ownership are prominent in Scotland. In response to the 'land question' (the concentration of ownership of large estates) which has persisted since the Highland Clearances (see Glass et al. 2020; Warren and McKee 2011), community land initiatives have emerged, mostly organised around communities of place (Braunholtz-Speight 2015). Evidence suggests that community land ownership can be a 'catalyst' for rural development within local narratives of sustainability (McMorran et al. 2014). However, privately-owned estates dominate upland and rural areas in Scotland, and owners' decisions have a significant impact on rural communities (McKee 2015).

It is not only the ownership of land which is important but what such ownership means for use and benefits. Critiques of traditional land uses on Highland estates, draw attention to how landscapes are managed for deer and grouse shooting for the last 150 years (MacMillan et al. 2010). MacMillan et al.'s (2010, p. 39) survey of landowners, illustrated a reluctance to move away from 'the romance of traditional sporting management aims and practices.' In contrast, community land and asset use can be more focused on generating employment, providing housing, improving self-sufficiency through renewable energy and activities that create community wealth from local development (see Hoffman 2013; Mackenzie 2009; Rennie and Billing 2015). In order to achieve these varied aims, communities are not only purchasing land and

¹⁶ A body of research ties crofting specifically to 'the land question' and land reform in Scotland (Kenrick 2011) and research has charted the impacts of legislation introduced from the 1800s to the present on land tenure (see MacAskill 2004; MacKinnon 2020).

assets from private owners but also bringing public assets into community ownership (Hobson et al. 2019).

My research will explore the politics of land use and landownership in Wester Ross, a region that is relatively understudied. Studies from the Outer Hebrides (see Rennie and Billing 2015; MacKenzie 2001; 2006; 2009; 2010; 2013) and other parts of Scotland provide useful context. Ownership of land and assets can be both positively interpreted as way to counter neoliberalism (MacKenzie 2013) or considered a burden placed on communities (Thomas and Banks 2018) in the context of 'state withdrawal from various aspects of public life' (Hobson et al. 2019, p. 117). Hence, as also mentioned in the BR literature above, analysis should be attuned to situating community land ownership within a broader structural analysis considering institutional, governance and policy contexts. This includes unpacking conceptualisations around resilient and sustainable communities in the Scottish context (see Fischer and McKee 2017; Revell and Dinnie 2020; Skerratt 2013; Winther 2017).

One study which is particularly insightful as a critical analysis of nature-culture relations, power and ideology is Mackenzie's (2013) study in the Outer Hebrides. She draws attention to how,

...the complicated and contingent process of 'commoning' the land through community ownership troubles binaries – of public/private and nature/culture – and through these disruptions creates a space/place where neoliberalism's normalizing practices are countered. (ibid, p. 4)

The process of commoning has been an important theme globally for those engaged in critical research. This is not simply about commons as a physical resource but captures a 'social process' that is advocated as part of a postcapitalist politics (Chatterton and Pusey 2019). There has been interest in commons and commoning in Scotland (MacKenzie 2013; MacFayden and Sandilands 2021), however there is scope to increase the cross-world dialogue by connecting with global struggles for commoning (see Federici 2018) and anarchist movements against capitalist modes of being and thinking which invoke commoning as praxis (Shantz 2013). Drawing on this literature can situate community empowerment and land reform agendas in the Scottish Highlands as part of critical post-capitalist lenses being applied elsewhere. It can help

to elucidate the alternative approaches that might contribute to the task of deterritorialising the future and creating more just and sustainable nature-culture relations. Much of this thinking has yet to be considered in the context of a UNESCO BR.

Conclusion

This chapter identified a number of key areas for development, ongoing issues and gaps to address in this thesis. Broadly these are: how to theorise nature-culture relations in complex ways which transcend dichotomies and capture complexity, relationality and processes of change and territorialisation; applying a critical heritage sensibility and complex theorisation of nature-culture to the study of a Scottish UNESCO BR; unpacking the specific dynamics associated with a BR defined as community-led; and understanding the impact of a BR for communities, heritage and sustainability in a regional context defined by ongoing colonial legacies and complexities surrounding Gaelic language and crofting. Bringing these issues together within the framing of cross-world dialogue, sets up the value of this study and the many opportunities to add new knowledge and insights to existing fields of research.

Across the literature, a key theme is the need to create more just and sustainable futures, and I add to this by researching a new context in which this could be occurring. The criticality of research towards alternative futures varies across fields. BRs have tended to be understood through the lens of sustainability science and applying a more critical qualitative theoretical lens will help to advance knowledge of what a BR is and does in discourse and practice in conditions of neoliberal capitalism. Likewise, using approaches from heritage futures research, applied in the context of a community-led BR, can add to understandings in CHS where there are potent arguments for the value of connecting heritage with broader social political and environmental issues.

BRs have been identified as sites in which positive relations between people and nature can emerge, and currently Scottish biospheres are under researched. BR literatures and literatures on heritage, community and landscape in the Scottish Highlands, help to inform how to approach nature-culture relations in this specific

regional context. Although subjects such as crofting, Gaelic and land ownership have each been rather well studied, they have not been examined much together in Wester Ross, nor in the context of a BR. A critical ethnographic lens is a fruitful methodology to analyse the Wester Ross BR in all its complexities and multiplicities. It is also well suited to creating space for new practice to emerge, because as the literature review has shown, these matters are not simply about thinking differently, but about living differently in the Anthropocene in Wester Ross, Scotland and beyond.

Chapter 3: A Critical Ethnographic Methodology

To answer the research questions, I adopted a critical ethnographic methodology, which is the focus of this chapter. I position the thesis ontologically and epistemologically, before detailing the nature of the 'multi-sited' ethnography, and specific methods for data collection and analysis. I introduce the ethnographic setting including how and where research activities were carried out in Wester Ross in-person and online. The Covid-19 pandemic required both researcher and participants to shift to new ways of working and I discuss how the research went digital. The chapter concludes with the ethical considerations involved in the research including consent, anonymity, harm and my positionality as a critical ethnographer.

Critical Epistemology and Ontology: Ways of Knowing and Seeing

This thesis follows the logic of epistemological pluralism, which is common in interdisciplinary research. It suggests that in any context, 'there may be several valuable ways of knowing' (Miller and Baird 2008, p. 46). I was informed in particular by the desire to hold in 'productive tension' representational and (non)representational, hegemonic and non-hegemonic politics and theoretical positions (Purcell 2012, p. 512) under the banner of 'critical' research. Epistemologically speaking, I recognise value in post-qualitative inquiry,¹⁷ whilst concurring with Gerrard et al. (2017) that language used by post-qualitative researchers can obscure the power of methodological resources and actors.

Following a critical epistemology, I draw from Marxist, post-colonial, feminist, post-modern/post-structuralist and anarchist traditions which destabilise notions of objectivity and assert the political nature of social research. The qualitative tradition of social science situates knowledge and critique as inseparable (Harvey 1990). Whilst recognising 'knowledge is partial, situated and contingent', it is also the case that certain kinds of knowledge and producers of knowledge have more authority than

¹⁷ Emphasis in such approaches tends to be on the decentring of the human subject, a rethinking of 'data' and 'representation' and generally pushing back against rigid notions of science in favour of animism and new materialisms (see Lather and St Pierre 2013).

others (Stevens 2004, p. 178). This is visible in the consequences of knowledge claims, their impacts and the futures they create (ibid). Uniting critical approaches is the desire for a more just and egalitarian society (Wigger 2016). This includes the aim of thinking 'beyond the social reality of neoliberal capitalism' which should take seriously the place of research participants and their positionality (Gerrard et al. 2017, p. 392). Critical theory has undermined the assumption that a researcher can observe, participate in, and tell the story of the group and place under study from an objective position of neutrality. What becomes important then in applying critical thinking, is to strike a balance between understanding and explanation where critical theories inform, but do not *a priori* obscure the phenomenon under study (Dey 2002).

A critical ontological perspective problematises existing conditions of inequality, exploitation and oppression, bringing the social order and prevailing ideas into question, rather than accepting these as given (Wigger 2016). Beyond critique, the point is to formulate coherent alternative visions to transcend the existing order (Cox 1981). Following Deleuze, we can problematise the world and open up the possibility that something different might happen (Hubbard and Kitchen 2011). A critical ontology denotes a way of being that is conscious of 'how power shapes us, the ways we see the world' (Kincheloe 2011, p. 206). The nature of the world is such that,

...the meanings we make about it, and our relationships with it are never final-thus humans are always in process [and] the self emerges in its relationships to other selves and things in the world. (ibid, p. 203)

A core element of critical ontology is to explore new understandings and ways of being and seeing in the world as part of transcending the Cartesian dualism which separates individuals from their surroundings (ibid). Indigenous ontologies in particular reinforce the need for profound shifts in how academics approach knowledge and research (Barker and Pickerill 2020).

Importantly, because a relational self is context dependent and can never be finalized in one 'true' form, a critical ontology addresses the crisis of representation through multi-vocality and multiple selves for researcher and participants (Brown and Dobrin 2004). Researchers cannot avoid representation entirely when communicating research (Firth 2013) but can avoid reifying and essentialising selves and collectivities. Key to this is acknowledging modes of understanding and contexts are historically

situated, with radically different kinds of subjects and subjectivities, objectives and objectivities (Comaroff and Comaroff 1992).

Critical Ethnographic Praxis

Critical ways of knowing and seeing informed the methodological approach of critical ethnography (CE). Madison (2005, p. 10), drawing on Kincheloe and McLaren (2000), describes CE as the 'doing' or 'performance' of critical theory. CE shifts the goal of praxis from acquiring knowledge and understanding about others for its own sake, towards forming dialogical relationships with others and the social transformation of material conditions of oppression and marginalisation based on principles of collaboration and empowerment (Brown and Dobrin 2004). Hence, CE is inherently relationship-conscious and place-conscious where praxis becomes a tool for freedom-building, not just knowledge-extraction (Brown 2004). Dialogue is at the centre of a critical ethnographer's engagement with the 'Other' which changes over time, and thus meanings remain open (Madison 2005).

As indicated in Figure 3, CE is dialogical across four components: the site of study/communities, communities' interpretations, researcher interpretations and secondary sources. Just as I was influenced by interpretations arising from different communities I engaged with, and the socio-materiality of the study site, this occurs vice versa. Communities could be influenced by my interpretations, part of the knowledge sharing of CE, most common with close informants (see Foley and Valenzuela 2005). Components of the diagram are not static or singular, even more so in a 'multi-sited' approach.

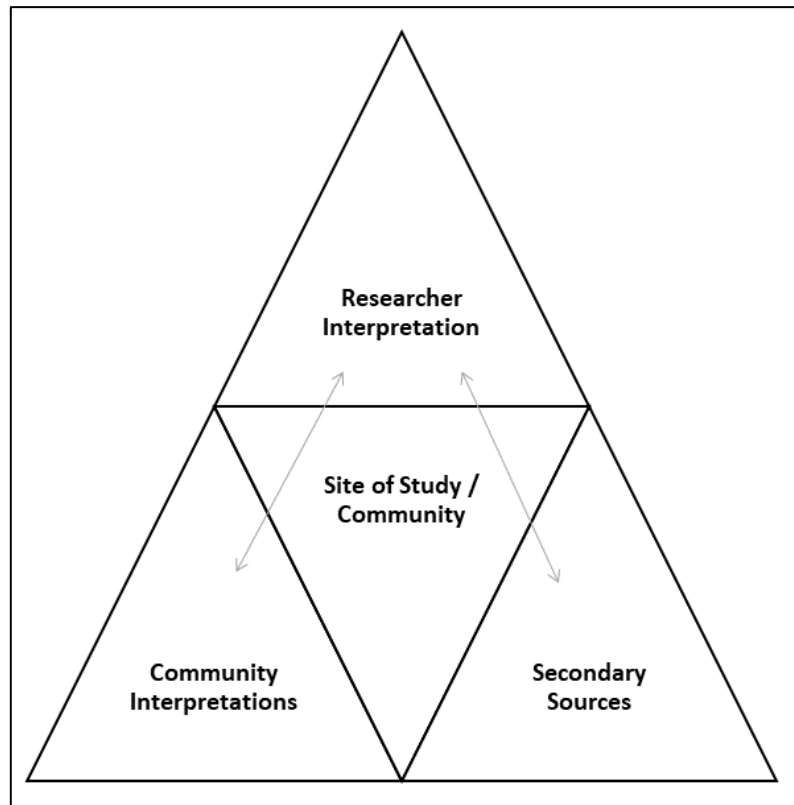


Figure 3 Critical Ethnography Dialogical Triangulation.

A critical ethnographic methodology allowed me to answer the research questions by accommodating both discourse and practice. I was influenced by a ‘problem-oriented’ research dialogue that can result from combining ethnography and critical discourse analysis (Krzyżanowski’s 2011). An ethnographic approach is particularly well suited to analysing heritage as practice, and for producing case studies of specific and complex local contexts which are globally entangled (see Silva and Santos 2012). CE can support the analysis of power relations and the struggle between ‘dominant’ and ‘subaltern’ and bring rich emic and etic perspectives together. Influenced by Gramscian ‘common sense’, this means exploring how culture becomes lived reality; how people ‘come to consciousness as members of specific cultural worlds at specific historical moments’ (Crehan 2011, p. 277). Moreover, given people tend to see the particular ‘realities’ of their cultural worlds as ‘fixed and unalterable’ ‘the way the world is’ (ibid), part of CE is identifying ways to move beyond this.

I drew on anarchist thinking here, which emphasises creating alternative social relations in the present through prefigurative politics (Yates 2015; Wigger 2016). This concerns both how participants construct futures through practice, but also how the

research itself can do the same. Research praxis can be directed towards democratic, anti-hierarchical forms that enable the construction of a more egalitarian world from below (Gibson 2019, p. 48). Hence, in conducting CE, my own praxis was about generating multi-vocality, collaboration and addressing the power relations between myself and participants, whilst generating new knowledges and practices. This brings an ethical imperative, to choose what type of difference that we make as ethnographers (Stevens 2004).

Conducting a Multi-Sited Critical Ethnography

Wester Ross was purposefully chosen given the BR designation, but also as a site to examine contemporary communities, heritage, and sustainability. Wester Ross has been relatively understudied in comparison with other parts of the Highlands, particularly in terms of social research.¹⁸ Recognising the fluid nature of places and communities, I utilised a multi-sited ethnography to ‘follow people, connections, associations and relationships across space’ and over time (Falzon 2009, p. 2). Multi-sitedness also recognises that heritage and power operate on diverse scales in different forms (see Silva and Santos 2012), drawing attention to scale as a relation (Harvey 2015). Hence, I sought to move beyond the biosphere as a fixed and isolated container, towards viewing place as part of ‘social relations, meaning-making and routinized interactions’ which embody ‘tradition and culture in ways that encourage certain kinds of interactions and social relations and discourage others’ (Harper 2018, n.p.).

Prior to fieldwork in Wester Ross, I completed a pilot study¹⁹ in the Isle of Man BR, which was also designated in 2016 but is government-led (see Figure 4). A week of intensive qualitative interviewing and participant observation on the island allowed me

¹⁸ Baldwin’s (1994) edited volume offers some useful insights into experiences of communities and places of Wester Ross.

¹⁹ The pilot study was possible due to personal connections to the island within the thesis supervisory team and based on discussion of shared cultural and heritage links to Gaelic language and Ireland.

to study diverse stakeholders involved in the biosphere partnership.²⁰ Pilot studies can play a crucial role in qualitative research, and as a result I was better informed and prepared for issues likely to emerge in the main study (Malmqvist et al. 2019). Testing of methods and questions and the thematic findings became a useful source for reflection and comparison with the circumstances in Wester Ross. Pilot findings are occasionally referred to herein but are published separately (see Russell 2022).



Figure 4 Location of Isle of Man Biosphere. OS Base map.

²⁰ Interviews were carried out with: Manx Wildlife Trust, Manx National Heritage, EcoVannin, CultureVannin, the Manx Government, the Manx National Farmers Union and the University College Isle of Man.

The main ethnographic fieldsite of Wester Ross, following Amit (2003, p. 6), was not simply 'awaiting discovery', ethnographers construct the field conceptually and in terms of their professional, financial and relational opportunities and resources. To study this large geographic area, I chose locations for fieldwork purposefully to construct my multi-sited approach (see Figure 5). Breglia's (2006) research of archaeological landscapes in Mexico is another example of the benefits of juxtaposing carefully chosen communities and places. Different locations within a broader ethnographic context can require a unique approach and adapting to different circumstances and opportunities (Murchison 2010).



Figure 5 Fieldwork Locations in Wester Ross Biosphere Reserve.

Within these boundaries, my initial stages of fieldwork which included site visits, events and meetings with key contacts, focused on Ullapool, Garve and Kyle of Lochalsh, in the Northern, Eastern and Southern areas. Subsequently I visited central

areas, namely Kinlochewe, Gairloch and Applecross (see Figure 5). Choices were made partly due to access to key informants and accommodation, including at the field station Anancaun in Beinn Eighe NNR, managed by NatureScot. I was also seeking diverse community and stakeholder perspectives and each of the areas had relevant activities and organisations, with connections between them, and the biosphere (see Figure 6). Shifting online, my ethnographic focus moved towards participating in the variety of biosphere organisational activities, which had hitherto been more peripheral when living in Wester Ross.

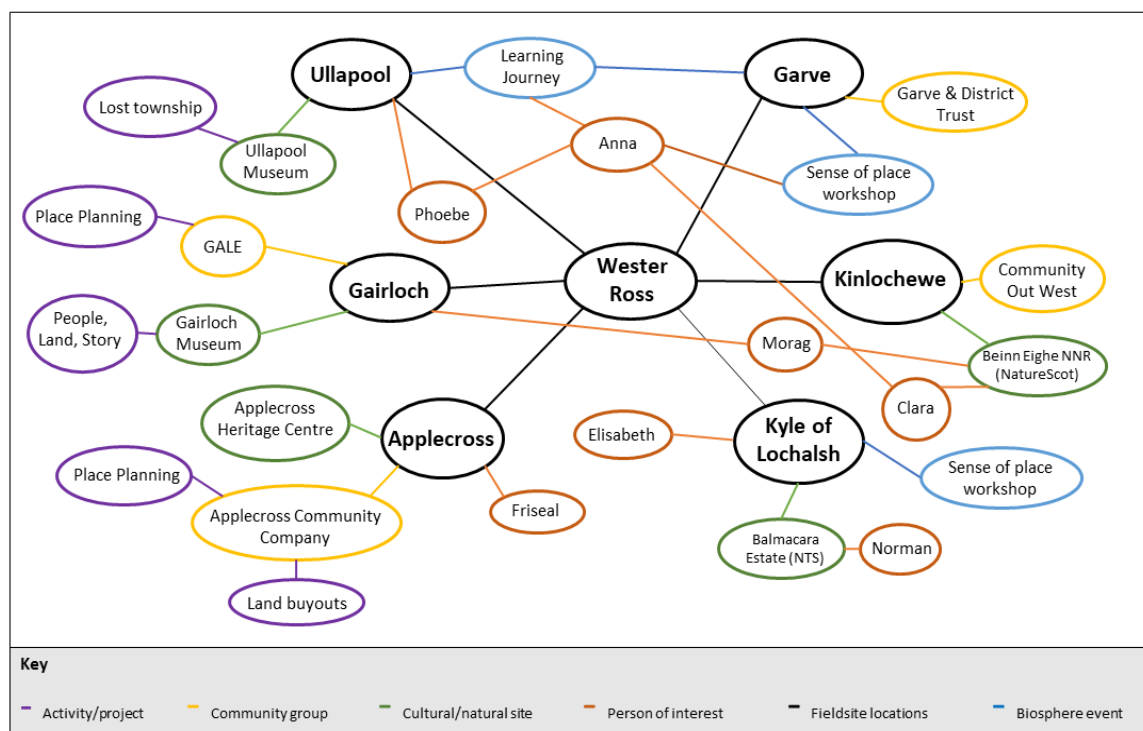


Figure 6 Conceptual Map of Fieldwork Activities

Going Digital

The multi-sited nature of the ethnography changed as a consequence of the Covid-19 pandemic. In-person fieldwork, the central method of data collection was impossible. Whilst a certain degree of uncertainty and adaptation is normal in research, the fact that I, my research participants, and my personal relationships were all fundamentally affected by the pandemic simultaneously, was a novel context to work in. As with many other areas of life, my research went digital. The timing of the pandemic means that this work is approximately two-thirds what Horton (2021, p. 1) calls a 'home-

bound pandemic ethnography'. Technology became a crucial tool for social interaction, and the continuation of research 'away' from the fieldsite (Howlett 2021).

Ethnography can 'embrace uncertainty' (Arya and Henn 2021, p. 1) and although there were disadvantages to losing physical access (see Howlett 2021) to Wester Ross, going digital enabled engagement with technologies as 'part of the everyday' and 'more spectacular' worlds that people inhabit' (Pink et al. 2016, n.p.). I followed Pink et al.'s (2016) conceptualisation of non-digital centric approaches where the digital is 'relational to other elements and domains of the research topic, site, and methods'. This was particularly apt for the pandemic as differences between a person's offline and online presence reduced due to the use of virtual spaces for both work and social engagements (Howlett 2021).

The negative impacts of going digital included having to abandon more collaborative methods including workshops using 'beyond text' methods such as participatory mapping. It was challenging to engage with resident populations in Wester Ross, namely crofters and Gaelic speakers, who were two important, harder to reach subgroups. Living in Wester Ross over a sustained period, was designed to open up access to these groups, and access via snowballing was difficult online.²¹ Attempts to engage with Wester Ross residents online were also unsuccessful,²² and as a result, the research increasingly focused on the BR organisation, which continued its operations using Zoom video conferencing as a key space of interaction.

Online ways of working did deepen my connection to key informants within the biosphere organisation and made observation of its practices and activities significantly easier, requiring less time and resources. Direct messaging individuals privately during meetings was also a way to access immediate reactions and interpretations, which was an advantage over face-to-face meetings. This was largely

²¹ For example, where I was directed to speak to specific crofters, those I asked to participate in an online format suggested I speak to them next time I am in the area instead.

²² I set up a 'sense of place' Facebook page similar to an initiative being run in the Isle of Man BR, which encouraged local residents to photograph their surroundings and share with me stories and activities of place. This was not successful in any meaningful way.

informal, and I saw this as part of building rapport in an online ethnographic context rather than a source of data. As Howlett (2021, p. 9) explains, being virtually situated between the formal and less formal aspects of participants lives allows for a 'fuller picture of who they are' and online contexts can reveal insights that may be overlooked during in-person communications.

Moreover, as the researcher, Howlett (2021, p.8) describes how it is possible to 'embed' yourself in participants lives remotely. This was certainly the case in my work as I formed strong relationships with biosphere personnel through my role as a volunteer supporting organisational online activities and engaged in regular informal communications with certain key informants. However, impromptu encounters are not possible online, meaning the informality of interacting with people and places physically, is replaced by a more formal space of interaction, arranged in a set space and time. Organisational perspectives were easily elicited in this way using video interviews. In contrast, Facebook groups offered insight into resident perspectives.

The findings emerged from studying overlapping physical and digital worlds and multi-sited engagement with different groups and different places in Wester Ross. This 'new reality' of researchers being 'co-present' and embedded in participants' lives from a distance, changes notions of 'the field' which cannot be limited to geographic space (Howlett 2021, p. 10). Horton (2021) has also suggested the experience of 'being here' whilst listening to different experiences of 'being there', can illustrate the asymmetries within ethnography and the ethnographer's comparative privilege. Asymmetries were less apparent in my context given my participants and I were living through similar experiences of the pandemic in Scotland.²³ Although the pandemic induced novel methodological circumstances, the above commentary is also part of a longer trajectory of questioning boundaries between being 'away' in the field and being at home. Amit (2003, p. 9) for example, argued that ethnographers cannot leave the field,

²³ The major difference between us was the urban and rural distinction. I was living through the pandemic in a flat in the city centre of the capital, whilst my participants were living rurally.

they take it with them, as it becomes ‘incorporated into their biographies, understandings and associations.’

Multi-Method Data Collection

My data collection followed ethnographic methodology which prioritises participant observation as the primary method, complemented by interviewing and documentary analysis (Gobo 2008).

Participant Observation in and with the Biosphere

Participant observation, the defining feature of ethnography (Holy 1984; Agar 1996) situates the researcher amid the community they wish to study (Angrosino 2007). Direct involvement in constructing the social world generates understanding of ‘the actions of others as the actors themselves understand them - through interaction and interpretation’ (O’ Reilly 2012, p. 104). In CE, participant observation also has potential as revolutionary praxis, linked to its nature as a form of knowledge production ‘through being and action’ (Shah 2017, p. 49). It compels us to ‘question our ideas of the world by engaging with those of others’ and ‘makes us always be open to considering new possibilities’ (ibid).

This thesis is based on eight months of in-person participant observation, conducted between August 2019 and March 2020 and twenty-four months of online participant observation between March 2020 and March 2022. During this time, I adopted, as ethnographers do, a role in the field of study (Hammersley and Atkinson 2007). The nature of participation changed in different contexts (Gold 1958), ranging from more passively observing activities and interactions with local people in Wester Ross and organisations,²⁴ towards more active participation in the BR organisation. An active role denotes participating as much as possible in activities as a means of learning (DeWalt and DeWalt 2011).

²⁴ Contexts where I was more passive include community council and community development trust meetings, the crofting cross-party group, Scottish Land Commission events and public events hosted by culture and heritage organisations. In these settings whilst I was actively listening and note-taking, I was not necessarily active in discussions or known to all in attendance.

My observations were primarily of the BR organisation, and over time my participation became an increasingly prominent part of the research context under study. The BR organisation comprises of a volunteer board led by an elected chairperson and staff. Figure 7 and Figure 8 show the composition of the organisation from the beginning to the end of the research, using pseudonyms and colour coding for role, illustrating key changes in staffing/directors' roles relevant to this research. Those in 'co-opted' roles are representatives of the Highland Council and NatureScot brought on in an advisory capacity. Among the remainder of the board, Norman has a relevant professional role as estate manager of a National Trust for Scotland property in Wester Ross. Other areas of interest and expertise across the board members include renewable energy and offshore oil and gas; cultural heritage and Gaelic language; crofting; youth work; environmental law; tourism; mountaineering and rangership; fisheries and marine; nature conservation and community development.



Figure 7 WRB Board of Directors 2019.

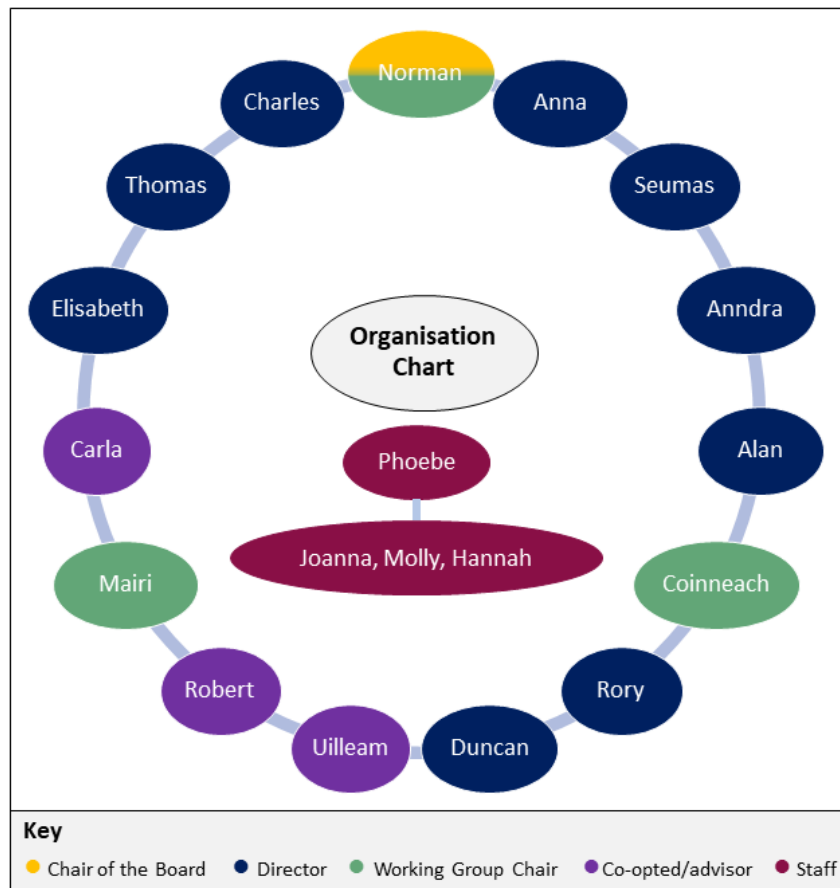


Figure 8 WRB Board of Directors 2022.

Data was collected from observing board and working group meetings alongside individual semi-structured director interviews (see [Appendix 1](#)). The board met bi-monthly and the working groups on an ad hoc basis. Meetings lasted 2-3 hours, generating transcripts of between 5-20k words. I participated in approximately fifteen board and fifteen working group meetings. I also engaged in activities between meetings and Figure 9 outlines a timeline of the biosphere during the research.

In early 2021, given my active role in the organisation including relatively informal activities and supporting projects, I was given a title of ‘research and development volunteer’ and added to the staff page of the BR website. Figure 10 gives a summary of the kinds of activities I carried out for different biosphere projects in this role, some of which were more relevant to the thesis and generated data, others which were carried out for biosphere aims and not used for the thesis.

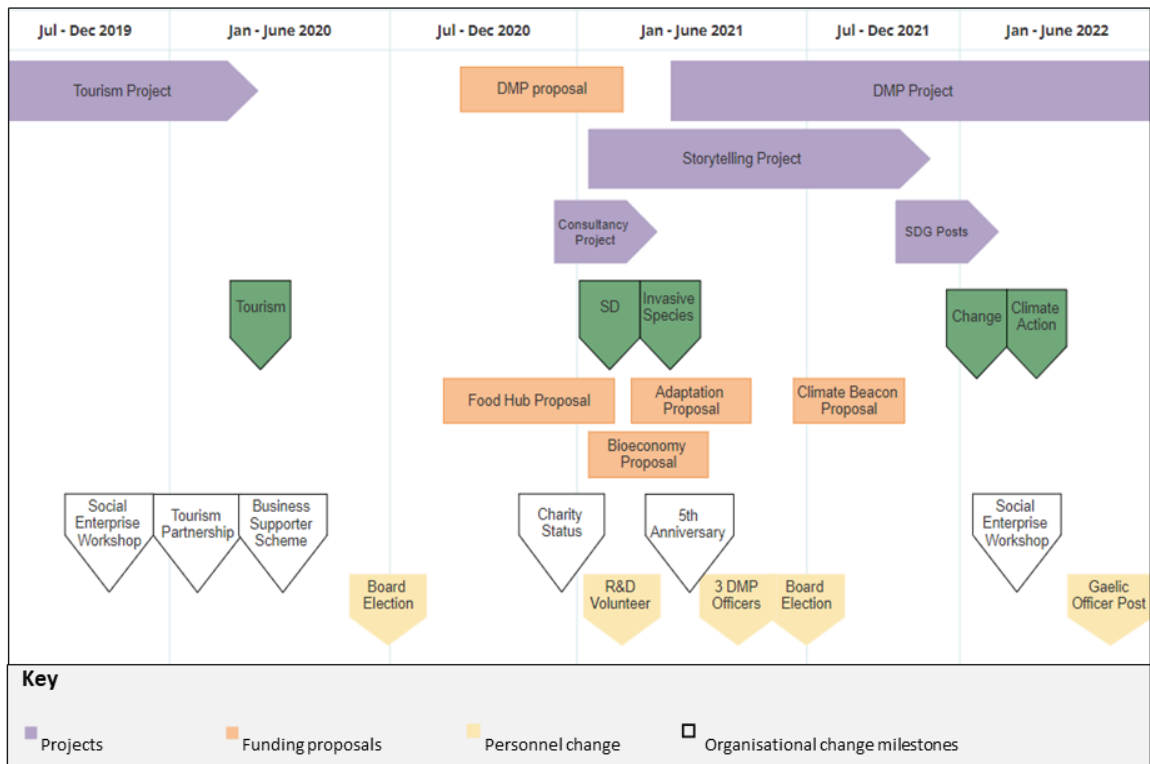


Figure 9 Biosphere Organisation Activity Timeline During Research.

Project	Researcher and Volunteer Activities
Tourism projects & DMP (Destination Management Plan) proposal	I supported activities in person and online around tourism from the beginning to the end of fieldwork. This included community workshops, desk-based research, design support, funding applications, recruitment of staff and attendance at biosphere meetings. This generated a significant variety of materials, predominantly fieldnotes.
SD (sustainable development) webinars	With guidance from the sustainable development working group, I organised and hosted a series of public webinars on sustainable development topics. I produced a report for the board and webinar discussions generated textual data for the thesis.
Adaptation proposal	I attended training workshops on making the biosphere more entrepreneurial and supported a funding bid for adopting a more entrepreneurial model.
Business support scheme	I supported the creation of the business charter scheme, with some basic logo design. I created social media messaging about the business supporters via interviews to promote the scheme. This was undertaken predominantly in a volunteer capacity.
Climate Beacon proposal	I led on a funding bid to establish a climate beacon in Wester Ross, liaising with organisations in the culture and heritage and environment sector and getting input from biosphere staff and directors to develop a programme of activity.
Invasive species conference	Through the natural heritage group, I helped organise an online conference on invasive species. This was a partnership event with the National Trust for Scotland.

Biosphere AGM – 5 th anniversary	I organised keynote speakers for the biosphere AGM in 2021 to celebrate the 5 th anniversary.
Climate Action Conference	I led on a funding bid to create an online climate community action conference.
Gaelic Officer Post	I co-organised a meeting on Gaelic through the cultural heritage group for my research and biosphere project development. I helped the chair of the group to develop a funding proposal for a Gaelic development officer.

Figure 10 Table of Volunteer Activities.

Interviews with Biosphere Residents and Community Organisations

Interviews are a space of meaning-making where partnership and dialogue between interviewer and interviewee ‘construct memory, meaning, and experience together’ (Madison 2005, n.p.). Interviews were carried out with key informants, including ethnographic interviews in the field which were less structured and more opportunistic and semi-structured online interviews which were recorded (see [Appendix 1](#)). The variance reflects the fact that in ethnographic contexts ‘different people and different situations require different techniques, varying along continua of structured to unstructured, formal to casual’ (O’ Reilly 2012, p. 126).

Semi-structured interviews were useful for accessing individuals with whom there was no observation and conversational opportunities and to explore ‘in depth’ particular matters of importance for the research (see Wengraf 2001). The semi-structured format enables use of particular questions but requires significant interviewer improvisation (ibid). I chose interviewees to build on initial understandings from earlier stages of fieldwork and targeted people in different communities and roles to discuss a broader range of topics. This included development staff working for local community trusts and the chairs of community councils. Although online interviewing was initially unplanned, similar to Jenner and Myers (2019) I found that data generated was not inferior and in some respects was preferable compared with in-person settings for both myself and my participants.

I conducted thirty-nine interviews of the following types: ten online and two in-person interviews with biosphere directors; six online interviews with local residents not representing an organisation; two in-person and sixteen online interviews with local residents with a specific organisation they were representing; and three interviews online and in-person with non-residents with connection to the area. Informal

ethnographic interviews are not included here as they did not generate transcripts and were recorded in fieldnotes.

I aimed to conduct interviews through Gaelic with people in Wester Ross, focusing on conceptualisations of nature-culture relations through concepts such as *dùthchas* (see [Chapter 2](#)). Post-colonial theory in critical ethnography posits the importance of language as part of cultural identity (Madison 2005). I had only basic knowledge of the language and pursued one-on-one lessons and completed immersion at *Sabhal Mòr Ostaig* on the Isle of Skye. Although 2011 census data suggested that 10.6% of the Wester Ross population speak Gaelic, I never encountered the language being spoken whilst in the area and found it challenging to identify speakers. I was ultimately unable to conduct any interviews through Gaelic but having knowledge of it, including grammar and expressions, was useful for discussions about it with interviewees, both speakers and non-speakers. The level of fluency I reached, typical of researchers who learn languages for fieldwork purposes (see Gibb and Iglesias 2017) was insufficient to engage meaningfully with any Gaelic text sources.

Documents and Visual Data

Documents and visual data were collected during in-person and online ethnographic fieldwork. Documents are social products and can be explored as part of a cultural analysis of what people (including organisations) say and do (see Hammersley and Atkinson 2007). I included project websites and social media pages, leaflets, funding applications, project reports, evaluation materials and policy documents. Although much was collected out of convenience whilst in the field (e.g. leaflets from museums, community archives, local newspapers etc.), in analysis I prioritised those most important and selected purposefully.

To contextualise observations of the biosphere, I reviewed governance and designation documents such as the UNESCO nomination papers, coordinator's reports produced for board meetings and the biosphere's website. This was useful to include given how texts are integral parts of organisations and 'important for its production and reproduction' (Gobo 2008, p. 130). Where relevant I pursued documentary sources from other organisations, such as estates and landowners, conservation

charities and community development organisations, namely any websites and reports on key activities. I also considered relevant national and international policy documents and strategies from the Scottish Government and NatureScot, Historic Environment Scotland, the Scottish Land Commission, and UNESCO MAB programme. Such sources were useful for exploring particular discourses and ideologies associated with key concepts such as heritage and sustainable development, and potential 'common sense' discourses. Discourses mediate ideologies and are part of the production of 'material realities' including 'institutions, policies and development projects' (Lyon and Hunter-Jones 2019, p. 977).

Whilst in Wester Ross I used photography to document communities, heritage and landscapes. This includes specific museum exhibits and sites I had identified as important (see Figure 6) and more exploratory walks in different areas. These are included throughout the findings chapters, and copyright of images is my own unless otherwise stated. Photographs help record the materiality of the fieldsite as it is experienced and can be treated as visual fieldnotes. Visual fieldnotes offer researchers a way to engage with creative, imaginative, embodied ways of knowing that are distinct from text-based fieldnotes (Pillay et al. 2020). In the online research, I also utilised visual and textual materials from social media, particularly Facebook.

There were two forms of this data; content produced by organisations (including the biosphere) conveying their identities and ideas and content produced by members of the community as part of specific groups. The former is indicative of social media for institutional forms of digital engagement aiming at 'the public' whilst the latter are spaces for social interaction and communication in a specific locale or on a specific theme. Some groups existed pre-Covid-19, whilst others were created or revitalised because of it. As Ruhleder (2000, p. 3) suggests, 'virtual venues support or enhance existing face-to-face settings and activities, while others provide alternatives to them.' The community pages, blurring the lines between the 'public' and 'personal' space, and often restricted to members, were not treated as 'data' due to issues of consent, but were a way to remain connected with residents in Wester Ross and their experiences of life in the pandemic. Organisations' posts intended for public consumption were saved as a screenshot and compiled as textual-visual data.

Ethnographic Writing and Analysis

The above three methods generated a rich corpus of material for analysis. Fieldnotes were a major source of data, which I treated as 'intertexts' that mediate between practical engagement with 'the field' and the researchers' critical reflections (Whitaker and Atkinson 2017). My notes were written by hand at the time of the encounters or immediately after, then typed, compiled and annotated adding further analytical and reflexive interpretation. Photographs acted as a way to 'integrate other modalities of expression' into fieldnotes (Thompson and Burkholder 2020, p. 3). For a collection of photographs, which pertained to a particular experience or location, I compiled these and added commentary as an initial stage of analysis. During the pandemic, the photographs became a useful aid memoire for writing and to re-immense in the experience of place, 'a temporal interpretative tool' (ibid, p. 7).

During online observations with the biosphere, I had access to the audio-visual recordings of Zoom meetings that were taken as standard practice. I transcribed these into text following the meeting predominantly manually, occasionally using software. Rather than seeing digital technologies as a 'substitute' for manual approaches to data analysis, I sought to combine approaches, taking account of different strengths and weaknesses of working with handwritten and typed text and audio-visual materials (see Tessier 2012). I kept a fieldwork research diary which included space for reflexive thinking about the research as a whole and the process of decision making and the direction of the data collection. As Punch (2012, p.87) explains a field diary is helpful for 'self-scrutiny and transparency of the context in which knowledge is produced' including emotional, practical and intellectual concerns. In my context, this could include my emotions pertaining to new experiences, reflections on emerging themes and priorities for future fieldwork.

All data was compiled, stored and analysed with the aid of NVivo software. NVivo is useful for ordering and categorising data by type, such as interview, fieldnotes, visuals and documents and is commonly used in the social sciences for qualitative data management and analysis. NVivo's coding function is practically very useful for generating new ways of ordering, connecting and understanding the data, offering flexible ways to create themes for interpretation. The main benefit of NVivo is

efficiencies afforded by the software around data management that allow for greater focus on the meanings of what has been recorded (Bazeley and Jackson 2013).

Whilst the software has many capabilities, I utilised some of the more basic, such as hierarchical file management, categorisation of files, searching across a large corpus of textual data, coding 'nodes' and annotating and visualising them (see [Appendix 2](#)). There were some time-consuming practicalities involved in using NVivo²⁵ and I had to consider the protection of data, especially any 'raw' data containing personal information (Pels et al. 2018). I stored this securely digitally, and anything handwritten once no longer necessary was destroyed. All digital files were stored on a password protected laptop that only I had access to throughout the research.

Data and theory are not separate entities, and I treated the former as empirical materials that might generate a variety of readings and make different knowledges possible (Alvesson and Kärreman 2011). This is part of what Alvesson and Kärreman (2011, p. 15) describe as an 'interplay between theory and empirical material', which emphasises critical dialogue rather than using data to validate knowledge claims. This approach is well-suited to an ethnographic methodology, which can be described as 'a process of coherently resolving breakdowns' (Agar 1986, p. 39) with a propensity towards theory development (Alvesson and Kärreman 2011). Data can be read across multiple theoretical perspectives (see Jackson and Mazzei 2018), which was the approach I took to writing a critical ethnographic narrative (Brodkey 1987).

Moving beyond thick description (Geertz 1973) a critical ethnographic narrative blends emic and etic in the interplay of interpretations and the site of study (see Figure 3). Data analysis should link ethnographic analysis to cultural action (see Williams and Brydon-Miller 2004), narrowing the gap between text and context through deep theorising (Lillis 2008). Furthermore, the analysis must link the ethnographic context to a sociological imagination, denoting practical theoretical understanding about

²⁵ For example, scanning collected materials (such as leaflets and local newspapers) into digital format, and the full transcription of audio files into text. I used screenshots to capture social media commentaries from different Facebook and Twitter accounts, which had to be converted from single images into a compilation of images, stored as a PDF for easy viewing and retrieval.

conditions of existence and what can be done to change them. Whilst 'conventional ethnography describes what is; critical ethnography asks what could be' (Thomas 1993, p. 4).

Writing the ethnographic text, I followed Foley's (2002, p. 487) approach; seeking a realist narrative that is 'more accessible and reflexive' than a 'scientific realist or surrealist postmodern' narrative. He suggests we speak from 'various historical, culture-bound standpoints', and must 'make limited, historically situated, knowledge claims' which ultimately aim to tell stories that bridge the cultural divide between 'intellectuals and ordinary people' (ibid). I also pursue post-academic writing which aims to narrativize and humanize ideas and understandings (see Badley 2019).

Data collection, analysis and writing were not linearly carried out. This recognises that writing is part of doing ethnography (Light 2010). I maintained use of NVivo whilst writing findings, creating continued dialogue between empirical ethnographic data and my interpretations. This helped avoid 'turning people and place into a figment of our ethnographic imagination' (Astuti 2017, p. 11). Moreover, because I remained somewhat embedded in my ethnographic context, I could continue adding interpretations and insights whilst writing and discuss findings with my participants. The non-linearity of analysis, writing and theorising contributed to producing an ethnography that aims to capture and synthesis complexity, whilst opening up, rather than closing down meanings in the overall thesis narrative.

Ethical Considerations

The above methodological approach invoked a number of ethical considerations in different contexts especially in relation to informed consent, confidentiality and anonymity, minimising harm, and researcher positionality. I drew on guidelines around qualitative and ethnographic research produced by the Economic and Social Research Council (ESRC), the British Sociological Association (BSA) and the Association of Social Anthropologists (ASA). Ethical approval for the study was given by the University of Stirling General Ethics Panel (see [Appendix 3](#)), however ethical decision-making was needed throughout the entirety of the research, rather than being a one-off process; this was especially true throughout the pandemic.

Informed Consent

I followed the ASA (2021) ethical guidelines on participant observation to try to indicate my presence as a researcher whenever practicable. I did this the most appropriate way depending on contexts of interaction. Written and oral consent were used, where it was reiterated that participation was voluntary with the ability to opt-out (ESRC 2015).²⁶ Initial access to the biosphere was arranged via an online meeting and then cleared by the board of directors. Individual director interviews had their own process of informed consent associated with use of audio-recorded transcripts.²⁷ Given the pro-longed period of observation of the biosphere, I had to re-check consent at times, given participants might forget they are being studied (BSA 2017).

Participant information sheets were used with interviewees covering research background and the implications of participation. Interviewees signed consent forms and were encouraged to ask questions at the start of the interview. On occasion, participants asked if I wanted total honesty or the 'party line' of their organisation. I opted for the former, offering caveats that interviewees could check specific quotes if potentially too sensitive to publish. In some settings, this formal and detailed approach was impractical. At some public meetings I confirmed if observation was acceptable with event hosts and my fieldnotes never identified attendees, because consent from gatekeepers does not necessarily mean consent from all involved (BSA 2017). However, when playing a more active role, including (co)hosting, I could often get full consent from all attendees.

In my closer personal relationships and observations, I was sometimes drawn into personal situations beyond the research scope (Mnyaka and MacLeod 2018). This was especially true for the online instant messaging with participants, where discussions went well beyond the research. In these situations, I was not collecting data, which was key to acting ethically, especially with informants who became more like friends

²⁶ These guidelines have been superseded by the UKRI guidelines.

²⁷ Newer directors who were not part of this process, were not included in the thesis and were not individually interviewed, although they were participants of board meetings that were included as data in the research.

than research participants over time. In such contexts, clarifying consent when lines were blurred was essential for informed consent.

Confidentiality and Anonymity

Research information shared by participants was treated as confidential. Following ASA guidelines, my fieldnotes were considered private (barring legal exceptions) to ensure the confidentiality and anonymity of my participants. Fieldnotes and other data were protected from unauthorised access and I ensured nothing would be published or made public that permits the identification of individuals that would put their welfare or security at risk. I made clear to participants that confidentiality will be maintained *as far as possible*. The two main caveats being where there is a threat of harm (ESRC 2015) and where stories told, might make a participant identifiable. This had to be negotiated on a case-by-case basis.

Contextualising information is crucial to making ethnographic and qualitative data meaningful, and herein I name my research site and organisations rather than seek to anonymise because the exact geographic location matters (see Walford 2018). When naming organisations and places, I accepted responsibility to deal with any sensitive information and issues of confidentiality with due consideration. When it came to individuals it was easier in some respects to offer anonymity (ibid). However, in an ethnography of local communities in a specific and small rural area, the limitations are clear. I use pseudonyms for individuals throughout (see [Appendix 4](#)), but given that job roles are used, those with local knowledge of the organisation, are likely to be able to identify these individuals. For those requesting a stricter level of confidentiality and anonymisation, I was careful to avoid giving specific identifiers to try to better conceal their identities. One of the challenges of anonymity in ethnographic research in an internet age is that it is possible to find identifying information easily online if organisations and places are identified (ibid).

However, this is not necessarily problematic if ethnographers work collaboratively with participants and focus on the benefits of openness in research and of naming sites and organisations (ibid). It can help organisations to raise their profile, increase transparency, access funding, share innovative practice and engage with wider

stakeholders and communities (Naidu 2018; Tilley and Woodthorpe 2011). Some groups are less concerned with concealing their identity, and more interested in the benefits of being known, especially concerning socio-political change and the assertion of rights (Mnyaka and MacLeod 2018). With Walford (2018) I agree that the quality of research is improved with more openness, but I also have tried throughout to anonymise where needed to avoid causing difficulties for my participants.

Minimising Harm to Participants and Researcher

There can be consequences from participating in research, and researchers must work to minimise harm both to self and participants during the course of the study, including psychological and physical. My work does not address any 'sensitive topics' with any 'vulnerable groups', however there was always the possibility of participants divulging sensitive information. I prepared to deal with the unexpected, and to re-assess possible risks to myself and participants throughout. In the online setting of meetings, potential harms arose due to individuals' behaviour, for example acting abusively or shouting at others. This led the BR to develop good practice protocols for online meetings. If I was chair or facilitator, I began meetings by encouraging people to treat each other with respect online.

In the context of the pandemic, the most prominent harm was the risk associated with transmission of Covid-19. I erred on the side of caution, given the vulnerability of rural Wester Ross communities with many older residents and was led by perceptions of local residents regarding visitors. I avoided harm by not returning to Wester Ross at all between March 2020 and March 2022. When restrictions were lessened, I chose online alternatives to in-person opportunities when possible.

Researcher Positionality

Reflexivity and researcher positionality are important in qualitative research. Critical ethnographers wish to 'act morally' and feel 'the responsibility to make a difference in the world' especially for those we study (Madison 2005, n.p.). I adopted an activist stance at times in the research, becoming an advocate for the biosphere organisation and the people within it. This followed increasingly from my 'insider' status as a volunteer. From this position, I could utilise my power and resources as a researcher

(including academic, practical and professional skills) to make a difference to the biosphere organisation.²⁸ This was important especially given I was working with an under-resourced organisation, who have in the past contributed to research, but not necessarily benefited directly from it.²⁹ My approach was informed by Freire (2014) and the need to create 'a horizontal relationship of equality' to promote dialogue from which can arise 'new emancipatory knowledge' (Nabudere 2008, p. 70). This is based on the ethical recognition of a responsibility to empower communities and individuals and creating 'caring relationships' as part of everyday ethics (Banks et al. 2013, p. 275). However, like my participants, my identity was not fixed at all times (see Foley 2002). I oscillated between insider and outsider status in different contexts which often invoked different kinds of power relations as a result. Being a Gaelic language learner, of Edinburgh descent, a young female, and a PhD candidate was relevant to how I was perceived by others and shaped my interactions with participants. Most importantly in terms of power, in some contexts, I was perceived as having status and expertise. For example, several times, a key participant expressed self-consciousness, feeling an imposter in a room of people (myself included) with university degrees. When we spoke privately, I rejected the idea that I and others hold special status as an authority on a topic, arguing for the value of knowledges and experiences generated through practice.

Although my positionality is important to reflect on within the research process, I fall short of autoethnography. I remain focused on understanding and making sense 'of the social worlds and experiences of others' (Coffey 1999, p. 37). Critical ethnography relies on the generation of data from close, and sustained relationships with people and places. The richness of perspective and knowledge generated herein, was possible through cultivating ethically professional relationships and trusting friendships with my

²⁸ For example, my knowledge of online tools and technologies, became of use to the biosphere as the Covid-19 pandemic shifted life online, and served the organisation as well as my own research. My knowledge over time became of use to the organisation too, and part of the approach to research based on dialogue is to create a 'common pool of knowledge accessible to all users' (Nabudere 2008, p.81).

²⁹ This was a comment made by a director of the organisation who said apart from my work, the biosphere has benefited little from the research projects to which they contributed.

participants over time. However, such closeness does not mean that I have an 'authentic voice' or authority to speak for these people and places (Gerrard et al. 2017). As Calhoun (2008, p. xix) puts it, there is 'truth value', in that some claims to knowledge can make better sense of the world than others, even in their contextual, partial, and specific cultural form.

Conclusion

This chapter has outlined the critical ethnographic methodology of this doctoral research, covering epistemological and ontological underpinnings and the practical implementation of a multi-sited ethnography. This recognises the heterogeneity of people and place, and rather than capture the 'true' essence of these as bounded entities, I open up space for multiplicity and relationality. Informed by interdisciplinarity and critical theory, my ethnographic work, carried out both online and in person, was varied and involved active collaboration with my participants in the UNESCO BR. Moving digital was a consequence of the Covid-19 pandemic, but this was ultimately a fruitful setting in which to conduct an in-depth analysis of the BR in Wester Ross. I was guided by everyday ethics and the need to be reflexive about my own positionality throughout. Having detailed my methodological approach, I now turn to the research findings.

Chapter 4: Biosphere as Designation, Organisation and Place-Making Lens

BRs are implemented in diverse ways in practice, adapting to differing local and regional circumstances (Elbakidze et al. 2013). This chapter concerns how the biosphere concept has been ‘interpreted and applied locally over time’ (Matar and Anthony 2020, p. 135), focusing on what it means for communities, heritage and sustainability in Wester Ross as understood by local actors. Using assemblage theory, I introduce a critical analysis of what the biosphere *is* and *does* in theory and practice. To understand what the biosphere ‘is’, requires attention to ‘where’ it is in space and time. As Hubbard and Kitchin (2011) suggest, concepts only have meaning, value and efficacy in a specific place or milieu and should be situated, contextualised and localised. The chapter discusses the biosphere as designation, organisation and lens for place-making.

I begin with local perspectives around the time of the reterritorialization (Price 2017), examining biosphere zoning as territorialising practice before moving onto post-designation dynamics. I introduce the biosphere organisation, identifying the local actors involved and organisational dynamics of the community-led model in practice. Finally, I discuss how the biosphere acts as a lens for place-making. Warburton (2020) suggests place-making is about stories we tell about ourselves, each other and our places, invoked in the construction of regional identity, bounded territories and relational networks. Considering this in Wester Ross, highlights how place and sense of place can be ‘collectively shared’ or ‘contested’, always in the process of creation and part of a larger socio-political milieu (Manuel-Navarette and Redclift 2010). This includes the invention of place myths (ibid) which can be challenged by community initiatives creating alternative place trajectories (Schmid et al. 2021).

The Biosphere as Designation

Nature conservation designations are embedded in places and can be interpreted as spatial and place-making practice (Walsh 2020; Williams 2018). The impact of such designations on communities, heritage and landscape in Wester Ross, was at the heart of discussions about the extension of the Beinn Eige biosphere designation.

'Not Another Designation'

Morag, who lives close to, and works out of Beinn Eighe NNR, was involved in such discussions, later becoming the biosphere's NatureScot advisor. NatureScot, she said were 'unsure' about the designation and concluded 'if communities wanted it, we would support it', but would not pursue nomination on their own. Alongside a few passionate BR advocates, most were not opposed to it given the softer boundaries compared with other conservation designations. Indeed, Morag recalled how landowners were told biosphere designation is 'not going to change anything'. Although lack of jurisdiction, regulatory authority and management powers associated with BRs can be considered a problem, it was in some respects key to achieving the designation in Wester Ross. Morag described how regionally, more so than elsewhere, 'people have a healthy disrespect for designations.' She reflected on Wester Ross National Scenic Area (NSA) consultations where there were tensions and feelings of 'not another designation'. Hence, the BR's lack of statutory enforcement 'sold it' to people, 'because it would not be about what can and can't be done with land'.

Morag suggested dislike of interference in land management is partly about the authority of state agencies such as NatureScot and other conservation charities and their ways of working. For example, NatureScot 'got it wrong' with the designation of Inverasdale Site of Special Scientific Interest (SSSI) causing 'uproar' by failing to account for the crofting landscape. Similar interpretations arose from crofters in response to Wild Land Areas (WLA) (Russell 2021a), which are also seen as illogical by others. The Chairman of Applecross Trust described 'the artificial way' the WLA created boundaries on the estate (see Figure 11). He said, 'they slam a line right down the middle' with one side deemed 'special' and the other not, placing important Atlantic Oakwoods in the bit that's 'not interesting'.



Figure 11 Applecross Estate Boundaries© Andy Wightman and Applecross Wild Land Area © NatureScot

Morag said, of designations, that boundaries are part of how value is conveyed, whether indicating an area has national, European or international importance. She explained for many designations, the lines can only be drawn exactly around the features for which there is ‘strong scientific evidence’, with little to no buffer room around it. In this respect, she argued that conservation is effective at protecting small sites but struggles with landscape scale thinking. On the value of a biosphere on top of a system of already strongly protected smaller areas, Morag characterised the biosphere as a ‘vehicle’ for working on a larger landscape scale for ‘regional sustainability’.

International UNESCO status was also a valued aspect of biosphere designation, and the process of community consultation emphasised the threat of ‘losing’ this status

alongside potential opportunities if retained.³⁰ Robert, a local Highland councillor, said early discussions indicated a desire to 'get recognition for Wester Ross'. He compared the area to Skye, which is well-known, and argued that although Wester Ross has more to see, 'it's not quite got that name' and the UNESCO label would 'push that'. The idea of securing a label that would bring recognition illustrates how 'a place must put itself on the mental map of decision makers and a distinctive heritage is the most obvious way of achieving this' (Graham et al. 2000, p. 165). Alongside putting 'Wester Ross on the map' community consultation events identified desires for a 'bottom-up approach' to 'empower communities' in contrast with years of 'top-down approaches'. Hence, the BR was considered an opportunity to create new ways of working in the region.

Local perceptions of designations in Wester Ross invoke the critique of conservation introduced in Chapter 2. As Walsh (2020) summarises, certain designations are accused of displacing 'local place-based' landscape imaginaries. Unlike such designations, often based on narrow criteria, the biosphere designation working at a regional landscape scale has more scope to accommodate such imaginaries. However, the process of zoning also invokes broader territorialising practices and logics.

Zoning as Territorialising Practice

The biosphere boundaries were created through a collaborative zoning process that ultimately resulted in the 'reterritorialisation' of Wester Ross biosphere (Price 2017). Re-territorialisation is about 'changes in conservation's territorial claims' (Adams et al. 2014, p. 576), here associated with new UNESCO BR criteria. Chapter 1 explained how Wester Ross BR had to expand its boundaries to include local communities. Zoning the biosphere required applying the designation criteria to a space already 'demarcated, bounded and parcelled' (Breglia 2006, p. 181) with designations. The creation of the

³⁰ Such opportunities are identified in the Assist Social Capital consultation analysis documents and included benefits associated with creating 'sense of place', 'an identity' and a 'destination' or 'label that brings visibility'.

three new zones, core, buffer and transition, involved using spatial data alongside community engagement to both qualify and quantify space.³¹

Core and buffer zones must be under conservation management, with the former aligned with existing designations. Beinn Eighe, under the management of NatureScot as an NNR became a new core zone, alongside the adjacent Loch Maree Islands and *Collie Mhór* an SSSI owned by the National Trust for Scotland (NTS). According to the zoning working group report, including *Collie Mhór* offers communities in Kyle of Lochalsh a sense of ownership of and involvement in the BR. Surrounding buffer zones incorporated land managed by Forestry Land Scotland (FLS) and NTS, and the transition zone covers the major settlements and human activity of Wester Ross and Lochalsh including coastal waters. The spatial distribution is 96% transition, 3% buffer, and 1% core (see Figure 12).

Norman supported zoning and participatory processes, associated with his role as the estate manager of an NTS property in Wester Ross. A long-term NTS employee, he became involved upon learning BR zones could include NTS properties. He supported zoning with his GIS expertise, explaining how boundary making required an 'objective' assessment of current land use practices and designations against the UNESCO criteria. He said, initially, it became clear 'none of the areas that are governed by private estates would be considered acceptable in terms of conservation management due to their practices'. However, for the transition zone, deciding the outer limits was a 'pragmatic' decision, related to size and engagement with 'gateway communities'. Those with desire to be in the biosphere were included meaning 'over time, the boundaries kept getting bigger'.³²

³¹ See De Nardi (2014) for a discussion about mapping methods which can move beyond quantifying towards qualifying of space, including sense of place and living heritage.

³² This is an example of landscape decision making beyond technical processes and the purview of professionals (see Dalglish 2018). A marine transition zone was also included in the outer boundary, to reflect the importance communities placed on connections to the sea, although Norman said this was somewhat 'arbitrarily' drawn.

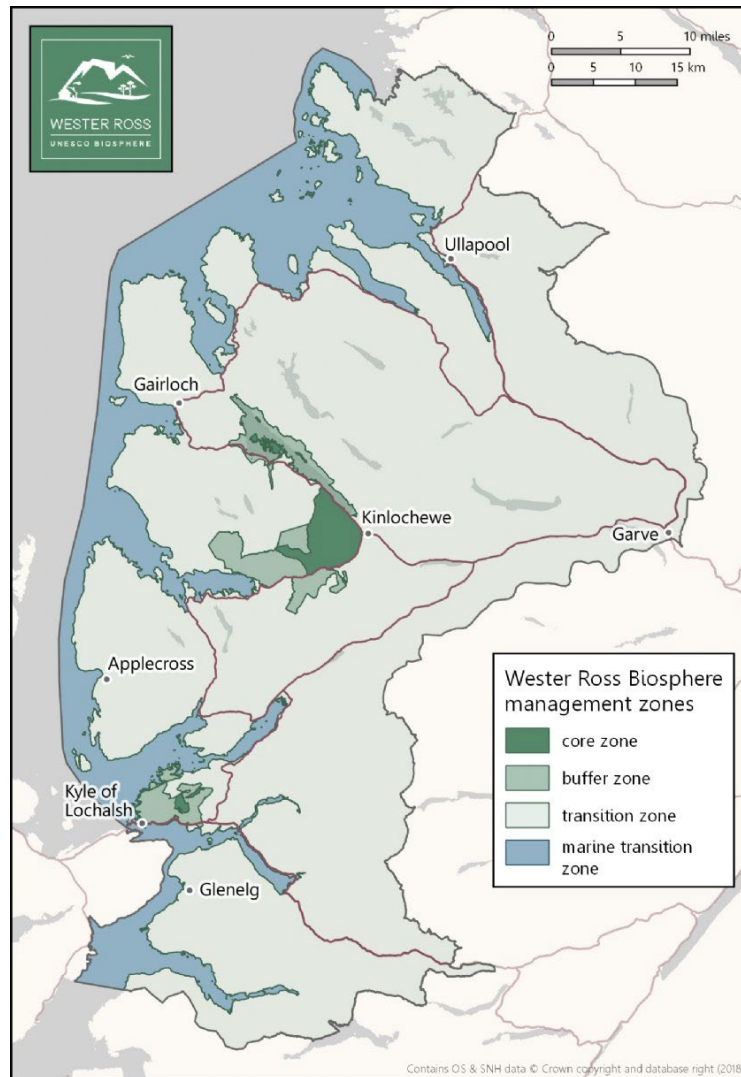


Figure 12 Wester Ross Biosphere Zones © Wester Ross UNESCO Biosphere

Whilst Price (2017) described the ‘reterritorialization’ process and the stakeholders involved, a more theoretical understanding of zoning as territorialising practice, drawing on other contexts is useful. Alongside the BR literature (see [Chapter 2](#)), zoning has been discussed in heritage contexts. It is understood by Breglia (2006, p. 180) as a territorialising practice that ‘codes both the landscape and the relationships people have with that landscape’, determining what can and cannot happen in the space. In the context of Mexican archaeological heritage sites, she critiques the sense in which zoning emanates from a statist logic to define and contain natural and cultural heritage ‘for the nation’ (ibid, p. 179). This is part of how processes and practices of designation constitute something as an object of conservation, knowledge, and intervention (Jones and Yarrow 2022). In this sense, as a ‘means of ordering the world’ (ibid, p. 19) biosphere zoning constitutes the ordering of nature-culture relations.

Biospheres are layered on top of pre-existing designations, the 'mille-feuille' effect (Mathevet and Cibien 2020, p. 121), as part of this ordering. Posocco (2008, p. 209) argues, BR zoning is a technology of governance informed by UNESCO-MAB's 'environmental cosmopolitanism'. In Guatemala, she shows how a combined universal and authoritarian logic created 'zones of exception', where human settlement and specific human uses of land are not permitted. In Wester Ross, biosphere zoning did not *create* zones of exception, because the core areas were already absent of people. The BR nomination document describes them as 'uninhabited, remote and wild'. Hence, spaces already parcelled off (such as the NNR) conformed to the logic of a core zone absent of human settlement, and thus zoning did not change, but reproduced the existing coding of human relationships to these landscapes through the BR.

However, the territorialising practices of the biosphere zoning process, did invoke something novel in Wester Ross; the recontextualisation of these 'wild' spaces within a broader regional socio-cultural context. As part of the 'production of space' (Lefebvre 1991), zoning as a territorialising practice can create new symbolic meaning in spatial form (Breglia 2006). Where other designations, as described above, exclude communities from their boundaries and the decision-making process, the opposite is true for the biosphere. Communities and local actors were directly involved in creating meaning through the biosphere designation, offering an example of a more localised approach to territorialisation that produced in some respects a more inclusive, rather than exclusive coding of the landscape. While biosphere zoning in Wester Ross remains embedded in statist and global logics of territorialisation, such logics were subordinated to a more locally driven process, rooted in the desire of local actors to create a regional sense of place and empower communities.

Moving towards post-designation and the implications of this zoning in practice, there was dissonance and some ambiguity arising from the fact that the designation does not bring jurisdiction over the resources and territory of the region (Matar and Anthony 2020). Norman suggested that because there is 'no compulsion' other than the threat of losing the designation, there is a 'disconnect' between those driving the biosphere management and those managing the land. Zones are layered on top of jurisdictional divisions of property ownership between private and public land, but owners are not

compelled to manage land differently. Morag, explained during interview that the management of Beinn Eighe NNR is unchanged as a result of the biosphere designation. Callum of FLS, responsible for land in a buffer zone, described the biosphere designation as a 'blanket that lies over this area underneath which there are designations and other kinds of legal obligations.' He felt this blanket is not yet 'influencing' decisions, 'nobody's thinking how can we contribute to this biosphere?' A key task in Wester Ross is thus to create the conditions of collaborative governance needed for BR land management. Alongside working with public bodies one of the major challenges is to work with a multitude of private landowners.

Private estates are the major form of land holding in Wester Ross, with around eighty owners to engage. Although landowners in Scotland are working together across estate boundaries for legislative obligations around deer management, the idea of working collaboratively at the regional scale of the biosphere and within a broader UNESCO remit, is far more complex and relatively unprecedented. It invokes the kinds of governance dynamics described by Parra and Moulaert (2016, p. 245) who highlight 'broader multi-scalar interactions of socio-political and economic processes' surrounding a Chilean protected area. Norman explained, the biosphere organisation has over the years struggled to generate the legitimacy and capacity to influence land management. This raises the question of whether BRs are effective for conservation action, or simply a 'bureaucratic label' (Coetzer et al. 2014).

My pilot study in the Isle of Man biosphere, which is government, rather than community-led, suggests that the designation can both legitimise the status quo and simultaneously motivate change (Russell 2022). This is because the biosphere designation can be interpreted in different ways by different stakeholders, depending on their priorities for, and understandings of, existing territorial governance. For some actors the designation was certainly as Mathevet and Cibien (2020) suggest, a tool to legitimise action but this was not always thought to be happening in practice. In Wester Ross, the consequences of biosphere designation were similarly ambiguous.

Phoebe, who was involved in putting together the UNESCO nomination documents for the designation before becoming BR co-ordinator, said of zonation and associated implications for land uses, 'that's where it gets fuzzy'. Uncertainty around what should

occur in buffer zones beyond supporting conservation led her to comment, ‘it does beg the question, why are these things here’. She felt the zones are ‘for UNESCO’, and important ‘in theory, from an academic perspective’, and of community engagement with the biosphere she said, ‘we don’t talk about the zones because it puts people off’. Zones in the Isle of Man have also been renamed with more accessible terms.³³

Whilst lack of clarity around how the designation could and should influence specific land uses in the zones is a challenge, Norman characterised biosphere management as focused on the biosphere as an ‘entity’ rather than individual zones. This is productive given some BRs overemphasise their core zones (Moreno-Ramos and Müller 2020), paying only lip service to managing the whole area (Hockings et al. 2020). Additionally, given BR zoning has been critiqued as offering spatial proximity rather than conceptual integration (Bargheer 2014), it is beneficial to move beyond zones as a central governing logic of the designation in practice.

The Biosphere as Organisation

Wester Ross Biosphere Ltd (WRB) was set up as an organisational entity to manage the UNESCO designation. WRB is community-led with a volunteer board of directors living in the biosphere. Any residents can be members of the organisation and non-residents associate members. The community-led governance model has been characterised by long-term chairperson Elisabeth as ‘unusual for biospheres’, which tend to be governed through partnerships of agencies that then work with communities. One of the major tasks of a biosphere organisation, post-designation, is to raise awareness of a relatively misunderstood and unknown UNESCO accolade (Reed and Price 2020b).

‘Biosphere, What’s a Biosphere?’

The perception that local communities and stakeholders are unaware of, and unsure what a biosphere is, emerged frequently across interviews with WRB directors and advisors, as well as being discussed amongst the board and with international partners. Elisabeth at a meeting with partners described, ‘the strong feeling of “biosphere,

³³ Changing buffer zone to care zone and transition zone to sustainable development zone.

what's a biosphere?'" as common in the UK. Similarly, Morag, speaking of regional and national stakeholders including NatureScot directors said, 'it is unlikely that they know what a biosphere is.' Early into their existence WRB produced a leaflet with a definition to help with communications:

Biosphere reserves do not belong to one organisation. They foster sustainable development through cooperation between the public and private sector, within communities, and by bridging local knowledge with global awareness.

Additionally, WRB's strategic plan includes the aim of developing 'a recognisable Wester Ross Biosphere identity'. This is not only about communicating the concept of a biosphere, but also the identity of WRB as an organisation.

Peggy, a former WRB director, suggested that 'biosphere won't resonate with a vast majority of people, but they do care about the things that can be done.' Working in the community development sector, she felt the biosphere must be translated into community benefit and 'community accessible language'. This has occurred to a certain extent. Phoebe, as co-ordinator, regularly communicates the biosphere to different audiences and tends to compare the BR to other designations to reinforce the key message that the biosphere 'does not draw a hard line between people and nature'. WRB's website is also based on a translation of the UNESCO MAB remit (conservation, development, logistics and research) into three pillars of 'living, learning, legacy'. The website reads, 'the new style biosphere is a place where people live and actively learn about their surroundings to inspire a legacy rich in both natural and cultural heritage.'

My understanding of the biosphere was informed by directors' views on what the biosphere is *not*, which seemed as important as saying what it is.³⁴ Community members approach WRB to object to development because as Elisabeth told me, they are 'thinking that we are representing them on behalf of the environment, which we are not'. The sustainable economic development role of the organisation was not always known or appreciated by people locally, and WRB actors agreed they will not

³⁴ Pollock (2004) makes a similar conclusion.

support or oppose any particular practices purely on environmental grounds, which is only one part of its remit. Robert, Highland Council advisor to WRB, critiqued those who interpret the BR narrowly as a 'green lobby' because,

...whilst we are responsible for taking care of the nature, passing it on to the next generation, we've got to remember people live here. It's a living working area.

How WRB actors construct organisational identity and translate the UNESCO remit reinforces managing the BR holistically at a regional scale. This was conveyed by different WRB directors as they explained their reasons for joining the organisation in interview, often addressing both conservation and development.

Seumas, a longer-term director who moved to Wester Ross from central Scotland was involved pre-designation and explained, 'we were concerned about the status of Wester Ross, both its economy as well as its sustainability as an area'. Alan, a lawyer from the US, a newer director, joined because the biosphere 'meshed with my thinking' namely the idea of a 'community-led development project' based on balancing eco-friendly 'preservation' with 'responsible development' for current and future inhabitants. Coinneach, originally from a Wester Ross village, moved away for work, but returned when he inherited a family croft. He was encouraged by another director to join WRB to represent crofting and Gaelic interests and explained how he thought the biosphere had a 'common human thread' that was attractive. It recognised 'human beings are the essential bridge between not just the built environment and the natural environment but also between grassroots community politics, and large-scale politics.' Despite having a sense of what the biosphere means to them, directors have also expressed difficulty communicating the biosphere to others, struggling, as Coinneach put it, to find an 'elevator pitch' to explain what it means in practice.

The Biosphere Assemblage

Assemblage theory insists that we do not take categories for granted (Macdonald 2013) and from observing WRB, I came to understand the organisation as an assemblage. Following from Deleuze and Guattari, assemblages are always becoming and possess tendencies towards stasis and change (Adkins 2015). They hold together heterogenous elements 'into some form of provisional socio-spatial formation'

(Anderson and McFarlane 2011, p. 124). This makes sense for WRB's composition, structures and decision making as an organisation, managing a designation.

WRB's board of directors is a group of fifteen individuals connected non-hierarchically by their willingness to join the organisation. Directors come from different areas of the biosphere, participate for varying lengths of time, in different ways and for different reasons. Each director has distinct interests and experiences both professional, personal and place-based (see [Chapter 3](#), p. 53). Although particular individuals are co-opted, directors are not selected for specific expertise, biosphere residency being the qualifying criteria. Compared with conservation institutions and BRs driven by agency partnerships where professional identities and expertise are dominant, WRB directors are predominantly guided by personal interest.

Speaking of Historic Scotland, Jones and Yarrow (2022, p. 144) note personal interest can be considered problematic and distinguish 'acting *for*' oneself from interest *from* the self. The idea that personal agendas threaten WRB has been a concern for Phoebe, working under a changing board, where some could be motivated by self-serving purposes. These range from using the position to advance financial interests or acquire authority or power, but also engaging in destructive or unproductive behaviours such as upsetting staff, causing disruption at meetings and misrepresenting the organisation. During my observations, such individuals were in the minority, but often had a significant impact on the overall stability of the assemblage and interactions therein.

Assemblages have components that work to stabilise their identity, and components that force change or transformation (DeLanda 2006). Elisabeth perceives her role as chair as holding together heterogenous interests and perspectives in WRB because where people put forward their ideas she can 'see both sides', whilst many others have a 'set idea'. However, this is not always successful in practice, and one or two individuals can dominate and steer conversations whilst many others remain silent. The presence of an uneven distribution of power across an assemblage (Higgins and Lerner 2017), can therefore require 'agency' and 'hard work' to 'draw heterogenous elements together, forge connections between them and sustain these connections in the face of tension' (Li 2007, p. 264). Elisabeth aims to stabilise WRB identity through negotiating

difference, but felt the organisation must also reflect ‘the needs of the area, thinking of what is for the greater good of the community as opposed to reflecting the thoughts and ideas of the board.’ In a sense Elisabeth conveys here the emergent properties of the biosphere assemblage becoming more than the sum of its parts.

The composition of the board changes over time as individuals come and go, which captures the decomposable nature of an assemblage (DeLanda 2006). The significance for WRB lies in how individual directors can be the sole source of a particular interest, expertise, or connection to local communities and organisations. For example, Jane is curator of Wester Ross’ most successful local museum and was Chair of the Cultural Heritage Working Group. Losing her from the board meant losing all museum expertise and connection to this organisation. Similarly, when a director who was Chair of the Natural Heritage Working Group left the board, this created a gap in fisheries expertise and operationally, with a struggle to find a replacement Chair with the time and interest in organising meetings. Each individual change to the board changes the nature and composition of WRB reflecting how the specific interactions within the assemblage, enact particular capacities which create emergent properties (ibid).

Thematic working groups (WGs) are the main organisational structure in WRB, covering Natural Heritage, Cultural Heritage, Sustainable Development and Education and Research (see Figure 13).³⁵ The WGs are chaired by a board director willing to take on this role, with other directors encouraged to participate in those of interest. WG Chairs are often key drivers of organisational activity and some directors participated in multiple groups, others none. WG meetings are more informal than those of the board and vary in format and function over time. This includes whether they bring in people from outside the board, something that Elisabeth always encouraged as a way to bring communities and expertise into the organisation.³⁶

³⁵ A tourism sub-group existed temporarily, which was created to manage WRB’s tourism project. It was disbanded when the Wester Ross Tourism Partnership was created. Marketing and finance are largely administrative taken on by the Chair, co-ordinator and treasurer.

³⁶ Compared with other WGs, the education and research group were less effective at this, and the Chair often preferring to meet with people individually. Additionally, when the pandemic forced the WGs online, some chairs struggled to organise and host online meetings.

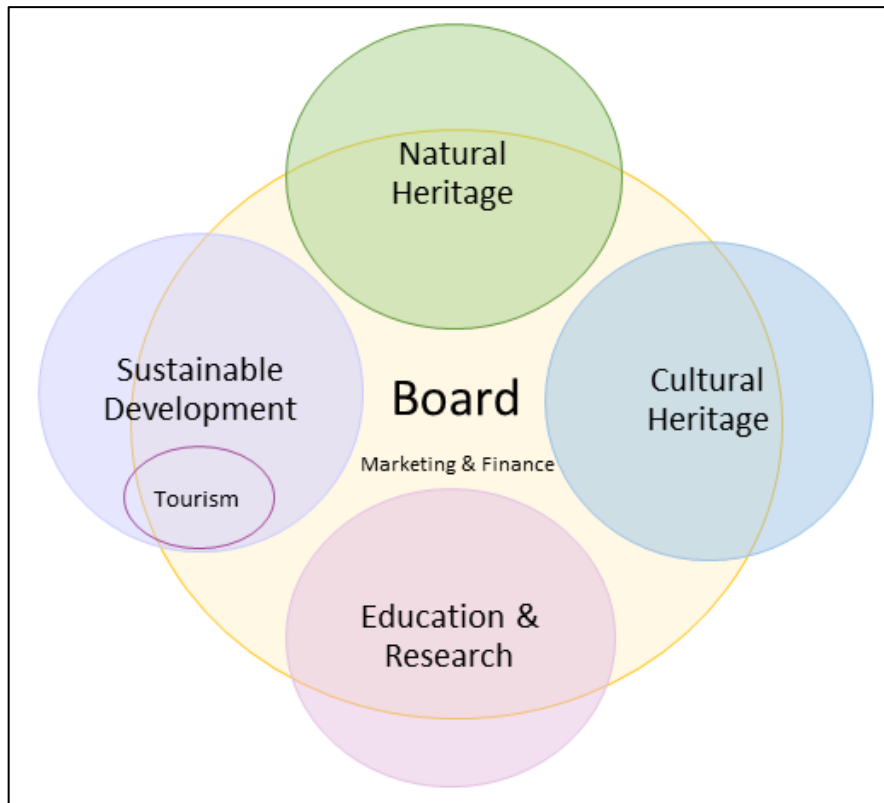


Figure 13 WRB Working Groups.

WG meetings could create frustration and conflict at times. For Phoebe, operationally if the meetings lack structure or purpose, they felt like a ‘waste of time’. I observed discussion circling many topics without progress on what WRB actors should *do*. Morag’s frustration with this was increasingly evident at one meeting, and even with the strategic plan to hand the participants struggled to develop action plans. WGs varied regarding the extent to which Chairs were guided by WRB’s strategic plan, a mechanism through which the heterogenous elements of the BR remit cohere.³⁷ It outlines regional scale ambitions under themes of conservation, sustainable development, knowledge and logistics and communication. For example, under conservation is an aim to share good practice case studies for managing natural and cultural heritage. Potential partner organisations are also identified and aims for ‘supporting existing work’ in the region. However, operationalising the plan has been challenging and over time the effectiveness of WGs has become a focus of board

³⁷ Phoebe formed the plan by travelling around listening to different local communities needs and collated this for the board.

discussion. Norman, among others suggested WGs may be ineffective, and could be reshaped or disbanded, especially as operational staff numbers grow.³⁸

WRB governance is horizontally organised through relations which in assemblage terms are 'rhizomic'. A rhizome has 'no up or down, right or left. It is always in the middle' (Adkins 2015, p. 24). Akin to rhizomic plants, which 'spread and reproduce underground and horizontally', a 'rhizomic assemblage is non-hierarchical and highly dynamic' (Horowitz 2016, p. 169). Through the WGs and board I witnessed this growth in multiple directions simultaneously. Whilst this aligns with working across domains, often the WGs were not bringing in local community perspectives as some thought they should. Moreover, as rhizomic assemblage, productive decision making geared towards focused action was a challenge when faced with 'infinite possible trajectories' (ibid, p. 169).

This helps to contextualise local interpretations of WRB as a 'talking shop'. Clara, a former staff member and director explained of a WG, 'you just have like 30 people in that room talking in all directions.' Similarly, over the long-term Morag was critical about the fact that 'people have been talking about the biosphere for about seven years now, and still nothing has happened'. Not speaking literally, she conveys perhaps how WRB has yet to create significant regional landscape scale change.³⁹ However, as Seumas explained, WRB has not had funding or capacity to fully embrace all opportunities. Pace of change was a source of angst for some directors, who were concerned with organisational fragility and sustainability.

Board meetings would act as a space to negotiate views on progress within the organisation and situate it temporally, considering issues of change and stasis over time. These were tied into moments of financial crisis for WRB, but also became moments of future-making, creating space to focus on how the organisation could

³⁸ For example, sustainable development could underpin all groups, rather than exist separately, the number of groups could be reduced and/or groups could align with the three BR pillars of conservation, sustainable development and knowledge and education, derived from the UNESCO model.

³⁹ Vasseur (2020) explains that pace is especially slow for biospheres where most of the people involved are volunteers and where different community interests and needs require place-based decision making processes.

change in order to survive and grow.⁴⁰ Meetings also situated the organisation spatially. Not only were they spaces where the identity of WRB would emerge through discourse and practice, but they created physical and digital connections for place-making through director interactions across Wester Ross. Jones and Yarrow (2022, p.81) explain meetings act as spaces where the future of objects of conservation are negotiated. This is also true for WRB in terms of rendering communities, heritage and sustainability as objects of attention and negotiation. However, arguably the function of WRB meetings is even more significant because the organisation has no physical infrastructure. Meetings thus represent the key socio-material space in which the biosphere as organisation exists.

The Biosphere as Lens for Place-Making

The biosphere designation and organisation, as a socio-spatial assemblage, create the emergent properties of a lens for place-making. Places are a 'particular constellation of relations, articulated together at a particular locus' (Massey 2005b, p. 67). This complexity underpins how WRB actors approach the task of creating a regional identity, whilst working within specific local places and communities. Moreover, a lens for place-making is also about engaging with and contesting narratives of community and place in a specific historical, geographic, and socio-political context.

Problematizing Fragmentation and Fostering Regional Sense of Place

How territories are perceived, made and reconfigured is part of the active creation of place (Bartolini 2020). As a territory, Wester Ross is perceived by WRB actors as fragmented within and between communities. Robert, who travels around as a local councillor explains the biosphere is a 'huge area' which is 'very fragmented', where communities tend not to collaborate and are 'pretty insular... they don't wanna know what's going on with each other'. In particular, he noted that communities in the North and South are unlikely to talk to each other. This is partly a result of physical geography creating 'isolation, rather than communication' in west coast communities (Willis 1994,

⁴⁰ This led to gaining charity status for the organisation to open up new financial opportunities and moving towards a social enterprise model is a future ambition.

p. 9). WRB director Rory, spoke about how separate communities look in 'different directions', for example Ullapool looking North and Kyle looking South, meaning the biosphere is not a 'cohesive entity'.

The biosphere brings these communities under one regional designation spatially, but not necessarily socially or psychologically. As Elisabeth explained, communities in Lochalsh 'dismiss' the biosphere thinking 'that's not us'.⁴¹ Community 'connectedness' refers to relations experienced in specific 'moments between people and spaces they inhabit' (Ravenscroft et al. 2013, p. 4). Hence, a lack of actual interaction between these people and places means few opportunities for 'collective understandings of community' which are 'bound up in everyday action in particular spaces and times' (Liu et al. 2017, p. 363).

A biosphere lens for place-making problematises this regional fragmentation aiming to get communities, as Robert put it, 'all talking and working in one direction'. The logic behind this is threefold. Firstly, community participation and collaboration are central to WRB's community participatory governance model. Secondly, historically the region was more connected and WRB directors see the benefits of remembering and reforging these connections as part of a regional sense of place. Thirdly, communities working together can address shared regional challenges and make the biosphere a good place to live. I discuss each in turn.

On community governance, a strong narrative among WRB actors is to perceive themselves as complementing and not competing with other community groups or individuals when pursuing their aims. It is well recognised by Phoebe for example, that local organisations are often in competition for limited resources and funding. Hence, WRB as an assemblage seeks to create 'alliances' and 'conjunctions' (Anderson and MacFarlane 2011, p. 126). However, this is challenging in practice and there are tensions within and between communities. As Robert explained, he once made a 'fatal

⁴¹ Elisabeth said the name Wester Ross Biosphere was done to keep the name short, but she felt perhaps it would have been better to call it Wester Ross and Lochalsh biosphere since most consider the latter not in Wester Ross.

mistake' of suggesting two community councils join up. The response was as though 'you were talking about Rangers and Celtic joining into one team. I just gave up'. Comparing community councils to the age-old tensions between these two football teams, embodies potential religious, and place-based differences as well as competitiveness and social tensions.

Shucksmith's (2012, p. 11) assertion that 'place... is inextricably bound up with class, power and inequality' was also relevant across neighbouring communities, such as Aultbea and Gairloch, where there is uneven distribution of community resources, the former being seen as a less desirable place to live. Whilst one resident of Gairloch characterised this as playful neighbouring area 'rivalry', he also indicated social class differences, with Aultbea having more social housing, and Gairloch benefitting from wealthy middle-class incomers. Hence, when pursuing development WRB actors must avoid 'exacerbating inequality... between places and within communities', which can occur if internal power relations are ignored (ibid, p. 9). Being community-led but representing multiple local places and communities, WRB actors must appreciate the messiness of social relationships and dynamics of power and change, adopting a critical conceptualisation compared with more simplistic and romantic ideas (see Waterton and Smith 2010).

WRB staff and directors as members of Wester Ross communities have their own experiences that inform awareness of the complex micropolitics of place. For example, Coinneach, described categories of 'local', 'local-local', or 'local-local-local', reflecting Macleod and Payne's (1994) 'degrees of localness', where you can be 'more local' than others by being born in a place and having lived there alongside potential identity claims based on family ancestry. Local-incomer tensions are well-documented in Wester Ross (see Jedrej and Nuttall 1997; Macleod and Payne 1994; Nightingale 2015) and elsewhere in the Highlands (see Jones 2005). Alongside degrees of localness, there are degrees of marginalisation, where places can be interpreted as 'a backwater, on a backwater on a backwater' (ibid, n.p.). In rural Scottish communities, the 'incomer' tends to be constructed as 'other' and in opposition to 'local' (Burnett 1998), although there are rarely neat divisions relevant at all times. A key undercurrent is who has legitimacy to act on behalf of 'the community', which is always a possible source of

conflict. In Aultbea local-incomer fragmentation is part of the tensions associated with proposed community hall development activities.

WRB director Anndra, previously chairperson of his local development trust bid for community ownership of a local asset and said, 'I was seen as an incomer, I don't know what the problem was, but there were people that were against the community ownership.' Multiple local organisations with similar remits working towards different visions of place, and coming from different perspectives on land ownership, adds another layer of complexity to community politics. These complexities are arguably part of why WRB actors pursue work *with* and *through*, rather than on behalf of communities in the biosphere. Although BR designations are about conserving 'special' kinds of 'cultural heritage', place-making in a community-led biosphere is also about the 'everydayness' of culture, in which WRB actors are embedded. As Williams (1958) proposed, culture is ordinary, heterogenous, complex, contradictory and 'always in flux' (Garner and Hancock 2014, p. 535). This multiplicity of cultural experience and the micropolitics of place are immanent in the BR assemblage.

The second logic for problematising fragmentation in the biosphere is historical regional connectivity. This emerged as a place-making narrative during interviews, alongside board and WG discussions of possible heritage projects. Anndra, for example, who has an interest in storytelling and historic drove routes in the area, described that Wester Ross 'makes sense' as a biosphere due to the 'cultural connections that go back a long way'. He said it was a 'homogenous cultural area' but that 'links have been neglected' and sees possibilities to (re)forge connections within the region which have declined over time. Seumas, who lives in the centre of Wester Ross spoke of how there is already a kind of north-south cohesiveness given the East-West divide in Rosshire and the Highlands more broadly. Thomas (2015, p. 41) argues 'a distinction between east and west within the Highland area is just as important as one that separates it

from the rest of Scotland.⁴² Of north-south identity, Seumas saw this as rooted in connection to and dependency on the sea. As a result of the Clearances the population live predominantly along the coast where there is evidence of prehistoric human settlement and farming (see Figure 14 and Figure 15).



Figure 14 Gairloch Community from the Auchtercairn Archaeology Trail.



Figure 15 Auchtercairn Archaeology Trail Roundhouse Remains.

⁴² This he explains is culturally significant around Gaelic language today. There is also geographic significance, ‘to leave behind the lowlands of the east and travel across country to the North-West Highlands is to experience one of the most complete contrasts in Scottish geography’ (Willis 1994, p. 1).

The sea was historically important for social and economic connectivity; evident in the proliferation of boathouses along Wester Ross shorelines (see Figure 16). Discussing the lost connections between communities by sea, Anndra and Seumas mentioned decommissioned ferry routes. Similarly, Friseal, a resident of Applecross, described how a short trip by sea to Kyle now requires hours of driving over the *Bealach Na Ba* mountain road. In a tour of Applecross peninsula, Friseal also described historical communities being more socially connected to the adjacent islands and how in his lifetime, he was increasingly disconnected from the sea. He had grown up on a fishing boat, feeling at home on the water, but the same boat was now slowly rotting in the bay, conveying the erosion of a sense of place based on interactions with the sea.



Figure 16 Boathouse on Loch Broom.

Perceptions of how places once were, are part of the construction of a Wester Ross regional identity and a specific west coast sense of place. WRB actors sought to reinvigorate a regional, collective connection to place, which is important given incomers to Wester Ross communities can bring a more urban sense of place (Jedrej and Nuttall 1997). Place-making practices invoke present narratives of place, relational to stories of what used to be, and what could be in the future. The above narratives of historic regional connectivity in the biosphere are used by directors in response to claims that the biosphere designation is too big and work alongside the idea of shared regional challenges.

'Good places to visit must first be good places to live'

The final logic for problematising fragmentation is that communities working together can address shared regional challenges. This was particularly evident from WRB's tourism work, a major focus of the organisation during my research. WRB were funded to participate in a collaborative project for biospheres to develop eco-tourism initiatives. Eco-tourism has been pursued globally in many biospheres given its potential to 'achieve conservation and community development' (Yuan et al. 2008, p. 55). However, early community engagement in the project caused a change in focus.

As identified by Anna the project officer who lives in the north of the biosphere, communities in Wester Ross 'do not want more tourism initiatives' whether 'eco' or otherwise, they want current tourism to be managed better. Locals felt visitor numbers have increased, so gathering evidence to assess this claim and the 'carrying capacity' of host communities and the environment became the priority. The North Coast 500 (NC500) driving route, in particular, is a private initiative that has put pressure on local communities by increasing visitor numbers and causing a change in the type of visitor from place-based to transient. The latter passes through multiple places in a short space of time and does not contribute to the local economy. Given the scale of challenges associated with tourism WRB actors propose addressing these collectively and regionally.

In other contexts, indigenous communities often politicise their identity to 'challenge unchecked tourism and the expropriation of environmental resources' (Jenkins 2008, p. 29). However, rather than challenge unsustainability directly, Anna's approach was geared towards a specific narrative for tourism management in the biosphere, that 'good places to visit must first be good places to live'. This aligned with activities carried out with communities, such as workshops to bring local sense of place into sustainable tourism planning. These embodied the sense in which 'the nuances of a unique local environment must first be recognised if it is going to be used responsibly and not destroyed' (Corsane and Bowers 2012, p. 250). At the first workshop, held in Garve, Anna conveyed to the small group of attendees how sense of place can be used to 'slow down' and redistribute tourists helping to resolve infrastructure pressures associated with hotspots.

Despite consensus on the challenges around tourism in the region, it was difficult to elicit meaningful local sense of place at the community workshops. The chair of the local development trust in Garve questioned if sense of place exists in such a small area, directing Anna to look at the Trust’s new community plan instead. The two places chosen for workshops were ‘gateway’ communities, often ‘overlooked’ as ‘places people pass through’ to get somewhere else.⁴³ This may have been part of the challenge for sense of place. People were asked to share what natural and cultural heritage they valued locally, and responses were often generic (see Figure 17). Although Corsane and Bowers (2012) suggest focusing on natural and cultural heritage in sustainable tourism can strengthen place attachments, there was more focus in the workshops on infrastructural problems (such as roads and public toilet provision) than on personal and collective relationships to place.



Figure 17 Sense of Place Tree Activity.

From Anna’s perspective some workshop outputs were disappointing, alongside the low attendance. She felt this was partly down to a lack of trust of her personally and of WRB. Attendees had numerous critical questions being unfamiliar with the biosphere organisation and designation. Some were reluctant to share their local knowledge,

⁴³ Garve is a commuter town for the East, and Kyle is ‘the gateway to Skye’, often overshadowed by this more famous island neighbour and was identified by HIE as ‘one of the two most fragile communities’ in the Highlands.

questioning how the information would be used. Reflecting privately afterwards, Anna explained she was an ‘outsider’ in these communities and not being known made it difficult to inspire sharing of personal experience and local place-based knowledges.

Trust issues are common in BRs (Walk et al. 2020) and even though WRB is a community-led organisation, this does not confer automatic legitimacy from all local communities. As well as being challenging for governance, this presents a barrier to integrating local and scientific knowledges. An important priority for WRB will therefore be to work more closely with its multiple communities, building trusting, long term relationships. However, local sense of place was not the only basis on which WRB actors worked towards more sustainable tourism, recognising that regional issues are shaped by broader national and global contexts.

Tourism and Regional Sustainability in National and Global Context

Tourism is a ‘key driver’ of the Scottish economy (MacLeod and Todnem 2007) and part of the global political economy, holding a ‘transformative power... to reconfigure space and place’ (Young and Markham 2020, p. 276). WRB actors problematised particular social, political and economic conditions in Wester Ross during their tourism project which I observed during a 3-day ‘learning journey’ and a 2-day tourism conference. The former was a knowledge sharing mechanism in the eco-tourism project (see Glass et al. 2018), where three individuals from partners in Norway and Iceland joined WRB directors and staff in Ullapool.⁴⁴ The latter was co-organised by WRB and its regional partners on the topic of sustainable tourism and provided a platform to launch outputs from the eco-tourism project. During both occasions WRB staff and directors problematised tourism management within conditions of centralised control for planning and governance; landownership; and economic dependency on tourism and lack of resilient livelihoods. These invoked a place-making lens that conveys the complex scalar relations of place and I discuss each in turn.

⁴⁴ Day 1 involved a series of presentations, including about the sense of place workshops, alongside the other project activities on assessing carrying capacity. Day 2 was a series of field trips to key sites in the biosphere, including Achiltibuie and Corrieshalloch Gorge where more informal learning exchanges took place between attendees.

Regarding the first, Anna spoke to learning journey attendees about how decision making and resources for infrastructure and planning in Wester Ross are controlled by centralised authorities, rather than local communities. Whilst Morag, a representative of one such authority, NatureScot, countered this language of 'control', Anna held firm that from the local resident's perspective, lack of control is a reality. She explained 'I have no control over things that are being done' because the council and public bodies hold all the power and authority. For her this was important because WRB's participatory, community-led approach could only achieve so much without buy-in from more powerful stakeholders with resources. She said this was a real difficulty, and that 'engaging with higher up people with authority' for overarching budgets, infrastructure and policies was nearly impossible.

Elisabeth, contextualised the governance context further, explaining that as a sparsely populated area in the larger Highland region, they are not a priority even at local government level. Moreover, local government planning areas do not coincide with the biosphere area, making it challenging to align current institutional structures with community-led planning for tourism infrastructure. When comparing Scotland's national governance context with those of the delegates from Norway and Iceland, the Scottish experience was characterised by more centralisation and weaker local government, in an economic context shaped by British and European politics. As Bryden et al. (2015, p. 112) explain comparing Norway and Scotland, national policies in the former tend to be tailored to local needs and circumstances, whilst in the latter policies are of a 'one-size-fits-all' variety. These comparisons illustrated the struggle for WRB to generate the legitimacy and autonomy to act at the regional scale. They also drew attention to the sense in which 'ecological, social and economic concerns emerge under conditions "not of our own making"' especially the 'systemic' and 'structural' (Schmid et al. 2021, p. 156).

Regarding landownership, Phoebe, after presenting at the tourism conference, was asked by a delegate, 'Wester Ross has the highest concentration of private landownership in Scotland, is the reserve trying to address that?' He was particularly concerned about landowning Trusts making decisions about vast areas of land without sustainability knowledge. Phoebe explained the struggle to work with landowners;

whilst they are trying to create relationships there is distrust on both sides. Land ownership challenges were also discussed throughout the learning journey. Anna said in Wester Ross it is 'difficult to find out information about who owns what', and difficult to know 'who is responsible' for what areas of land. The legislative complexity of the crofting landscape was raised, alongside absentee landowners and a lack of transparency with owners of large sporting estates.

On the learning journey tour, I heard how privately wealthy individuals can purchase entire islands, such as *Tanera Mòr*. The owner, a hedge funder, is physically transforming the island,⁴⁵ seemingly for tourism purposes, creating a 'Disneyland pastiche scenario' as one local described. Norwegian and Icelandic partners had a vastly different experience of land ownership where it is not legal for individuals to own large tracts of land. Hence, the 'Norwegian model' is perceived more broadly in Scotland as 'the goal for equitable landownership and sustainable land management' (McKee et al. 2020, p. 407). Bringing actors together from BRs in different contexts, is thus part of how WRB staff and directors can reflect on the key issues for place-making specific to Wester Ross compared to alternative international conditions.

Landownership and tourism also combine to create regional housing problems. During the tourism conference, lack of affordable housing for hospitality workers and local people was raised, with WRB Director Norman, criticising the prevalence of holiday homes and short-term tourism accommodation, although predominantly from a personal viewpoint. Phoebe argued housing is key to having people in the community, meaning more affordable housing is needed,⁴⁶ and an attendee suggested WRB could try to deliver this. However, lack of housing in Wester Ross was attributed to multiple, complex market and political conditions such as lack of land available due to private ownership, crofting tenure, lack of developer interest and infrastructure problems.

⁴⁵ Anna, who lives locally, described how you can hear explosives from the island and many people locally have been employed in construction which has involved significant excavations.

⁴⁶ This was exacerbated by the Covid-19 pandemic which created a surge in demand for property in rural areas of Scotland in the Highlands. Croft and house prices of up to £500,000 were cited as problematic by local residents and the pandemic trend of buying up of properties was characterised as a second Highland clearance.

WRB actors are not necessarily resourced to pursue change in these contexts in practice and thus new place trajectories through the biosphere as a community initiative often end with problematising particular conditions and promoting new discourses of regional sustainability.

'There are no other industries'

The final condition problematised is economic dependency on tourism. This brings to the fore the question of 'how local economies can thrive, and unique socio-cultural and environmental resources survive, in a globalized environment' (Milne and Ateljevic 2001, p. 370). Over time communities in Wester Ross have become increasingly dependent on tourism which has displaced other economic activities associated with the land and sea. For example, Ullapool is one of the ten major fishing ports in the UK, having been established in 1788 by the British Fisheries Society. The fishing industry has been crucial to the economy for over two hundred years. The decline of a once booming herring industry was partly a result of declining stocks and the shift from west coast fishing to east coast, given less demand for herring from markets in Europe and the West Indies (Munro 1994). Ullapool Community Trust (2017) state today 'whilst the harbour is still active, tourism has come to play a vital role in the local economy'. This is a similar trend across Wester Ross where livelihoods are increasingly tourism focused (see Figure 18 and Figure 19).



Figure 18 Gairloch Harbour.



Figure 19 Marine Recreation and Tourism - Gairloch Harbour.

Globally, tourism is increasingly seen as an agent of socio-economic growth, and problematically, messages of 'sustainable tourism' often have little impact (Sharpley 2009). This was evident at the tourism conference, where certain speakers focused on economic growth narratives rather than sustainability. These were individuals representing business interests on the east coast, national tourism organisations and the NC500. The NC500 speaker stated, 'we may not be good at sustainable tourism, but neither is Visit Scotland or the Highland Council'. An audience member, less than enthusiastic, asked, 'what are *you* going to do in the future, what are your actions around improving the sustainability of your approach?' The response was, 'make your business busier and make you busier'. Recalling an earlier definition of sustainable tourism, he said, NC500 is 'focusing on the economy bit', implying the two other domains, 'respect for culture' and 'respect for environment' were not their responsibility.

Another business speaker said WRB 'would be more successful if it could monetise its brand' and argued it is 'ultimately about the bottom line' and 'getting out of the red and into the black'. Such narratives situate tourism within a broader neoliberal growth paradigm where tourism is promoted 'at any cost, with little space for alternative discourses' (Cole 2016, p. 32). Tourism for private and elite profit-making occurs at the expense of subsistence, wellbeing and ecological sustainability, and ultimately disempowers local communities (Nicholls et al. 2016, p. 51). Phoebe's presentation on

the biosphere, had positively argued 'economies should serve society' and evolve in a way that stays within the safe operating space of the planet. She positioned biospheres as places to create sustainable livelihoods, complementing Anna's narrative that good places to visit must first be good places to live. Given the dissonance of messages about tourism and sustainability, WRB staff and directors were privately frustrated by the conference. A local resident also commented on the misalignment of narratives, with business speakers not engaging with the concept of 'sustainable' tourism or offering solutions to address over-dependency in the local economy, seasonality challenges and lower wages driving young people to leave the area seeking other employment.

WRB actors situate tourism in a broader narrative of community wellbeing and sustainability, whilst other actors (re)produce 'common sense'. A heated exchange between a business speaker and Norman occurred during conference discussions. Regarding over-reliance on tourism in Wester Ross and the need to diversify the economy, Norman had stated 'tourism is inherently unsustainable because it encourages people to fly and is based on fossil fuels'. His interlocuter stood up and responded angrily that tourism is 'essential' to the area. He said, 'what about my children, what will they do if there is no tourism?', because there 'are no other industries' and if you look at forestry and fishing, 'these are hardly sustainable either'. The idea that the region has no other industries, is part of a historical narrative of the Highlands as a 'problem region' that is 'underdeveloped', as introduced Chapter 1 and considered in Chapter 7 on the scalar politics of development.

Whilst diversifying the local economy is part of how WRB actors see the relationship of tourism to sustainability, requiring change, others interpret present dependencies as a sign that there are no alternatives. This is a common neoliberal discourse that can manifest in many place myths. For example, at the conference, the topic of food production also saw an East coast farmer reinforcing that the best (and ultimately only) option for the west coast is to rear cattle for the east, because 'you cannot grow anything on the land in the west coast'. Anna resisted this narrative, arguing local communities *can* and *do* grow food, including a variety of fruits and vegetables. Land use evidence indicates this agricultural history and growing activities could support

self-sufficiency aims but not necessarily the 'productive' models of the east coast. Hence, WRB staff and directors often recognise opportunities to move beyond the 'common sense' of particular place myths, drawing on alternative understandings based on historic and contemporary experience and sustainability objectives. Although these do not always manifest into practice, local food is a domain in which there has been practical efforts to deterritorialise existing relations and enact alternatives (see [Chapter 7](#)).

By problematising the conditions of power over planning, landownership and economic dependency, WRB actors point to the possibilities for 'alternative place-specific trajectories' (Schmid et al. 2021, p. 156). This includes challenging neoliberal ideology that 'there are no alternatives' (ibid). However, there are limitations for place-making through the biosphere as community-led organising. Namely, the constraints of jurisdiction, resource and meaningful relations with local communities. Place-making occurs in conditions not of WRB actors' making, part of the broader socio-political milieu and even if individuals personally challenge 'common sense' discourses, the biosphere assemblage does not always have the agency, capacity, or legitimacy to address structural conditions and power relations in practice. However, this does not mean that the organisation cannot make productive contributions towards regional sustainability and during the Covid-19 pandemic WRB created space for community organising towards sustainable tourism, empowering new structures and building organisational capacity.

A partnership approach for sustainable tourism

The pandemic created significant uncertainty for WRB and communities in Wester Ross, starting just a week after the tourism conference in 2020. Both lives and livelihoods were at risk, and this presented challenging conditions for all. WRB directors chose not to furlough Phoebe and priorities for tourism planning established pre-pandemic were revisited with communities to assess their relevance in a Covid world. The priorities remained the same demonstrating how the pandemic exacerbated pre-existing challenges and inequalities as reported for the overall impact on wellbeing in Scotland (Scottish Government n.d.). Despite lockdowns, high domestic tourist numbers in the pandemic placed pressure on the carrying capacity of

communities and landscapes. However, the new challenge was trying to balance the risk to people's lives from the potential spread of the virus whilst supporting tourism-based livelihoods and educating a new set of visitors behaving problematically causing local tensions.⁴⁷

WRB set up and chair the Wester Ross Tourism Partnership (WRTP) and secured funding to implement a Destination Management Plan. This was a significant step forward for community-led sustainable tourism with the WRTP acting as a mechanism for regional collaboration among communities. It was also significant for WRB with the funding increasing capacity through three officers employed for the north, mid and south areas of the biosphere. These officers would support local collaborative working to address the challenges of tourism at a regional scale.

Although positive for place-making and sustainability, some locals have interpreted WRB as overly focused on tourism and visitors rather than residents. However, the message that good places to visit, must first be good places to live challenges this interpretation, as does the breadth of nature-culture relations considered by WRB actors in the next chapter.

Conclusion

The BR concept is not always well understood (Reed and Price 2020b), and each implementation of the model can differ in practice. This chapter has outlined how the biosphere concept has been applied and interpreted locally over time in Wester Ross, as designation, organisation, and lens for place-making. It has unpacked what the designation means for communities, heritage and sustainability through the interpretation of local actors, including those involved with the biosphere.

⁴⁷ Facebook pages recorded problems with tourists defecating on picnic benches and in front of people's houses, parking on sensitive coastal habitats and historic monuments, setting fires and leaving mounds of litter in their wake which were health hazards and environmental destruction. This was blamed on a new type of domestic visitor that would not usually visit rural areas. Some locals erected physical signage telling visitors to go home, roads were closed to prevent tourists accessing beaches and police were called. When challenged, some tourists' sentiments seemed to mirror how, when custodians of Chichén Itzá reprimanded Mexican tourists for failing to respect the rules of the archaeological site, they were told this is my patrimony too and I can do whatever I please (Breglia 2006, p. 112).

Introducing a BR can be challenging where there is not already a strong regional identity (Mathevet and Cibien 2020). Although evident for Wester Ross, the acceptance of the designation was seen as a way to create this identity and was perceived as something different to other kinds of conservation designations that can displace 'local, place-based' landscape imaginaries (Walsh 2020). The biosphere, operating at a landscape scale, can accommodate such imaginaries, making space for communities in decision making and as part of the landscape. The designation was also seen as an opportunity to work differently, including from the bottom-up, hence the community-led governance model that has emerged.

As an organisation of local residents, WRB is an assemblage of interests with a remit covering nature-culture relations. The biosphere as assemblage cannot be reduced to the sum of its parts, because interactions between parts enact capacities which create its emergent proprieties (see DeLanda 2006). Moreover, there are processes of territorialisation and deterritorialization which 'stabilise or destabilize the identity' (ibid, p. 19) of the biosphere. This is a productive way to characterise the biosphere as organisation, which is the product of processes and practices and not an essentialised or fixed category. Such processes and practices occur across multiple spatial and temporal scales and are elaborated in upcoming chapters.

Finally, an emergent property of the biosphere assemblage, as organisation melds with designation, is a lens for place-making. WRB actors seek to (re)forge a collective regional identity based on appreciation of historical connectivity and the benefits for addressing regional challenges. My findings reinforce that shared sense of place is a 'critical' for collective action and that BRs have 'strong potential' in this regard (Taylor 2010). Places are infused with meaning in specific spatial and temporal contexts (Manuel-Navarette and Redclift 2010) constitutive of 'a particular constellation of relations, articulated together at a particular locus' (Massey 2005b, p. 67). I have illustrated this in the Wester Ross context and shown WRB actors often problematise aspects of these relations and challenge particular place-myths opening up new place trajectories. Such myths are often taken-for-granted, as part of naturalised 'common sense' stripped of historical qualities and presented as fact (Essebo 2019). However, such problematisation does not always create action out of alternatives as this is more

complex and ambiguous in practice. Hence, there are opportunities to strengthen place-based governance and collective action in Wester Ross.

The next chapter examines how WRB actors approach the negotiation of nature-culture relations, illustrating how assemblages are 'constantly constructed, undone and redone by the desires and becomings of actual people who are caught up in the messiness... of life in idiosyncratic milieus' (Biehl and Locke 2017, p.83).

Chapter 5: Negotiating Nature-Culture Relations in Discourse and Practice

This chapter examines how nature-culture relations are negotiated and contested by WRB actors. It focuses on aspects at the heart of BRs, namely overcoming the nature-culture dichotomy, acting as innovative places for sustainable development, and conserving traditional cultural landscapes and heritage (Aschenbrand and Michler 2021). I start by exploring how natural and cultural heritage are conceptualised by WRB actors in discourse and organised in practice. Konsa (2016) has argued that in conservation practice, although natural and cultural heritage are underpinned by similar logics, they are often separated by the distinction between nature and culture.

I move on to domains of sustainable development and conservation of cultural heritage, taking each in turn and discussing different examples of degraded landscapes, green jobs, rewilding, story gathering and traditional knowledge and skills. These examples derive from observations of WRB board meetings, working group meetings, written materials, director interviews and a series of webinars with external speakers and community perspectives. As well as illustrating the kinds of nature-culture relations being negotiated by WRB actors, and how such negotiations play out, this contributes to a better understanding of whether there is ambiguity and ‘narrative tensions’ that are difficult to reconcile in the BR, as has been argued elsewhere by Aschenbrand and Michler (2021).

The Interconnection of Natural and Cultural Heritage

WRB exists to conserve natural and cultural heritage in Wester Ross, which are conceptualised in organisational discourses as interwoven:

The natural and cultural heritage cannot be separated.

While the conservation of natural and cultural heritage plays an integral role, Biospheres do not draw a hard line between people and nature. Rather they consider that nature is always surrounded by people, and that people need nature to live. They explore how to connect people, nature and development in sustainable ways.

The UNESCO nomination document also states, ‘biological diversity is part of the cultural heritage’. This is akin to conceptualisations of biocultural heritage (see [Chapter 2](#)) and solidifies the BR emphasis on ‘working at the human-nature interface’ and

moving beyond fortress models which ‘separate humans from the environment’ (Wilkes 2022, p. 7).

In practice however, natural and cultural heritage exist as two distinct working groups (WGs). On several occasions, this separation has been a subject of discussion. At a board meeting in late summer 2020, following the election of a new board, Elisabeth as Chair, raised the subject of WGs. She proposed reviewing them and deciding whether all of the current WGs were needed and then identify directors for each one. Acknowledging ‘there’s crossovers in them’, she said for pragmatic reasons directors should join only one or two. Alan, a newer director asked, ‘is there a big difference between natural and cultural heritage?’ Elisabeth and Seumas, responded yes in unison, and the conversation continued:

Elisabeth: *natural heritage tends to be about environment and cultural heritage is more into-*

Alan: *people, OK.*

Elisabeth: *-the history type side and museums and things like that. Sorry Seumas did you want to say more?*

Seumas: *No, I was going to say is Gaelic unnatural? [laughing] I mean if you dispose of cultural heritage where does Gaelic go?*

Rory: *No, I don’t think we can.*

Elisabeth: *He’s not saying, I think Alan was thinking of amalgamating them, but that would be too wide a brief that one.*

Seumas: *yeah.*

The WGs therefore continued as they were with separate groups for natural and cultural heritage. The subject of amalgamation re-emerged during a discussion on whether the WGs were fit for purpose in early 2022. Elisabeth again reiterated that two separate groups should be maintained because the subject area created would be ‘too big’ and ‘a lot of detail would be lost’. Moreover, she argued that out of all of the WGs, these two were currently the strongest and ‘have different aims’, suggesting that whilst there is overlap, both are currently ‘working’ in their own right. By this she meant that they had been successfully meeting (including with those outside of the board) and engaging in activities, such as applying for project funding and developing events. These WGs were as Harrison (2015, p. 34) describes of objects of conservation, operating quite autonomously as fields of intervention and ‘domains’.

The idea that combining natural and cultural heritage creates a domain too large was also reflected in former director Jane's experience of WRB. Previously chair of the Cultural Heritage WG, having museum expertise, she explained on discussions of natural heritage, 'feeling that I have nothing to contribute' and 'only having an input 10% of the time'. This reflects how within different domains of natural and cultural heritage there are specific techniques and knowledges applied for conservation and management practices (see Harrison 2015). For example, at a Natural Heritage WG meeting, attendees discuss the minutiae of a biodiversity plan, whilst at Cultural Heritage WG meetings, topics could be music and stories. Hence, despite the recognition of nature-culture interconnection, separate domains are needed as people are often unlikely to have expertise to cover the breadth of natural and cultural heritage.

Moreover, with each WG targeting specific funding streams and stakeholders which are themselves in separate domains, having two distinct WGs allows WRB actors to better align with existing policy silos to advance specific natural and cultural heritage interests. This brings to mind Kopnina's (2016) argument that dichotomies are often needed practically and ethically, because the interests of nature and culture/humans and non-humans, do not always align. This is useful to bear in mind for BRs and when considering how natural and cultural heritage interests are prioritised within the UNESCO Man and Biosphere (MAB) programme. Some working in the cultural heritage domain for example, perceived that natural heritage was dominant. Jane explained WRB has 'more of a focus on the natural heritage side of things'. This was certainly true for the size of the Natural Heritage WG, which had absorbed members of a previous regional environmental network. Moreover, it reflects how the natural environment is often deemed the 'strongest attraction' in Wester Ross (Fenton n.d., p. 35).

Additionally, in the Isle of Man BR, the cultural heritage partner, described that in MAB events, natural science was prioritised, seen as 'the real science' of biospheres, whilst culture, arts and heritage were marginalised to fringe events. This is consistent with the fact that historically MAB practitioners and BR managers are trained in natural sciences (Reed 2020, p. 22). Hence, whilst WRB might adopt a conceptually holistic integration of natural and cultural heritage, the separation of these into two WGs, is a

way to give equal opportunity and priority to both domains. As Seumas noted above, without a distinct cultural heritage WG, where would specific discussions on Gaelic culture and language take place?

Observing both WGs I found discussions often returned to reinforcing the connectivity between nature and culture even though operating in distinct domains. The Natural Heritage WG reviewed the draft Highland Biodiversity Plan, aiming to submit a WRB response. A section titled 'people', stated, 'land-based, and tourism businesses thrive'. A WG member representing a conservation charity said, whilst it might be good that tourism businesses thrive, people are still leaving the area. He critiqued the absence of population retention in the plan, which he felt is 'such a big part of planning' and 'underpins any discussion, whether it is natural heritage, or tourism.' Patrick, WRB director and Chair of the WG agreed and added, 'there's lots of people who depend on biodiversity and healthy environments to make money. So, productivity, rather than just tourism'.

Hence, although focusing on biodiversity conservation,⁴⁸ discussions can bring to the fore social, cultural and political contexts that situate landscapes within broader nature-culture relations. Similarly, the Cultural Heritage WG often discuss culture, communities, and heritage in relation to place and landscape and a project on Gaelic in the biosphere has an explicit natural heritage focus (see [Chapter 6](#)). Returning to a relational idea of nature-culture is one sense in which actors can avoid reproducing dichotomous thinking whilst working in different practice contexts. My interpretation is that this occurs because the WGs as spaces for negotiation and dialogue, are rooted in locally diverse, place-based experiences of participants, who draw on this holistic form of knowledge alongside specific domain expertise.

When discussing natural and cultural heritage as a board, and especially where it concerns WRB's overall identity and external communications, the importance of a holistic, interconnected approach always seems to emerge. For example, regarding the

⁴⁸ Which involves prioritising initiatives such as tackling invasive species and getting communities involved in site monitoring as well as broader scale conservation planning.

creation of a business supporter scheme for WRB, Phoebe, having researched two other BR schemes, presented examples of principles for directors' comments:

Norman: *I don't see why local products is in the same line as cultural heritage. That's more to do with business. I think local should be a line of its own. Where it says conserve the resources of natural, I would put natural and cultural and have them together at the top because that's the principles of biospheres to me, because that would leave an extra pillar to emphasise the local. I think some of my twitchiness about perceptions of the biosphere, is because of the word bio people assume it's about the conservation of natural heritage, and so anything that blends the two together is a good thing. So, I would have that as the first principle. So natural and cultural resources, and heritage suggests the past.*

[...]

Elisabeth: *I agree about moving the cultural heritage up the natural one. Are we conserving natural heritage or are we promoting it?*

Seumas: *I like the first one including conserving, but I think it should also have promote.*

Norman: *There is no reason we can't have conserve and promote in the same one.*

Seumas: *We're just messing with words here.*

Norman: *But we need to, to give Phoebe a steer on what the Wester Ross principles should look like.*

Elisabeth: *Do we need to stick to six, could we have seven with cultural as its own one?*

Norman: *I think we need natural and cultural together.*

Alan agreed with Norman and highlighted that UNESCO combine ecosystem services and cultural values, 'they blend it together and that's what makes each biosphere distinctive, its cultural value'. Here, the language of 'blending' is used to capture the distinctiveness of the biosphere approach. Although Seumas is dubious as to the importance of word choice, as Norman suggests this relates directly to how the biosphere is perceived. Given the 'openness' and 'ambiguity' that Aschenbrand and Michler (2021) argue is present in BR narratives, communicating an explicit and clear message is vital. WRB's final set of six principles, which businesses are invited to adopt thus included: 'help to conserve and promote the natural and cultural resources of the Biosphere area' and also 'support the economy to benefit people and nature'.

Nature-culture connectivity has however been challenging to communicate to the public on social media. WRB's Facebook in particular embodies the same challenges as those Kenterelidou and Galatsopolou (2021) identified with marine world heritage

sites; predominantly promoting nature rather than culture. WRB's Facebook features re-shared⁴⁹ images of landscape photography, which speak to an aesthetics of the 'sublime', emphasizing naturalness and vastness suited to the tourist gaze (see Macdonald 1998). Cultural heritage and WRB's identity as a community-led organisation is less commonly conveyed. This was a source of frustration for some and later consultants were contracted to develop a communications strategy for WRB, which could help produce more nuanced messages.

A Model Region for Sustainable Development?

The imperative to act as model regions and 'innovative places' leads Aschenbrand and Michler (2021, p. 13) to argue that 'ignoring the most difficult issues is not a viable option' for BRs, such as conflicts over land uses. WRB directors frequently mentioned unsustainable industry and land uses in Wester Ross during board meetings and interviews. Seumas described the 'despoilation' of the environment, Robert argued land is 'not being used correctly' and Rory characterised areas of Wester Ross as 'wet deserts'.⁵⁰ These assessments are contextualised in the history of landscape change in the Highlands where, as Robert put it, 'between sheep and what's happened since way back' the result is 'not the natural landscape'. He and others resist how popular images of tree-less, people-less landscapes are viewed positively as 'natural' when in fact they are a human product that understood in historical context are degraded.

Although part of a long historical trajectory, Rory a WRB director with rangering experience in Wester Ross and other parts of Scotland, felt those responsible for areas of wet desert today, should have their ownership forfeited if they are deliberately creating a 'worsening of the situation' by preferring to manage for sheep and deer.

⁴⁹ It should be noted that these posts, are made by a volunteer board member who does not have social media training and is largely re-sharing the posts created by other people in Wester Ross and news outlets, rather than creating bespoke content.

⁵⁰ This refers to deforestation of landscapes combined with the wet Scottish weather.

Sheep and deer are barriers to woodland regeneration,⁵¹ and re-forestation requires intensive management of grazing through fencing (see Figure 20).



Figure 20 Native Woodland Regeneration on Applecross Estate.

Alongside more ‘traditional’ land use practices, Seumas noted that ‘Wester Ross has not been developed sustainably’ in relation to key industries such as commercial forestry, fish farming and aspects of crofting, of which he said, ‘very little of it has been sustainable in the true sense of the word’. The extent of ‘non-green fish farming’ in Wester Ross was a particular problem for Seamus and whilst fishing is recognised as a valued part of the area’s heritage, industrial style farms tend to be seen as more damaging to the area, described by one gamekeeper and former WRB director as ‘filthy and full of disease’.

This draws attention to how WRB actors can mobilise a biosphere lens in relation to both ‘special’ landscapes and the ‘everyday’ and ‘degraded’, which aligns with the

⁵¹ Deer management and woodland regeneration are major areas of activity for public bodies in Scotland, including NatureScot and the Forestry Commission, framed by Scottish Government policies such as Scotland’s Forestry Strategy. However, creating change on a landscape scale is challenging, especially in Wester Ross where publicly owned land is bordered by privately owned estates where there are financial incentives to keep deer numbers high for sporting.

European Landscape Convention (see Thompson et al. 2013, p. 4). This is important because special landscapes of conservation and landscapes of degradation are often cleaved apart in conservation discourse and practice (see Zimmerer 2000). However, according to a former WRB director, and consistent with my observations, there has been little to no action that might constitute engagement with unsustainable industries.

During interviews, sensitivities arose around employment versus sustainability. As 'unsustainable' as some practices/industries may be, they provide much-needed job opportunities for people in Wester Ross. Seumas explained of Kishorn, one of the larger industrial developments:

In the last 10 years, it has created a small number of jobs. If you close Kishorn development down, you would make unemployment a feature of the community. We don't have unemployment in this area. Fish farms are always calling out for more people, the Kishorn development likewise. People have got to live, and they've got to earn their living. And you require a certain degree of compromise when it comes to, is this development sustainable? Of course, some aspects of it are not sustainable, but we have to balance, just as we have to balance jobs and employment, with housing, and affordable housing. It's all part and parcel of how we best live with each other in this area.

At times, dependency on larger industries and estates was challenged. Rather than finding 'balance' with larger employers and environmental sustainability, a gamekeeper and former WRB director asked, 'how many jobs have been lost *because* of these industries?', and how many more could be employed if things were done differently. With sporting estates, whilst they provide employment to a small number of people, alternative uses of the land and change of practices could create more jobs for local people. Similarly, in a marine context, creel fishermen are arguing that if fishing practices were less intense, there could be *more* boats, and *more* fisherman, and *less* environmental impact (SCFF 2017). The key issue here is creating sustainable rural livelihoods in Wester Ross, an aim that is part of WRB actors' critique of economic dependencies and conditions in the region (see [Chapter 4](#)). How to create employment opportunities and address unsustainability, emerged explicitly when WRB actors became aware of Scottish Government funding for 'green jobs'.

Addressing Unsustainability

The funding announcement was brought to the board and the Sustainable Development WG by director Seumas, who upon seeing it wondered, 'what was meant by green jobs?' He explained to other directors how he emailed his MSP and Friends of the Earth Scotland and got responses 'straight out of Edinburgh... both came back with a load of jobs, which frankly were urban city jobs, urban jobs... not really relevant to Wester Ross'. In response, director Thomas, formerly of the Highland Council, suggested that being in a vacuum, perhaps they themselves could define what a green job is, 'it's about shifting the paradigm of urban green jobs' and asking, 'what are the non-green jobs?' Alan was less interested in this arguing, 'we shouldn't reinvent the wheel' and should use the definition of green jobs on the Scottish Government website. Moreover, he argued focus should be on communicating the biosphere rather than 'going off on a tangent to figure out how we can be relevant through green jobs.' He added, people locally are happy to have a job period, whether it's green or not.

However, Seumas was keen to bring funding to Wester Ross given the need to address the region's many 'non-green' jobs. At the next meeting, he cited examples of possible green jobs for Wester Ross from the government's list: food sustainability, zero waste projects, crofting, climate change projects, renewable energy and improving local supply chains. He suggested WRB should be focusing on these areas if funding becomes available, although he admitted 'some are more relevant to Wester Ross than others'. Seumas also emphasised the marine environment, including traditional boat building as within the concept of green jobs and Anndra added vernacular crafts 'dry stane dyking, thatching' and local food production. Alan questioned WRB's role regarding green jobs and said, 'if you ask most people what a green job is they'd be baffled, just like when you ask them what a biosphere is.'

However, Norman, Chair of the Sustainable Development WG, felt there was overlap with the immediate priorities of WRB, including food production, and added the (re)introduction of rangers as green jobs. With organisations including NatureScot, Highland Council and NTS cutting their ranger services, he thought WRB could play an employing role. Patrick resisted this idea, arguing that the government had reduced funding for these green jobs and now were just bringing back jobs they withdrew in the first place. Whilst this re-introduction was positive in some respects, he said the

government should not expect the third sector to be running public sector jobs, instead 'we should be making a strong case that the government's agencies should be doing these things.' Discussions continued about whether WRB's role should be to employ people in green jobs directly, given others are failing to do so, or to encourage organisations to bring back green jobs and perhaps support as a partner, rather than employer. These discussions are an example of how WRB actors, like those in North Devon BR, negotiate the 'vacuum' created by state retreat/transformation, where non-state actors may step into a new role as service deliverer (Kirsop-Taylor et al. 2020, p. 12).

Regardless of the appropriate agency for delivery, Seumas felt the key point was to redirect government money to Wester Ross, 'otherwise it will go to the big cities... Wester Ross and it's rural and remote conditions should be flagged up'. The tensions between rural and urban conditions were a common thread in conversations of innovation for sustainability. Norman proposed discussion of green jobs should be 'from the bottom-up', leading to a Sustainable Development WG webinar open to all residents. Key conclusions of webinar discussions included the reiteration of how rural conditions need rural solutions, and the need to create 'critical mass' in sparsely populated areas.

WRB could act as a mechanism for regional collaboration across communities, organisations and businesses, which is part of the value of a BR designation (Walk et al. 2020). Given WRB already has a business supporter scheme in place, this would be an obvious starting point. Indeed, Seamus argued that WRB should approach their business supporters, to encourage them to employ people in green jobs in existing businesses. However, these supporters are small scale local businesses, and given the extent of regional unsustainability, he also argued for addressing the 'bigger challenge' of 'converting non-green industries into greener industries'.

Industrialised and commercial activities like forestry have a long history in the area and natural resources may not necessarily be managed for sustainability but for national or private agendas (see Figure 21). Norman agreed it would be a big success if WRB could find a way of encouraging change with certain industries but labelled this a difficult, 'political' issue. The extent that WRB should be engaging with larger more

‘unsustainable’ industries to ‘green’ or change their practices was somewhat contentious, with some directors seemingly concerned about implications for how the biosphere would be perceived.

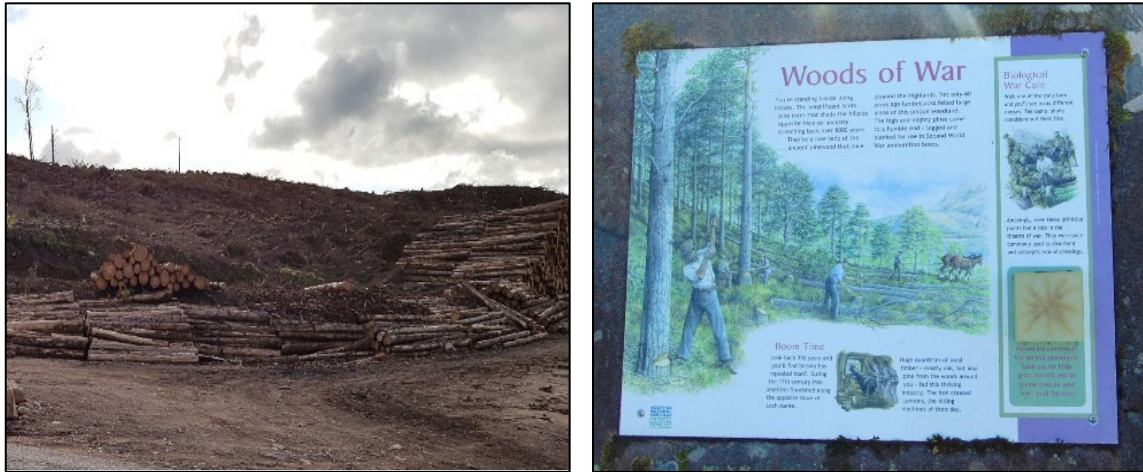


Figure 21 Contemporary and Historic Industrialised Forestry in Wester Ross.

At a knowledge sharing workshop between WRB and a Canadian BR, the latter described working with industrial giant Alcoa, the world’s sixth largest producer of Aluminium and a key regional industry. WRB directors, such as Alan, were cautious of how such a relationship affects the BR brand and integrity, being a UNESCO organisation working with extractive industry. Similarly in developing WRB’s business supporter scheme, how to deal with unsustainable businesses that might sign up was a key point of concern. How would this be managed, who would decide what is sustainable or not?⁵² During the tourism conference (see [Chapter 4](#)), Phoebe was asked about how WRB approach working with private and specifically unsustainable businesses. She explained WRB directors might feel differently, but her view was ‘the biosphere must keep the door open, we cannot refuse to talk to people because we decide they are unsustainable’. She said, if Shell wanted to work to be greener, ‘would that not be a good thing?’

⁵² Ultimately it was felt that the risks of this were limited in practice, because the scheme was being tailored towards small scale local businesses in Wester Ross and was unlikely to attract larger organisations.

How to address unsustainability is a complex issue that WRB actors have been negotiating largely in discourse, and less so in practice. Overcoming the separation between degraded development landscapes and those which are the object of conservation (see Zimmerer 2000) is an important foundation. However, how to negotiate and manage the ‘multiple and dynamic boundaries’ of conservation and degradation, and their linkages (ibid, p. 363) is proving more challenging. Partly this is due to lack of dedicated funding and capacity to act, but also the ambiguity and political nature of defining sustainability in practice and retaining regional employment.

Moreno-Ramos and Müller (2020) argue that acting as a model of innovation and sustainability requires BRs to move beyond sustainable development towards regenerative approaches. This is part of wider arguments regarding the inadequacies of sustainable development for addressing inequity and unsustainability and moving beyond a neoliberal ‘green economy’ (see Kothari et al. 2014). Regeneration rather than sustainable development, makes sense in the above context given arguments for change. It also works conceptually with the ‘both/and’ approach, in that it applies to both ‘special’ landscapes, *and* those more degraded.

Rewilding as Regenerative Practice

The idea of pursuing regenerative approaches includes the aim to ‘regenerate the natural processes within the biosphere’ as part of ‘learning to live in relation to nature’ (Moreira-Muñoz et al. 2020, p. 69). Rewilding could embody this idea and has been pursued as a conservation strategy in Scotland (Brown et al. 2011), rising rapidly in public profile (Deary and Warren 2017). Rewilding has not been a major focus for WRB actors and tends to be characterised as ‘contentious’. In Wales, tensions include how the farming community can feel threatened by rewilding, the different social constructions of landscape, and power differentials among key actors (Wynne-Jones et al. 2018). When Alan asked the board to support a regional rewilding project, this prompted discussion which illustrated areas of tension in Wester Ross.

Regarding rewilding, Norman said WRB needs to decide ‘what our role in that is, do we want to engage in that proactively?’ He explained that rewilding was discussed at a

previous year's AGM, where outspoken views among the board were expressed. Alan argued rewilding is necessary to limit climate change and 'rather than reinvent the wheel, let's get on board, and add our support'. Coinneach, however, felt that 'rewilding is very nuanced'. He was critical of the actions of well-intentioned Trusts pursuing re-wilding but reproducing underlying patterns of unequal land ownership. He argued Trusts end up focusing on 'managing a resource' ignoring 'the people who are part of the land', so for him 'communities affected by the landscape scale change in management need to be involved. We need to support the people.'

Coinneach's concerns reflect that rewilding can be problematic for 'obscuring the long history of human involvement in the landscape' and a continuation of landowner power over landscapes (Macdonald 2021, n.p.). Norman agreed and said, 'I am not convinced we should be supporting rewilding as currently envisaged it is a very vague concept.' As Macdonald (2021) argues, the idea of wildness is not fixed and rewilding is without a 'stable meaning'. Despite not wanting WRB to actively support this yet, Norman did feel that they could ensure that 'communities are engaged with' as well as 'entering the debate'. The debate includes polarised discourses of 'rewilding' versus 'repeopling', the latter, about regenerating the Highlands and Islands by repopulating landscapes, rather than re-introducing predator species. A nuanced approach, involves asking what kinds of practices should be encouraged to produce what kind of landscapes and in what specific areas?

Such nuance emerged in an interview with local resident Chris. Chris is a historian working for Historic Environment Scotland and son of NatureScot employee Morag. Having lived in Gairloch since a young age, he has direct experience of walking the landscapes of Wester Ross that might be identified for rewilding or repeopling. He described a fertile strath that was formerly inhabited and *could* be repopulated but would be unlikely to offer a good quality of life for anyone.⁵³ In contrast, in that same strath, the benefits of ecological regeneration would be significant given that currently

⁵³ Based on the fact that there is no infrastructure whatsoever, as with many glens which were cleared, they have been as Rory, WRB director put it 'bypassed' by development since the 18th century.

‘nothing grows’ because of deer numbers. For Chris though, rewilding can utilise the cultural heritage of traditional land use practices in a region. For example, positive outcomes for landscapes and biodiversity could result from bringing back cattle and transhumance, which could be subsidised as part of crofting.

This perspective contrasts with perceptions that enhancing biodiversity means reducing cultural diversity, and overlooking tradition and cultural landscape practices, as discussed for rewilding as heritage-making process in Portugal (Bartolini and DeSilvey 2020). The fact that rewilding can reproduce nature-culture boundaries (Bartolini 2020) requires a careful negotiation of the ambiguity and nuance of managing landscape change over time in specific contexts. Moreover, regenerative practices such as rewilding are arguably similar to BRs in how they act to ‘conceptualise and communicate the human-nature relationship’ (Aschenbrand and Michler 2021, p. 3). WRB actors are thus negotiating, what Harrison (2015, p. 24) describes for domains of heritage, modes of existence that produce ‘*particular worlds*’ and ‘*specific futures*.’

Reinventing the (Colonial) Wheel and Developing WRB’s voice

WRB actors produce *particular* worlds and *specific* futures as one of the emergent properties of the biosphere assemblage. However, as Aschenbrand and Michler (2021) explain, biosphere narratives can be more ambiguous in terms of the organisation of human-nature relationships, especially compared with national parks. How WRB actors perceive national parks emerged due to the prospect that one could be designated in Wester Ross. A commitment to a new park in Scotland was part of the Green-SNP coalition Scottish Government in 2021.

The board discussed whether park designation could bring benefits to Wester Ross and whether it would be welcomed by local communities. Alan, spoke positively of John Muir and the establishment of national parks in America and the importance of ‘preserving’ the biosphere area. However, Coinneach said, US national parks removed

indigenous people, describing this as part of the ‘turning wheel of colonisation’.⁵⁴ Seumas also conceptualised the designation as ‘very little to do with human interaction with their environment’, and focused on ‘preventing development’. The tensions in perspectives among directors includes how negotiations are shaped subtly by individuals’ scalar frame of reference.

Alan often utilises thinking derived from international and national agendas, aligning with his life and work experiences beyond Wester Ross. He shapes WRB activity through the lens of not ‘reinventing the wheel’ and he finds value in associating the biosphere with pre-existing ideas and structures. Coinneach, on the other hand, sees ‘the wheel’ as a wheel of colonisation that should be reinvented and often pushes towards more work with communities to build a biosphere narrative, from local or regional experience within Wester Ross. The latter perspective is about creating space for WRB to develop its own unique voice, and to transcend problematic historical and contemporary power relations. An example which illustrates this more fully, is when Alan called for WRB to support a Friends of the Earth (FoE) pledge for a Green Recovery, for ‘building back better from coronavirus’ associated with Scottish Government Covid-19 recovery plans.

As a proponent of signing up, Alan explained:

This is the government’s perspective so I don’t think it’s necessarily getting political in any way to say that we support this initiative, and this is something that our organisation would like to echo, be part of. I think it’s directly affecting the Wester Ross Biosphere whatever happens nationally in Scotland.

However, other directors were unsure. Norman, for example, said they should take a direct approach to Scottish Government to position WRB as a mechanism to develop ‘these ways of being more sustainable as we move out of Covid’. He wanted to see the organisation taken seriously as a catalyst for implementing practical solutions. Similarly,

⁵⁴ The relationship between national parks, colonialism and indigenous peoples has been well documented in a variety of global contexts (see Dahlberg et al. 2010; Meskell 2012; Rashkow 2014; Sadler 1989). Alongside issues related to the inception of the park, ecotourism initiatives can also continue the wheel of colonisation through privatisation and dispossession (Ojeda 2012).

Rory described WRB as 'big enough to do this for ourselves'. He compared how FoE are a conduit for those that may not get involved usually, whilst WRB are 'an official organisation and UNESCO designation'. He thought WRB could 'support the same call', rather than FoE's call, but concluded 'I prefer we actually just did it'.

Whilst Alan felt it would not 'hurt' to support the pledge, others thought it could create negative perceptions of WRB. Coinneach explained, 'while I do support the just transition dialogue, I feel that we would alienate more people by getting into Friends of the Earth's slipstream.' He continues that 'with a build back better, greener, these are very generic statements', and whilst the idea is not to oppose other people or groups 'we're building our voice, it's coherent, and it's uniquely ours.' Hence, in the process of negotiating nature-culture discourses, the identity of WRB itself is negotiated. Being proponents of specific discourses, or being associated with particular organisations, all feeds into wider perceptions of the biosphere, and so are carefully negotiated around ideas of 'neutrality' and inclusivity.

Across the above examples WRB actors are engaged in a multi-scalar negotiation which draws together local, regional, national and global. This plays out through negotiations of directors' perspectives and in discussions regarding when and how to engage with agendas and narratives beyond WRB. These interactions are part of complex processes which are never static, and WRB as a result is always in a state of becoming. Being engaged in a constant process of negotiation is part of what makes WRB a model of governance that exists in the 'messy middle' (Wilkes 2022). It is also part of the complexities of planning that incorporates: the social and economic needs of the population, unique characteristics of biosphere ecosystems and the region's cultural heritage (ibid).

However, complexity surrounding negotiation of nature-culture relations does create challenges for WRB actors in terms of taking action. At online board meetings, conversations are left unresolved and tabled for later discussions when there is more time, but often there never is. This helps to explain why BRs can have more ambiguous narratives than national parks (Aschenbrand and Michler 2021). The extent to which this is a problem depends on whether overall BR priorities are being met, and BRs are reviewed on a 10-year basis. However, I would argue that increasing rather than

minimising complexity is necessary for negotiating nature-culture relations in the Anthropocene.

Conserving Cultural Landscapes and Heritage

Innovation and change narratives can be difficult to reconcile with conserving cultural landscapes, traditions and heritage (Aschenbrand and Michler 2021). However, for WRB, an approach of learning from the past to shape the future, positions change and innovation as part of cultural landscape conservation. This is embedded in a translation of the BR functions into the pillars of ‘legacy, living and learning’ found on WRB’s website. Legacy refers to how:

People in the Highlands have been managing the landscape for centuries, and their current and historical knowledge are vital to the future of our environmental well-being.

This statement invokes ‘traditional knowledge’, or ‘local ecological knowledge’ which has a defining feature of being ‘place-based knowledge held by local communities’ (Hockings et al. 2020, p. 242). Positioning this knowledge as vital for future environmental wellbeing is a way to give ontological power to these forms of knowledge in conservation management.⁵⁵ The ‘living’ pillar follows:

The biosphere is inclusive by design and celebrates the way in which we continue to interact with and take care of our natural and cultural heritage. New landscapes can develop that respect and learn from the past while meeting the changing needs of the future.

Combined with the learning pillar, which emphasises engagement and participation from biosphere communities, these conceptualisations reinforce the idea of BRs as places for co-governance and place-based learning (Wilkes 2022). Change is part of a positive discourse around caring for heritage, whilst addressing the needs of the future in the present. Such discourses align with ‘future-oriented’ visions of heritage, where the past is used in the present to ‘shape new practices and environments’ (DeSilvey et al. 2020, p. 360). Hence, in discourse, WRB actors see change as consistent with

⁵⁵ See Meskell (2012) for discussion of Christopher Fabricius’ arguments around giving ontological power to traditional knowledge in conservation and heritage management in national parks in post-apartheid South Africa.

valuing cultural heritage, tied to heritage as a 'living process' (Kehoe and Dalglish 2018, p. 11).

In practice, most of WRB's activities and discussions tend to be focused on intangible cultural heritage (ICH), forms of everyday cultural practices and local skills, knowledges, stories, and language.⁵⁶ This is tied into a broader concern in Wester Ross for the sustainability of the region's cultural heritage. There are viability challenges regarding whether people are committed to and have the capacity and willingness to practice their heritage and transmit it to future generations (Labadi 2011). This brings to the fore the 'endangerment sensibility' regarding heritages deemed vulnerable or at risk of being lost (Vidal and Dias 2014) and how WRB actors engage in heritage-making practices of 'categorising', 'curating', 'conserving' and 'communicating' (Harrison 2015, p. 36).

'All That's Left Is Stones': Lost People, Places and Stories

WRB actors, especially within the Cultural Heritage WG, participated in a west coast story gathering project, funded through NatureScot's natural and cultural heritage fund. It used local 'story gatherers' to collect stories on different themes: histories, industries, migrations, environments, architecture, communities. Phoebe, co-ordinated this activity with the project lead partner, so that WRB covered most of the geographic areas within the biosphere. Directors Coinneach and Mairi worked alongside her as story gatherers in their local areas. Whilst this project was focused on identifying cultural experience and heritage of Scotland's west coast more broadly, it was an opportunity for WRB actors to engage with and capture the social values that arise from collective attachments to place and heritage (see Jones and Leech 2015; Jones 2017).

Coinneach, speaking of the importance of the work invoked an endangerment sensibility when attributing value to people and their stories of the past. He argued

⁵⁶ ICH is defined in the UNESCO 2003 Safeguarding Convention and five specific domains are identified: oral traditions and expressions; performing arts; social practices and festivals; knowledge and practices concerning the universe; traditional craftsmanship – all have been discussed by WRB actors at different points in time.

that stories must be collected before they disappear, seeking to avoid 'losing another generation, without capturing their stories that belong to the area and belong to them'. He also conceptualised story gathering as a mechanism not only to identify and document Wester Ross cultural heritage, but to connect with people in the community, especially to show older people 'that they are valued while they are still alive.' He spoke on numerous occasions about addressing social isolation in the project, 'by reaching out to those in the community, particularly older members holding stories who may no longer have a community around them to share them'. Hence, this was not merely about 'collecting' as heritage-making practice for Coinneach, but about connecting people and recognising the role of stories in the transmission of place-based cultural heritage (Herman 2017).

Sharing stories collected locally so far at an online public workshop for the project, Coinneach also emphasised connectivity in terms of how places are shaped by local-global relations. For example, post-war emigration meant the 'reservoir of memory in the community has gently siphoned away around the world over time' and Applecross Heritage Centre captures stories of some who have moved to other parts of the world (see Figure 22). Narratives of loss around people, including in contemporary contexts, feeds into constructions of sense of place and social memory. Another example of the local-global connection is the legacy of military presence in Wester Ross, which Coinneach has collected stories on in his local area. Regarding the cold war, he said 'there is a presence here that has international reach'. Whilst this history and the story of the area is partly captured in formal heritage contexts e.g., museums and interpretation (see Figure 23), Coinneach's stories focused on how local people were affected by these experiences in a deeper way including contemporary relationships within families. Through such stories, places come alive as unbounded, as 'networks of social relations and understandings', creating 'a sense of place... conscious of links with the wider world' (Massey 2005b, p. 67).

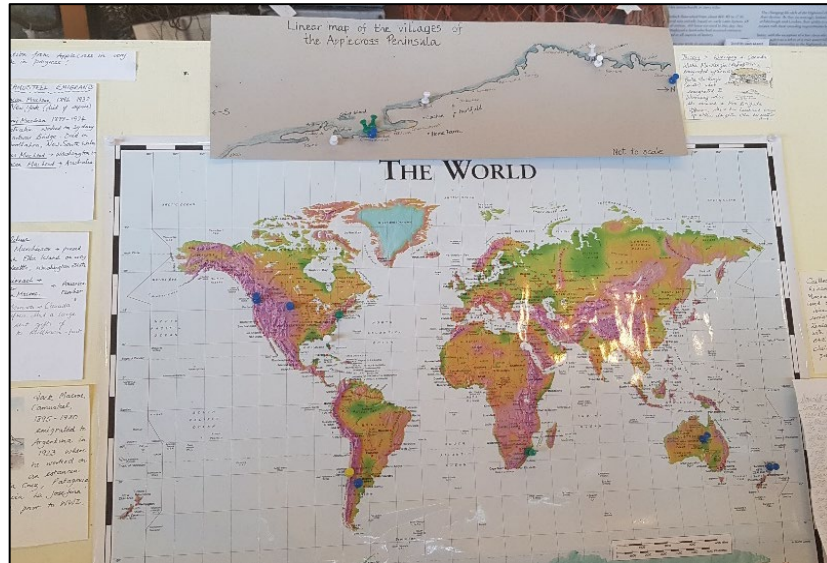


Figure 22 Applecross Heritage Centre – Emigrations From Applecross.



Figure 23 Heritage Interpretation of Military Presence.

The emphasis on capturing peoples' experience of everyday life in Wester Ross, was central to Coinneach's way of valuing local heritage. He said of Gaelic teaching, singing and cultural activities 'these things weren't separate or made special by any way, they were just part of the fabric of daily life'. The story gathering project was therefore a way to manage the loss of cultural ways of living and emphasise 'everyday' 'local, particular and mundane' heritages (Robertson 2018, p. 177), as opposed to the 'monumental' heritage of the authorised heritage discourse. Breglia's (2006, p. 7) work in Mexico suggests heritage landscapes can 'obscure' the everyday reality of places which are 'active, dynamic, contingent spaces of the production of social relations.' For Wester Ross, natural heritage designations are often felt to obscure the social and

cultural lives of inhabitants and their relation to place (see [Chapter 4](#)). Collecting stories is therefore a way to bring this cultural experience to the fore, invoking an approach to 'heritage-as-practice' rather than 'heritage-as-artefact' (ibid, p. 140).

Moreover, heritage artefacts seemed less important based on intrinsic value as objects but more so for people, places, and stories relevant to contemporary local communities. This was especially pertinent for Clearance heritage and landscapes, which provoke an active production of past, present and future social relationships in the local landscape. Mairi reported that 'lost villages' were a theme from stories collected in Applecross, which reflected a broader sense of how places have lost people, and their songs and stories; 'all that's left is stones'. In an Ullapool Museum project 'Lost Inverlael', community archaeology methods and researching stories of eviction 'lost even within the local community' (project coordinator), were seen as important to identifying any local familial connections to the lost township.

The social production of memory through collecting stories of 'lost pasts', is part of interpretations of the present and future, and illustrate heritage is continually (re)made. As Jones (2012, p. 346) has discussed in Easter Ross, the Clearances can act as a kind of 'post-memory', creating 'a framework for interpretation and action in the present' set within a foundational narrative of historic loss and displacement. The examples speak to the literature in Chapter 2 around productive and radical nostalgia. Actors in Wester Ross are frequently mobilising emotions associated with that which has been 'lost' through their projects in the present. These particular examples of lost townships, lost people, stories and places are indicative of more reflective kinds of nostalgia that indicate a 'desire for remembering' (Boym 2001 cited in Orr 2017, p. 7).

However, I would add that engaging with ideas of lost people, places and stories, is also a way to understand (and revive) different forms of biocultural heritage (BCH). The above examples map well onto concepts of landscape memories and place-based memories which are ways of characterising and understanding BCH (see Ekblom et al. 2019; Lindholm and Ekblom 2019). Landscape memories are 'tangible materialised human practice and semi-intangible ways of organising landscapes' and their outcomes (ibid, p. 4). Place-based memories also contribute to the organising of landscapes and constitute 'ways of defining places and making sense out of them socially and

culturally' (ibid). The latter are continually (re)negotiated locally and by external actors (ibid).

The ability of external actors to interpret the BCH of Wester Ross in the story gathering project was a source of conflict between WRB actors. A key issue appeared to be ownership of ICH and Alan, at a Cultural Heritage WG meeting criticised that stories collected were ultimately subject to the 'editorial control' of VisitScotland, a 'top-down' organisation outside the biosphere. Speaking of the intention to use stories to promote west coast tourism, he questioned why WRB must 'surrender our control over what a visitor to Wester Ross Biosphere is exposed to'. He was concerned that it could become an 'entertainment exercise' promoting,

...more of a North Coast 500 approach to things, which is let's cover 500 miles on the west coast and see as much as we can within the shortest period of time that we can see it in.

Alan's concerns convey what Newton (2009, n.p.) has argued for Scottish Highlanders, that they often 'lacked the institutions to become authors of their own narrative.' This raises questions like, 'who is in charge of creating the stories? Whose purposes do they serve? What stories are not being told?' (ibid).

Alan is keen for actors *within* the biosphere, namely WRB, to retain control over the stories *of* the biosphere. He is reticent to see local culture and heritage serving purposes that are 'produced or staged for touristic consumption' (Teo and Yeoh 1997, p. 193). Place-marketeers can 'repackage' and 'compress' historical events and geographic areas to make them more attractive for consumption (ibid). Stories, alongside ICH more generally can be part of the commodification of culture for tourism development with negative implications for communities (see George and Reid 2005). However, more positively, Esfehiani and Albrecht (2018) describe ICH as a key part of nature-culture interaction that can act as a conservation tool within broader tourism management. Additionally, interest from visitors in local landscapes and culture can foster pride in the local BCH (Cocks et al. 2018). In two English BRs, the use of BCH tourism (see Russell 2021b), is being pursued for such purposes, allowing space to tell stories linking different parts of complex processes of nature-culture interaction and interdependency (Wilkinson 2019).

Responding to Alan's concerns, Coinneach explained each story gatherer has the 'discretion' about what to put forward and that community members will be 'representing themselves in their own words, and that editorial control will not be surrendered'.⁵⁷ For Coinneach, the project would give space for local voices to tell their stories. Moreover, for people moving into Wester Ross to live, he said they 'have never been told the stories, they know, but don't understand the names of the places they live so it is to bring them into the landscape.' Again, Coinneach conveys how collecting stories is not simply about stories as objects of conservation or consumption, but about the practices of heritage-making as a mechanism for connection through meaningful social relationships and transmission of place-based knowledges.

Alan's concerns however bring an important issue to the fore. It is not necessarily heritage-making practices in and of themselves (collecting, curating, conserving, communicating) that are problematic, but often *how* they are carried out. How practices are enacted, by whom, and for what purpose, is key to the kinds of futures which are assembled, and the values produced (Harrison 2015; Harrison and DeSilvey et al. 2020). WRB actors in the story gathering work seemed situated between more 'in situ' participatory approaches that combine documentation efforts with revitalisation of BCH in local communities and 'ex-situ' collecting usually shaped towards wider local/global consumption (Fernández-Llamazares and Cabeza 2018). The project was driven by non-WRB actors, operating at scales beyond the biosphere, and the limitations of the pandemic prevented much of what Coinneach sought to achieve, resulting in a more 'ex-situ' approach.

This is evident when compared with discussions among actors in the Cultural Heritage WG on how they would approach heritage-making practices. For example, work on community archiving was discussed, which feeds into WRB's strategic aim to 'collate historical records to build a cultural and heritage-based database for Wester Ross to

⁵⁷ However, at the end of the project, a non-WRB story gatherer expressed discomfort at being asked to summarise stories to make them shorter, an example that suggests this is not necessarily the case.

inform future action'. On possible projects and priorities, Alan suggested WRB should work first with Gairloch Museum. However, Coinneach, Chair of the WG, felt that WRB's interest would be best served by 'filling in the gaps' pointing out that whilst Gairloch and Ullapool and Applecross Museums all have 'fantastic archives', there were materials out in communities that were not having the opportunity to 'be captured while they exist'. With such materials likely to be deteriorating, WRB should help to 'instigate a culture of collection and restoration of community archives' which they are well-placed to do 'as a grassroots community-led organisation'. Similarly, Anndra, was keen to establish a new photographic archive easily accessible to local people online, because whilst there are already some out there such as *Am Baile* managed by Highland Council, 'there might be better ways of having more of a resource' managed by WRB.

The desire to go beyond current institutional approaches relates to how these are not always well-received by all in the community. It also reflects WRB's specific regional focus which tends to be missing among the very localised and larger Highland-wide heritage-making. When discussing the practicalities of this work, Coinneach, among others emphasised the importance of building trust and conveying the biosphere as 'a good steward or guardian, particularly of people's family collections of photographs.' Moreover, he said work should occur on a partnership basis, and digitising work should be led by communities.⁵⁸ Phoebe felt even before approaching people, there should be a clear message about why WRB would have these photos and 'the stories that we would potentially tell'. At the same time, she suggested an open approach to asking people what *they* want to see preserved and asking, 'are there specific aspects of our shared history that you think is really important?' This would help to categorise materials and 'share the narrative that everyone wants shared, rather than just ours'.

Hence, alongside tensions of being 'inward facing' for local consumption and participation, or 'outward-facing' to satisfy the tourist gaze (McCleery and Bowers

⁵⁸ Some challenges on this were discussed, especially how communities may not have skills for digitising work which would therefore require an initial capacity building stage supported by WRB.

2017, p. 194-195), issues of participation and ownership are pertinent. WRB actors approach heritage-making processes by privileging a participatory methodology aiming for communities to have ownership of and make decisions about their own heritage. In contrast, the AHD privileges expertise, efficiency and institutional approaches to participation which work 'on behalf of' the public, tending to sacrifice reciprocal relationships with specific people (Graham 2017a, 2017b). Graham's (2017b) suggestion that museums should draw more on anarchist practices regarding how to enact participatory approaches to access and ownership could be relevant here.

Moreover, there is a larger body of literature on collaborative heritage-making methodologies inspired by anarchism in archaeological contexts (see Gonzalez-Tennant 2018). These propose forms of non-hierarchical and horizontal organising which seems to align with how some WRB actors wish to see relations between the biosphere and local communities. Anarchist methodologies also draw attention to the *how*, seeing specific forms of practice as key to how new relations can be prefigured in the here and now for more just and sustainable futures (Russell forthcoming). This includes how to negotiate difference at the micropolitical level, which is part of the complexity that often leaves WRB actors struggling to initiate actions, given concerns about acting legitimately, outwith territorial or institutional authority.

Responding To Scarcity: Traditional Knowledge and Skills

At a biosphere webinar held on the topic of traditional skills for sustainability, Norman argued that promoting and retaining traditional knowledge and skills is part of 'celebrating' the cultural heritage of the biosphere. Examples of such knowledge and skills were also suggested for inclusion as green jobs in Wester Ross. However, directors and local residents at the webinar described how specific skills have declined over time. Seumas said a few decades previously, there was a much greater availability of trades and craftspeople with traditional skills. Norman agreed that finding people with traditional skills now is challenging, citing thatching, weaving, working with lime mortar and crofting as part of the 'huge number of traditional skills that people would have had in their local communities, that no longer exist, or which are very very scarce.'

Lisa, a Wester Ross estate owner and crofter, gave a presentation on her experience of the challenges and benefits of using and acquiring traditional knowledge and skills locally. For example, those needed for 19th century farm building maintenance, forestry, agriculture and boat building. A second speaker, from Historic Environment Scotland (HES), spoke of the relationship between maintaining historic buildings and climate change and critiqued changes in the economies of construction which devalue traditional skills and encourage unsustainable resource use. Although focused predominantly on buildings, in discussion he was encouraging of community-based transmission of traditional knowledge and skills.

For example, Seumas described a 'very active' traditional boat building programme *Am Bàta* in his local community (Figure 24) that was halted due to Covid-19; 'we are 18 months into not building a boat'. The HES speaker encouraged using the biosphere to frame boatbuilding as 'cultural heritage activity' and to seek funding through HES. He explained that HES would find this attractive as 'part of making the culture living, as opposed to dead'. In the context of tourism, he argued historic buildings should not be empty, because this offers little to the visitor who 'wants to see it alive; they don't want blue plaques everywhere; they want live humans. Hitting things and making things.' This was the first contact I observed between WRB actors and HES and although conversations suggested possibilities for partnering on heritage activities, this was never followed up.



Figure 24 Am Bàta Project. Credit: shared with author, reproduced with permission.

From a community point of view, activities like *Am Bàta* are not necessarily framed for tourism but are about participation in living culture rooted in place-based memories, which are part of collective BCH. This includes the connection between boatbuilding and Gaelic heritage, which is noted in WRB's strategic plan. Additionally, the project involves intergenerational skills transmission between senior school students and community members, working with (often retired) skilled traditional boat builders. This helps to transmit the knowledges and skills which have been acquired through connection with the sea. However, as shown in two other UK BRs, BCH activities can be integrated into tourism strategies to help sustain and celebrate a huge range of local skills and practices (see Wilkinson 2019). As with the above example on lost people, places and stories, the subject of lost skills is herein mobilised by local actors through a lens of nostalgia, which in this instance denotes the more restorative form of nostalgia that emphasises a rebuilding or the 'return of an object or experience lost' (Orr 2017, p. 7).

One of Norman's suggestions for how to revive and promote knowledge and skills, was for WRB to develop a practical learning course focused on things 'people would have done in this area'. The 'driving force' for learning delivered across the biosphere would be the UNESCO link of 'people and place'. He framed this as an alternative to 'niche' skills training and formal institutional approaches which struggle in sparsely populated

areas, and often cannot support people to make a living in Wester Ross. Connecting traditional knowledges and skills to contemporary population needs for sustainable rural livelihoods is a core feature of BCH (Russell 2021b; Swiderska and Argumedo 2017). Norman argued rather than certification and achievement, why not ‘create Scotland’s first folk school and let’s do it in Wester Ross Biosphere.’

Whilst some folk models construct heritage as ‘traditional, unchanging cultural practices’ (Reed 2015, p. 382), BCH is about adaptation to local circumstances over time (Russell 2021b, p. 12). The latter, rather than the former aligns well with the discourses of WRB actors who see the interaction of people, culture and place over time as leading to the creation of place-based knowledge, skills and heritages. It also relates well to arguments around cultural heritage as an enabler of sustainable development (Giliberto and Labadi 2021), which moves beyond heritage ‘preservation’ towards ‘sustainable use and development’ (Loulanski and Loulanski 2015, p. 6).

In BRs, this thinking is part of the bringing together of socio-economic needs of the population, with unique landscape characteristics and regional cultural heritage (Wilkes 2022). An example is WRB’s proposal for a bioeconomy project, working with international partners in Norway and Iceland. It sought to share knowledge of ‘natural and cultural heritage traditions’ to add value to wool supply chains to benefit local producers and craftspeople through new livelihood opportunities. Wool is a resource associated with many traditional practices, including the ‘age old skill’ of dyeing with local plants, weaving and other crafts which feature in Applecross Heritage Centre (see Figure 25 and Figure 26).



Figure 25 Traditional Skill Interpretation - Applecross Heritage Centre.



Figure 26 Crafts Using Wool and Plant Dyes - Applecross Heritage Centre.

Phoebe explained to WRB directors when developing this proposal, crofters and crafters in Wester Ross suffer from low wool prices, and the cost of shearing sheep and processing wool generates 'negative income'. Hence, the project is about utilising natural and cultural heritage for sustainability, helping wool producers to mill locally, finding alternative uses for wool, and creating a regional bioeconomy. The proposal was unsuccessful in a Scottish Government funding bid, and the lack of resource and capacity to enact new heritage imaginaries in practice is preventing WRB actors from effectively promoting and retaining traditional knowledge and skills.

ICH and BCH in Scotland

The fact that WRB may struggle to fund work around ICH is both unsurprising, and problematic. A recent report on ICH in Scotland has identified that two UNESCO

domains, traditional craftsmanship and knowledge and practices concerning nature are significant policy and practice gaps (Local Voices CIC 2021). More broadly, the preoccupation with tangible aspects of heritage is common in the European context (Jones 2017), and the absence of ratification of the UNESCO Convention on ICH means that practices, knowledge, and skills, along with language, are not formally recognised in the UK (see Hassard 2009). Nationally, HES and NatureScot are separately responsible for conservation of natural and cultural heritage, and conservation of materiality has been dominant within both organisations in practice (Russell 2021b).

A key barrier to overcome is how ICH (including traditional knowledge) can be interpreted by Scottish policy makers as mostly relevant for indigenous peoples and applied in a limited way, to practices like crofting, rather than communities living heritage more broadly (Russell 2021b). Similarly, Smith and Waterton (2009) argued that ICH in England is associated with non-Western and non-European cultures, and thus heritage management ignores the intangibility of all heritage. Actors like WRB fall through the cracks of current policy frameworks because of their emphasis on ICH in the spaces between natural and cultural heritage, and the BCH of contemporary communities. Writers on BCH reinforce that local ecological knowledge is a feature of all cultures (Cocks 2006). In Scotland, as Poole (2018, p. 57) argues for the SDGs, there is a need for more 'explicit recognition of the culture, values and heritage of diverse peoples and their relationship with land' in policy language. BCH can help address unsustainability linking communities, heritage and landscapes and draw attention to forces undermining local ecological knowledges and practices (ibid). Support is needed for organisations like WRB to apply such thinking in practice and act as mechanisms to develop expertise and guide future ICH and BCH practice.

Conclusion

BRs have been identified as models enabling work at the 'human-nature interface' departing from conservation practices which separate people from the environment (Wilkes 2022, p. 7). I have shown this to be a relevant characterisation for WRB, having outlined how actors continually negotiate nature-culture relations in ways that increase rather than reduce complexity and work across natural and cultural heritage and degraded and unsustainable landscapes. However, as a difficult and political issue,

how to address unsustainability in practice is more challenging. Nonetheless, linking back to Chapter 4, this reinforces that WRB actors are conceptualising the biosphere more holistically, identifying regional issues of importance rather than focusing purely on conservation of core zones as has occurred in BRs elsewhere.

The case studies illustrate how WRB actors are negotiating nature-culture relations in ways which produce 'particular worlds' and 'specific futures' (Harrison 2015) across multiple domains. Indeed, many more were not included in this chapter. Across these domains I highlighted some emerging tensions between actors, adding to an understanding of why BRs can produce ambiguity (Aschenbrand and Michler 2021). The chapter has given weight to the notion of WRB as a rhizomic assemblage, especially showing how actors negotiations of nature-culture serve to continually redefine what a biosphere is and does in discourse and practice.

The multiplicity and complexity of this becoming invokes the rhizomic quality of assemblages which spread horizontally encountering 'infinite possible trajectories' (Horowitz 2016, p. 169). Whilst WRB meetings offer space for actors to identify and explore such trajectories, at times such spaces are insufficient to unpack complexities to the extent that decisions are made on actions to take. Although in many ways successful at negotiating complexity and tensions in nature-culture relations, unresolved discussions combined with a lack of capacity and resource, diminishes the agency and legitimacy of WRB actors and the biosphere assemblage.

Finally, on the idea of 'narrative tension' pertaining to innovation and change for sustainable development and conservation of culture and heritage (Aschenbrand and Michler 2021), I found WRB actors and discourses position change as positive in both domains. This is linked to priorities around addressing unsustainability and improving the viability of living heritage. WRB actors and discourses position cultural heritage as part of how people manage landscapes and see change as welcome in assembling new futures informed by the past. The kinds of heritage-making practices discussed in the case studies of story gathering and traditional skills and knowledge often denote ways of conserving cultural heritage to address broader aims relevant to social relations and economic and environmental conditions in the region. How heritage-making is carried

out, including the emphasis on social relationships within communities, is important to WRB actors' conceptualisations and organisation of human-nature relationships.

Having focused on nature-culture relations in diverse contexts negotiated by WRB actors, the next chapter uses crofting and Gaelic as in-depth case studies involving actors beyond WRB. As political and emotive forms of natural and cultural heritage, these are contentious domains of community, heritage and landscape which elucidate the challenge of working with change and complexity.

Chapter 6: The Past, Present and Futures of Crofting and Gaelic in the Biosphere

The previous chapter illustrated that WRB actors are engaged in the production of particular worlds and specific futures across a breadth of domains relevant to the BR remit. This chapter focuses more closely on crofting and Gaelic which were introduced in Chapter 2 as important for communities, heritage and landscape in the Highlands and Islands, and part of complex histories of marginalisation and colonialism. Taking crofting and Gaelic in turn, I explore how each are locally interpreted in discourse and enacted in practice in Wester Ross from past through to present. This points to problems of unsustainability and loss/endorsement which also emerged in Chapter 5 as relevant to WRB actors' negotiation of nature-culture relations.

The chapter considers the challenges of working with change and complexity, because as DeSilvey and Harrison (2020, p. 4) suggest, in contexts of loss and endorsement actors may try to 'arrest or reverse processes of loss and change', or instead seek to 'work with change'. This also concerns a broader suite of actors beyond WRB who are engaged in activities which shape crofting and Gaelic futures, particularly at a national scale. This concerns as Harrison and DeSilvey et al. (2020, p. 5) describe of their work on heritage practices, the actors and activities involved in 'sustaining (or not sustaining anything that might be seen to be vulnerable, and hence both endangered and valuable'. I conclude the chapter by bringing together crofting and Gaelic as a joint target for conservation efforts and place-based future-making.

The Heritage of Crofting as Loss and Abandonment

Crofting is described on WRB's website as 'a historically important land use' which has declined significantly over time but 'remains relevant to local communities today'. The decline is visible in the landscapes of Wester Ross; a result of the Clearances and more recent land abandonment. Ruins of croft houses stand alone or adjacent to new houses (see Figure 27 and Figure 28) and signify what Robertson (2015, p. 994) calls 'a landscape and environment of survival'. Abandonment is part of the crofting landscape constructed as heritage, as ruined crofts, dwellings and under grazing are described in the special character of the Wester Ross National Scenic Area and within the

Statement of Significance for the Kintail estate managed by the National Trust for Scotland (NTS).



Figure 27 Ruined Vernacular Building and Bracken-filled Landscape in Applecross.



Figure 28 Blackhouse Ruin and New Croft House in Applecross.

For those living among landscapes of abandonment, their experience and knowledge of place and community are informed by change over time. A local resident of Gairloch and board member of the Museum, discussing crofting township maps from the 1840s during interview observed,

...you can see there were so many more houses... the population was that much greater than it is now and all around our area we still have all those ruins... a number around the crofts have just been abandoned.

Similarly, on Dundonnell estate, the owner described to me the importance of acknowledging the Clearances and their effects on people and place. He described their impact as,

...so very clear on the ground, it's a living landscape, the history is still there, you can still see those abandoned houses... it runs deep in the history and the feel of the place.

Whilst NTS and NatureScot interpretations tend to characterise cultural abandonment in Wester Ross landscapes as 'wild', this is often resisted by locals. Crofter Lisa described landscapes where people lived 150 years ago as 'more abandoned' than they ever have been, but still not wild. In contrast to positive connotations of wild landscapes, Seumas called abandoned crofting townships 'graveyards of unsustainable practice' (see Figure 29). Coinneach also discussed with me his sense of frustration when landscapes seemingly empty are interpreted in ways which fail to acknowledge the Clearances. For example, pondering Wester Ross landscapes, a local Museum volunteer had posed the question in the local paper, 'why didn't people in Wester Ross build anything?' He explained, 'most buildings were destroyed' and on occasion described the driving force of abandonment as historical 'genocide'.



Figure 29 Glenarigolach Township in the Valley of Allt a Ghlinne, © Louise Pearson

In the museums of Gairloch, Applecross and Ullapool, crofting is a major focus of interpretation. Exhibits tell the local and regional stories of crofting in Wester Ross and include displays that emphasise historic practices and technologies (see Figure 30). The manual labour and hardship associated with life on the croft, and how crofters engaged in a variety of activities to survive is part of crofting represented as cultural heritage.

Alongside this are narratives that emphasise the collective nature of crofting activities, such as peat cutting and harvesting, which acted as ‘social occasions’ within the community (Ullapool Museum). In all three museums, the narrative of loss and decline over time is prominent.



Figure 30 Historic Crofting Tools - Gairloch Museum.

In Applecross Heritage Centre, one interpretation panel reads ‘until the 1950s, Applecross was very much a crofting and fishing community... crofting, as a way of life, is a thing of the past.’ More optimistically, it continues: ‘crofting has changed, but hopefully, not vanished.’ An Ullapool Museum booklet on crofting, argues that it was ‘the preoccupations of modern life’ that ‘threatened’ crofting. It explains how crofting ‘struggled during the last century’ citing an ageing population and loss of skills passed through generations, speculation around land and housing, neglect of crofts and absenteeism and the fact that policymakers have favoured and subsidised more highly industrialised forms of agriculture. Hence, explicit connections are made between crofting of the past and crofting of the present.

Contemporary Crofting in Practice

Interpretation of contemporary crofting features alongside historical narratives at the Balmacara Estate, owned and managed by NTS since 1946. In contrast to narratives of loss and decline, interpretation at Plockton describes the estate as ‘thriving’, with crofting connecting land, people and nature (see Figure 31). Balmacara Estate is 75% croft land, with eighty-two crofts over eight townships, described as a ‘true Highland crofting estate’. NTS literature describes management of the estate as about ‘careful consideration of heritage’ and support for ‘modern crofting’ suggesting a balancing of past, present and future. In Plockton visitor centre a display outlining key aspects of crofting includes uncredited local perceptions that suggest crofting contributes to landscape aesthetics and ‘supports’ the cultural landscape and biodiversity, although you ‘cannot live off crofting’ (see Figure 32). The interpretations magnify the importance of contemporary crofting as a positive contribution to landscape and communities whilst recognising current limitations.



Figure 31 Plockton Village Interpretation Board - Balmacara Estate.



Figure 32 Interpretation of Crofting Using Local Perspectives.

Norman of WRB, is estate manager of Balmacara and he expressed during interview how he has always recognised the value of the estate as a crofting landscape. However, he felt NTS colleagues have not always held the same view, having spent years advocating the importance of the crofting story. He suggested some saw the estate as a burden rather than an asset. This is partly related to the complexities of acting as a landlord for multiple crofting townships, which I encountered whilst exploring Plockton. There was an ongoing conflict playing out on the community noticeboards regarding whether crofters have the right to use the village as 'common grazings'. Tensions appeared to erupt at a community council meeting, culminating in a resignation due to 'nastiness' aimed at crofters on the issue of cows in the village.

Although conflict rarely features in heritage interpretations of crofting, other local actors also suggested tensions over land were present. For example, a crofter in Applecross challenged the idea of a romanticised collective harmonious past, whilst describing contemporary conflicts associated with the mapping of crofts, where some were drawing boundaries dishonestly causing disagreement. This helps to contextualise Norman's comment; 'never have I known so many people to fight over so little. To extent that they will go to court over a small piece of land'. Recognising conflict is important for understanding contemporary crofting practice, avoiding romanticisation of the past and is relevant to creating new crofting futures.

The (Un)Sustainability of Crofting

A *Crofter* article published in 2019 titled, ‘the death of a crofting community?’ explains that historically as place-based communities, the strength of crofting townships lay in people living and working there. Today, a very different community has taken shape, one in which the proliferation of ‘the non-resident outsider’ adds ‘nothing except to the apparent emptiness of the place’ (Bannister 2019). This was a prominent feeling from the local crofters I interacted with in Wester Ross. In Applecross, a crofter showed me the numerous abandoned and neglected crofts in his township explaining the negative impact in land use terms (see Figure 33). However, much of his frustration was because such crofts are owned by people living in England, with no intention of working the land or allowing someone else locally to do so.



Figure 33 Example of Grazed and Neglected Land in Applecross.

Crofting regulations stipulate crofters should be resident within 32km of their croft, but apparently this can be circumvented by siting a caravan on the croft.⁵⁹ A crofter from Kinlochewe described trying to sell a croft, and a couple from South England came to view it. When he learned they would not work the land and would install a caravan and later build a holiday home, he said he refused to sell to them, to keep the land in crofting use for someone living locally. Such small acts from crofters, are in

⁵⁹ Presumably this means that one has an address on the property, but I was unclear how this circumvented the purposeful use regulations.

recognition of the dire unsustainability of crofting in townships all over Wester Ross, with some areas left with only one or two active crofters.

Given it can be easier to identify what is unsustainable, compared with sustainable (Smout 2009), it is useful to define what a sustainable crofting community might mean. A sustainable community in general is that which can 'evolve and develop sustainably... an integral part of the environment; and enables ethical and equitable distribution of resources and opportunities today (intra-generational) and in the future (intergenerational)' (Winther 2017, p. 339). Considering these elements brings to the fore the environmental, social and economic conditions of contemporary crofting in practice, as understood by actors in Wester Ross and beyond.

The environmental sustainability of crofting is contested. The Scottish Crofting Federation (SCF) posting to Facebook stated that crofting is good for biodiversity and is 'a sustainable way to produce food, grow communities and protect the planet'. A crofter replied that this is only the case where small-scale food production methods are embraced, and often they are not. Crofting *can* involve diverse activities but remains predominantly focused on sheep grazing which is generally characterised as an unsustainable practice (see Figure 34). The dominance of such grazing in Wester Ross was described by a crofter in Kinlochewe as a result of government subsidies, with crofting practices today a 'product of the 1950s'. He was a strong advocate that 'crofting has to change' and felt the Crofting Commission and the SCF were 'failing crofting' by not realising the future can be about more than raising sheep (and even cattle). Removal of subsidies for environmentally harmful practices is one key route to sustainability within BRs (Stoll-Kleeman and O' Riordan 2017) and as suggested in Chapter 5, subsidies could be directed towards encouraging more traditional crofting practices like transhumance.



Figure 34 Sheep Grazing in Wester Ross.

However, regarding change, there are tensions between what is interpreted as traditional and proposed ‘modern’ crofting practices. At the national level policymakers suggest there is space for both. In the foreword to the Crofting National Development Plan, Fergus Ewing MSP, Rural Economy Secretary argues:

Traditional crofting has a role to play in our ambition to re-people the Highlands and Islands, but it is also important to encourage modern approaches to crofting and diversification into such things as renewable energy projects, tourism, woodland and beekeeping. (Scottish Government 2021a)

At a local level within crofting townships in Wester Ross, some crofters pursuing more ‘modern’ or environmentally sustainable practices, are criticised by other crofters. In Aultbea for example, a crofter explained, ‘I am frowned upon because I’ve got ponies on the croft here, which obviously aren’t the traditional thing.’ Similarly, a neighbouring crofter’s attempts to rewild their croft were ‘not going down well’. Coinneach has similar issues in his township. Whilst interested in pursuing the ‘modern’ practice of peatland restoration on the common grazings, he is apprehensive about how other crofters will react. He explained, ‘my neighbours have flat out rejected the notion that I’ve got any interest in the common grazing, because I don’t have any animals there’. Peatland restoration is seen as important by national organisations such as NatureScot and the Scottish Government, part of how crofting can contribute to tackling the climate crisis. However, crofters can perceive this as a

threat to 'the actual productive use of land, which is what crofting is ultimately for' (crofter, SCF meeting).

Some 'modern' uses of croft land are less controversial because they blend with 'traditional' practices, for example woodland crofts are considered environmentally sustainable and can be grazed. Although some support the natural regeneration and rewilding of crofts in areas where grazing is reduced (such as occurred in some parts of the Balmacara estate), sometimes *more* grazing is deemed better in specific contexts. There are high value nature landscapes that are at risk due to the decline of grazing as explained by NatureScot conservationist Morag. Hence certain landscapes are biodiverse *because* of grazing and thus grazing is not inherently environmentally (un)sustainable as a practice. This is the complexity of high value nature landscapes especially in the uplands of Europe, where threats include both under and over grazing and where histories of change support the critique of attempts to freeze landscapes in time (see Costello 2020).

The key issue is the intensity of practices in specific spatial and temporal contexts. The idea of 'traditional' and 'modern' practices might create a rather binary view of what is and is not sustainable, however there is a more complex dynamic that requires considering land use intensity, specific location and extent of the practice at a regional scale. WRB in their crofting description, capture some of this complexity when they suggest crofting can enhance biodiversity, but simultaneously state that crofting contributes to reduced biodiversity as a result of '*extensive* sheep grazing' [my emphasis]. The extensiveness of sheep grazing in Wester Ross is blamed on subsidies and the longer term agricultural and economic policy and politics at a national and European scale.

However, some local actors also suggested the need for a change in mentality. The factor of a Wester Ross crofting estate felt some crofters 'will use the land at full capacity if they can' not investing in land improvements. Using land more intensively is a direct driver of unsustainability (Ellis et al. 2021) alongside indirect drivers such as land abandonment. There are actions that could be taken at a local and regional scale to address some of these issues, supporting crofting practices that are more sustainable and considered an integral part of the environment (Winther 2017). WRB

actors, especially directors like Norman and Coinneach with direct experience of crofting, could work in partnership with the SCF on training for crofters on the benefits of sustainable land use change in the biosphere. Such actions would constitute an example of how a civil society organisation can support forms of facilitated self-governance that improve the sustainability of a resource (Van Laerhoven and Barnes 2019).

The social composition of crofting communities is directly related to its land use practices. Many crofters have given up use of common land, because as Friseal, explains, they are too old to 'put their sheep out on the hill like they used to'. This is part of a broader social sustainability challenge, 'the pool of traditional crofters is getting smaller and the people older' meaning that new people must be brought in to ensure crofting survives in Wester Ross. WRB director Rory, reports that in some townships there are only a 'few people keeping going', but at the same time it's very difficult for young people to get in. He argued that crofting communities are not very 'inclusive' and it is hard to get into the 'power structure'.

Crofts are passed down through family inheritance and there is often reluctance to relinquish this inheritance. For those not passed down a croft, such as Friseal, the way in is to manually search the crofting register to find someone willing to sell or transfer their croft/croft tenancy. A former employee of the Crofting Commission, Stuart, who lives in Wester Ross, explained that where crofts have been held in families for generations, individuals often refuse to be the one to break the line, even if they have no interest in living on and working the croft. This is a barrier to equitable distribution of opportunities and resources intra and intergenerationally, as many young people are unable to access a croft.

Where change is resisted however, this can reflect that 'in colonial (and former colonial) societies... where land has been appropriated, a strong sense of ownership and defence may persist through succeeding generations' (Storey 2012, p. 15). The Highland Clearances are drawn on in contemporary discussions about how to tackle the problem of access to crofts. For example, at SCF meetings, there have been proponents of a strengthened enforcement by the Crofting Commission to ensure transfer of unused crofts over to new tenants. However, forcibly removing those not

working their crofts is critiqued as continuing historic injustices of land dispossession and breaking long lines of family inheritance. The prospect of the Commission or a landlord forcing change of croft tenancies, was described as practically and politically unfeasible by an agricultural valuer:

You could end up on the front page of the crofting gazette as being a horrible nasty landlord [...] to try and throw people out, you are not going to find an agent, legal or professional in other way who will act for you in doing that. Cause it's so much against cultural heritage of it.

Another critique was given by a former SCF employee who was involved in the Shucksmith Inquiry. The report from the inquiry, produced in 2008, influenced the Crofting Reform (Scotland) Act of 2010 which mandated crofters cultivate their land or put it to 'another purposeful use' (Hains et al. 2013). She argued that enforcing such a rule is 'forcing people to use 10 acres of unproductive land when others with land are not obligated in the same way'. Quite simply, why should a crofter need to make sustainable use of a marginal piece of boggy land, when non-crofting land users are not held to any similar standard? Although a valid point, upholding the rights of individuals *not to* use land productively, leaves croft land in a state of neglect and abandonment, undermining the overall sustainability and viability of crofting as collective heritage into the future. Moreover, commons governance literature identifies that an important factor in successful management of common pool resources is monitoring and graduated sanctions (see Ostrom 1990, 2012).

Individualisation has already contributed to changing the nature of crofting as a social system, undermining common and co-operative management (see Brown 2008). One problem in Wester Ross is the amalgamation of crofts and 'croft collecting' by individuals, which has been interpreted as evidence that crofting is no longer imbued with a sense of communal behaviour but operates as a mechanism for property grabbing at a local level by 'selfish' individuals. As Hoffman (2018, p. 141) suggests, making crofts into larger units is 'counter to the goal of maintaining the rural population and would undermine crofting as a form of community'. Crofting in Wester Ross was often felt to constitute an individual hobby, 'not a community thing anymore', tied to the decline of practices involving collecting working. As a crofter in Applecross said, 'no one uses the common grazings'. Alongside croft amalgamation

and collecting, crofters can apportion their share of the common grazings for their own use. These conditions support viewing crofting in Wester Ross as an 'under use' context similar to that described in the common grazing pastures of a BR in Germany (see Brossette et al. 2022).

Crofting common grazings committees (CGCs) are supposed to 'help sustain communal working' and management of community assets (Crofting Commission 2021). However, many of these CGCs are not functioning well in Wester Ross. They may rely on only one or two individuals, and some are unwilling to join or run a common grazing committee because of the personal financial liability involved. In Applecross, a crofter explained that absentee croft owners living elsewhere do not participate, 'they do not want to know'. Hence, CGCs are not necessarily working in Wester Ross as an effective form of local resource governance. Despite their levels of autonomy to enact decentralized forms of organisation, capacity for sustained local co-operation and participation is highly diminished. Arguably, this is predominantly due to the overall decline of crofting as a rural resource in local communities and the declining number of people living in rural communities and engaging in crofting in practice. In line with Brossette et al.'s (2022) conclusions in the German BR, actors beyond the fragile common pasture organisations are needed to promote sustainable development and conserve common grazing practices.

Talking of changes to crofting over time, Stuart, highlights how some of the above problems are a consequence of legislative change. Specifically, the introduction of the right to buy crofts, which has incentivised turning leased crofts into privately owned properties. He said the logic was that those without capital would have the opportunity to own land and access better rights and privileges but ultimately, 'introducing the right to buy was a folly, because it undermined that basic principle of crofting'. Similarly, Norman, speaking of crofting suggested there is 'nothing sustainable' about a system based on buying and selling crofts to the highest bidder. Crofts have become a valuable commodity, eroding the overall system of crofting in practice. It is an example of how common pool resources are 'under pressure to dissolve, in order to be replaced by market-driven individualised use of land and

resources' (De Moor 2019, p. 319). In Wester Ross, this is compounding the problem of intra and intergenerational inequity.

During an SCF meeting on the topic of access to crofts, the top three barriers to accessing crofts (as voted on by attendees) were: unused/neglected crofts not made available (by old or former crofters/absentees); market price and competition (prices too high); and crofts being bought for house sites. The first of these was discussed above, and the latter two are interwoven. The high market value of crofts and tenancies is pricing out younger entrants to crofting, where even croft tenancies without a house can be valued at £200,000. This is part of the power structure of crofting where access to land becomes predominantly a matter of economic capital. Crofts as speculative house plots, generate economic value for private gain, and contribute little to the continuation of crofting as an agricultural land use and cultural connection to land. Whilst SCF have indicated that this could be addressed through market intervention, the perception that crofts should be freely bought and sold as property emerges in opposition.

Countertrends towards individualisation of property ownership in crofting, include some local interest in community buyouts of the common grazings in some parts of Wester Ross. However, taking croft land into collective ownership is seen as sensitive and a potential source of conflict. As one crofter suggested, there would be 'uproar' if there were public discussions of buyout of common grazings, particularly if intentions might be for a 'modern' purpose such as having a wind turbine to generate local income. Stuart explained that crofting communities are 'not always willing to share the management responsibility over the land that they have with the wider community'. Crofters might prefer current tenancy arrangements to new forms of collective property associated with the community, because as Coinneach explained:

If you create another committee of land ownership, you have to have a very harmonised population, because sometimes, benign neglect from an absentee landlord is better than massive in-fighting within a community that doesn't know what its sense of purpose is. Or if there's agendas and people want very different things out of it.

This view recognises one of the challenges expressed in CPR literatures, that co-operation is more likely in smaller, homogenous groups (Ostrom 1999). It positions

crofting as part of a broader context regarding who should have what rights associated with land. Such dynamics are discussed in Chapter 8 on the politics of land use and ownership.

Finally, regarding the economic sustainability of crofting, it has never been associated historically with a resilient livelihood. Although crofts can be treated as commodities to generate wealth, crofting itself, 'is not profitable... I cannot make the economic case for it' (Agricultural Valuer). Alongside the lack of livelihood opportunities from individual crofting, the value of common grazings under declining usage becomes mostly cultural and symbolic (Brown 2006). Crofters are usually employed in work beyond crofting, which makes working croft land part of leisure time. Whilst some may find income-generation opportunities on/around their croft such as offering holiday accommodation, others must work away. Coinneach, explains how the latter situation can cause a sense of a dissonant identity:

It's contradictory and paradoxical, and other people would say hypocritical, but I am a crofter, engaged in trying to re-establish a derelict croft, and I'm working in the oil and gas industry worldwide, one of the biggest contributors to carbon emissions and climate change.

This dissonance is because for Coinneach, crofting is more than a hobby, it is a source of cultural connection to the land rooted in an environmental ethic. However, as he explained to Alan at a WRB meeting, the 'peculiarity' of crofting is such that he cannot survive from it alone. He contextualised this in the larger dynamic of Wester Ross as a 'net exporter of people' for the last four centuries because people cannot make a livelihood. For him, this is a legacy for WRB to wrangle with, to address the problem that people cannot 'create a livelihood... where they place their feet on the ground and where they place their head at night'. Crofting then is another example that reinforces the lack of sustainable and resilient livelihoods in Wester Ross (as discussed in Chapter 4 and 5).

Considering all of the above, the sustainability of crofting is complex and contested. I would argue that aspects of crofting in Wester Ross invoke qualities of a 'dysfunctional landscape' (see McAlpine et al. 2013). The solutions suggested for addressing dysfunctional landscapes include reforming governance and transforming societal values (ibid). Although crofting has some of the ingredients needed for successful CPR

management, there are few effective forms of local self-governance in practice. This makes for a challenging environment, explaining why WRB actors have rarely discussed working in the domain of crofting. As one director explained crofting has ‘a long way to go to be sustainable’. There are few uncontentious issues and although attuned to problems and opportunities resulting from change over time, WRB actors have not yet been able to work with this change to create more just and sustainable crofting futures. Most people concerned about crofting futures, including WRB actors, have not been looking to national political actors to improve the sustainability of crofting.

Crofting as a ‘Political Hot Potato’

Norman discussing the topic of bringing vast areas of unused croft land in Wester Ross into more productive use said, ‘where there is a will, there is a way’, but stressed that ‘big questions’ must be asked of Scottish Government and the Crofting Commission for their lack of action. He felt, that ‘nothing is being done’ about the lack of access to crofts and characterised the problem in terms of crofting as ‘a big political hot potato’. Another Wester Ross resident, and clerk of his crofting township committee, similarly suggested that the problem is ‘everyone’s terrified of crofting, all politicians are terrified of crofting, they don't know how to deal with it, what to do about it, it’s such an emotive topic’. Inaction however does not prevent change from happening anyway, and given that sustainability, ‘depends on the ability to embrace change’ and ‘adapt to loss and transformation’ (Holtorf and May 2020, p. 342), this is a major challenge for all actors to come to terms with.

One of the political difficulties at a national level is how crofting is part of long-term relations of domination and marginalisation from the Highland Clearances through to the present. MacKinnon (2020, p. 366) explains today, crofting is part of a system of undemocratic, illegitimate structures of domination and the national approach to crofting fails to meet basic standards of citizen engagement and participation in decision making. This often subtly played out within the interactions of the Cross-Party Group on Crofting (CPGC), which is chaired by SCF and has representation from the Crofting Commission, Members of the Scottish Parliament, and Scottish Government. A key aim of CPGC meetings is to generate actions for lobbying and hear updates about crofting policy and projects.

A recurring theme over my observations of these was crofters calling for national legislative reform and for the Commission to be better resourced to enforce crofting duties, but also enact a broader role on crofting development. Issues identified above which threaten the future of crofting as a sustainable system would be placed at the door of the Commission and Government as in need of resolution. An undercurrent of much criticism was that the Commission was disconnected from the local reality of crofting communities and the Scottish Government were not prioritising crofting in the Programmes for Government.

From the Commission's perspective the fact they are under resourced was repeatedly cited, and a high-level executive reported that as an organisation, they tend to focus on the low hanging fruit rather than areas of most difficulty like pursuing absentee croft owners. Scottish Government representatives were unable to answer questions on when crofting law reform might take place and contributions usually focused on reporting statistics about financial support for crofting from grants, alongside broader statements of commitment to ensure 'crofting can reach its full potential'. The creation of a national development plan for crofting was repeatedly flagged as an important milestone for the future of crofting in Scotland. However, when the long-anticipated plan was published in 2021, SCF were disappointed by its content and failure to address the need for legislative reform.

This crofting impasse, namely the lack of action to support crofting systems in practice reflects the absence of an effective form of co-management where rules to manage crofting as a resource are shared between government agencies and local groups. Solutions are sorely needed if crofting is to survive at all into the future, and these must be tailored to the complicated conditions on the ground as described above. A 'polycentric' governance approach, as outlined by Ostrom (2012), can help to move beyond crofting as governed through a hierarchical, top-down agency-based structure. However, in a 'self-governed' polycentric system, there must be participation from local actors using the resource, who should ideally make many of the rules that govern the sustainability of the resource and its use (ibid).

In the absence of such conditions, we can also consider the relevance of an anarchist perspective on crofting. Given anarchists are critical of how the State and the market

create hierarchies and inequalities, they reject these institutions as a solution to create more just and sustainable futures. Instead, they emphasise prefigurative politics, which is about creating new futures in the present through enacting horizontal and non-hierarchical relationships beyond hegemonic institutions (Franks 2018). This concept connects well to heritage futures thinking (see Holtorf 2020; Morgan 2021) which is ultimately about the ‘assumed futures’ inherent to particular practices, and ‘alternative futures that could be assembled’ (Holtorf and May 2020, p. 343). Following this, there could be a stronger role for WRB as a horizontally networked actor to support facilitated self-governance through the prefiguration of alternative crofting futures.

This could involve working with change at a local and regional scale in the biosphere, inspired by regenerative approaches and ideas of re-commoning which are necessary to addressing the unsustainability and dysfunctionality of crofting. There are many other contexts in which new nature-culture relations are being created, where transformations occur by enacting processes of social, ideational, economic and ecological commoning (Shantz 2013). Alternatively, biocultural heritage models offer another way to guide action related to reviving and sustaining community and place-based practices such as crofting, and importantly such models have an emphasis on more equitable and sustainable intra and intergenerational practices. Hence, although crofting may be a political hot potato, alternative approaches could support a more just and sustainable crofting future in the biosphere.

Gaelic in Wester Ross: *Gàidhlig ann an Ros an Iar*

Wester Ross is one of perhaps three BRs in the world where Scottish Gaelic might be spoken.⁶⁰ According to WRB’s strategic plan, Gaelic language and culture are ‘a vital thread that runs through the rich fabric of life in Wester Ross’. However, just like crofting Gaelic has declined significantly over time, especially during the 20th and 21st centuries. Hence, although deemed important, as Elisabeth explained of today, ‘there

⁶⁰ The other two being Galloway and Southern Ayrshire BR and South Nova BR in Canada. However, the language is critically endangered in the latter (McEwan-Fujita 2013).

are no pockets of Gaelic speaking in Wester Ross.’ The loss of Gaelic is described in WRB literature as ‘rapid and devastating’ with ‘huge amounts of knowledge of the local landscape dying with it.’ WRB’s website, of Gaelic revival in Wester Ross, identifies the important work of Gairloch Museum, home to a significant collection of Gaelic resources.

‘Dropped Like a Hot Potato’

Interpretation within the museum, tells the story of Gaelic in Gairloch, including the history of the language and how this created a rich cultural heritage including music, place names and literature and other oral traditions, some of which are preserved in the museum. One board explains that in Gairloch, Gaelic was the first language for locals few of whom spoke English ‘until the 1880s and as late as the 1950s’. However, Gaelic declined significantly by the end of the 20th century meaning ‘the language is never likely to be heard as freely as it once was.’ In the museum’s film of post-war local experience, the decline of Gaelic is reported as going hand in hand with the decline of crofting. An older woman says:

Living here and growing up was so much connected with Gaelic, you were aware of it disappearing in a way... there are places I know by name, but I’ll never hear them mentioned again.

Other voices on the film speak about how Gaelic was branded as ‘old-fashioned’ and older speakers were perceived as ‘stupid’. Hence, many who could speak Gaelic chose not to ‘because that’s the way the world was going’.

Gaelic was not transmitted to a generation of Wester Ross local residents who grew up with Gaelic speaking family but were themselves in the intergenerational transmission gap. Both Coinneach and Friseal had this experience, and Coinneach described not having Gaelic ‘as a feeling of loss’. Both he and Friseal later learned the language as adults and were two active proponents of language revival and normalising Gaelic in Wester Ross. For those who never did learn Gaelic but grew up in Wester Ross they still retain a sense of identity based on Gaelic culture. As a middle-aged resident of Applecross explained during interview:

I’m not a Gaelic speaker, I was brought up in a Gaelic culture, at a time when, Gaelic was very much discouraged by Gaels. When I first moved here, I was four, and when I played with the neighbouring kids they only

spoke Gaelic and I only spoke English. Now they don't speak any Gaelic, no one speaks any Gaelic here. I'm not claiming my affinity with the Gaelic culture is really through the language, it's more through... the people I grew up with, were the last of the old timers. It was a completely different world where none of the modern trappings were there and it was a fishing and peat cutting way of life, there was absolutely no modernity. Within my lifetime that has completely changed... it's an interesting question, your identity... what is that west coast identity?

This draws attention to a cultural place-based experience of being Gael without Gaelic. Bechhofer and McCrone (2014) argue someone speaking Gaelic who is born in Scotland is as likely to be accepted as a Gael as someone who has the blood and lives in the Gàidhealtachd, but without the language. They suggest Gaelic identity is more open and fluid than it is fixed and given. However, the experience of Elisabeth, who moved to Wester Ross from another part of Scotland as a Gaelic learner, draws attention to the inverse. She told me that older folk would refuse to speak to her in Gaelic and would only speak back in English, which prevented her from using the language in everyday life. Regardless of the reasons for this, it shows that cultural boundaries are (re)produced over time, based on the agency of the *Gàidheal* to reinforce or dissolve these boundaries between themselves and others.

Choosing to forgo Gaelic language is often interpreted as a consequence of colonial structures and ideologies undermining the confidence and pride of the speakers. It was common to hear in Wester Ross that individuals from Gaelic speaking heritage felt the language to be unworthy of being passed on to the next generation. Friseal, speaking of living through narratives of Gaelic as detrimental to 'progress' and the legacy of this said, 'if you get told as we did... that your language and culture is pointless then you start to believe it'. Stuart, introduced above, had a Gaelic-speaking parent, but he himself was 'in the generation where Gaelic was being dropped like a hot potato, it was... frowned upon'. A central narrative undermining the value of Gaelic is that it has no place in modernity, it belongs in the past and should not be carried into the future.

This narrative can also be implicit in non-speakers' characterisations of the language. An English estate owner suggested that the reason 'hardly anyone speaks it' is due to the isolation and purity of the language which has a hard boundary with English. Such views position the language as 'Other' and not interwoven with contemporary society.

This could explain why Gaelic can be seen as important when viewed as heritage, and considered unimportant, or perceived negatively when used in ‘modern’ contexts like road signage (see O’ Hanlon and Paterson 2019). Such views contrast with valuing Gaelic as part of a future-oriented place-based development in the Highlands (Camshron 2021), which challenge how Gaels and Gaelic were characterised as uncivilised and barrier to progress (see [Chapter 2](#)). These are issues of chronopolitics, and as Innerarity (2012, p.80) explains, margins of exclusion are defined not only spatially but through temporal categories, ‘the new outsiders are... those who live in another time period.’ The chronopolitics of archaeology relates to how actors ‘use the past in the present to construct a history for the production of the future’, which cannot be separated from political praxis (Borck 2019, p. 232).

Such chronopolitics play out in how Gaelic is part of the cultural politics of future-making at the level of the nation-state. As Friseal explains, ‘languages and culture become politicised by people who have agendas to push’. In Wester Ross, the politics of Gaelic invoke a relationship to Scottish nationalism because people consider Gaelic as a ‘separatist issue’. Language use thus becomes part of a more complex negotiation of political, as well as cultural identity. In this context Friseal was keen to note that historically speaking it was a Conservative politician that advocated investment into Gaelic, at a time when the Highlands and Islands Development Board saw ‘no role for Gaelic in what they were trying to do’.

Gaelic as ‘Scotland’s language’ (Macdonald 1999) has created tensions between those that consider *Gàidheal* as an ethnic, indigenous identity, and those that feel that such positions lead to structural racism and essentialism (Armstrong et al. 2022). The former, are concerned that years of national policies emphasising a ‘networked’ approach to Gaelic as Scotland’s language, where urban areas are becoming ‘energy centres’ of the language, ignores the crisis in vernacular communities in the *Gàidhealtachd* (Ó Giollagáin et al. 2020). Where group existence is marginalised, strategic essentialism is often pursued to forge a collective identity beyond heterogeneity (Spivak 1987). This is deemed important to counter-hegemonic struggle, for example, as Wald and Hill (2016, p. 26) explain of ideological diversity and sociocultural differences within La Vía Campesina, these are ‘bridged over, using

imagery and symbols (such as seeds, soil and water)' to create and maintain a 'common peasant identity' which acts a 'cultural glue' for the movement. However, critiques of cultural fundamentalism (Hill 2014) point to the reification of culture and ethnicity as bounded and static entities (Hogberg 2016).

The relational approach that links culture, language and place in the *Gàidhealtachd* explicitly rejects essentialism (Oliver and Mackinnon 2021). The political arguments of those that advocate more investment in Gaelic as a community language in the Highlands, is also arguably not against a networked language at a national level, but against the continued marginalisation and exclusion of communities in remote areas of Scotland. Taken at a local perspective, there is no desire for certain people to be excluded from the language and culture, indeed I found the very opposite in Coinneach's view. He described the importance of bringing new people into Gaelic culture and language and felt Wester Ross communities have missed opportunities for acculturation; 'welcoming outsiders in and making outsiders insiders' through the sharing of culture.

In the absence of acculturation, he felt local spaces, such as community councils can become 'colonised' because 'all of a sudden, the local voices are displaced'. Focusing efforts on Gaelic as a networked Scottish language and on institutional requirements (e.g. language plans) neglects the support rural communities need to create to spaces locally where Gaelic can be heard in decision making and where legacies of the past can be replaced by positive cultural experiences with Gaelic. The challenges here are akin to dealing with 'difficult heritage' which embodies pasts that are recognised as meaningful, but 'unsettling and awkward' invoking 'entanglements between identity and memory, and past, present and future' (Macdonald 2009, p. 1).

In the context of colonisation and marginalisation, there is trauma embedded in Gaelic heritage, which is implicitly and explicitly passed down through generations. Coinneach spoke of the 'brutal' experience his father had, and the sense that 'he didn't feel it was safe to teach it to us'. Now in a care home, his father has never self-identified as a fluent native speaker on any census, and such trauma is 'communicated', 'sent down the pipeline and placed on the shoulders of a young person'. Moreover, the centrality of narratives of loss and displacement are a major

theme in Gaelic culture and heritage, including sorrowful music and poetry, meaning people can ‘get mired’ in a sense of grief. Alongside difficult heritage, this is part of how the oppression of Gaelic exists as ‘social memory’ or ‘post-memory’ which is drawn from narratives that precede people’s birth; ‘a powerful thread running through people’s lives’ (Jones 2012, p. 354).

Keeping Gaelic Alive in the Biosphere

Working with change in this context, WRB’s remit to promote and conserve Gaelic cultural heritage involves negotiating narratives of loss, political dynamics and ‘identification’ involving boundary processes (see Jenkins 2008). WRB’s board has only a handful of Gaelic speakers and the language is not spoken operationally. However, there is broader interest in the language as ICH including language-based practices like storytelling which are at ‘special risk of being lost as knowledge of the language itself declines’ (McCleery and Bowers 2017, p. 194). Seumas, describing WRB’s approach to Gaelic in the biosphere said, ‘we’re fairly conscious of the importance of keeping Gaelic alive... but it’s not just Gaelic’. He cited the traditional aspects of culture and community including Shinty and music as important alongside shifting attitudes towards the language itself.

WRB currently has limited bi-lingual materials⁶¹ despite some conversations about having a Gaelic version of their business supporter logo, translated by director Uilleam. The lack of bi-lingual materials is partly about resource, but also reflects a sense that translation alone is tokenistic, particularly when considering the extent of decline and challenges in the community. Elisabeth said whilst it’s ‘nice to see’ things in Gaelic, it can be ‘lip service’, and for her it is more important to advance projects supporting the oral culture and history of Gaelic. She was hopeful that the story collecting project (see [Chapter 5](#)) would support such work.

⁶¹ Where translations have been done, these are not always straightforward. For example, WRB’s name can appear as Taobh Siar Rois, UNESCO Bheatha-Chruinne, or Ros an Iar can be used instead for Wester Ross, which denotes a subtle difference in place names which can be connected back to sense of place. Additionally, the word Bheatha-Chruinne does not translate literally into biosphere, which has no direct equivalent in Gaelic meaning that some speakers would be unfamiliar with the reference.

Returning to this project, Coinneach, at the public workshop talked of stories from his father's generation where in the context of feeling 'Gaelic was unwelcome' and 'would hold you back', individuals such as Kay Matheson made significant contributions to the community, including 'a renewed sense of cultural confidence', bringing people together in ceilidh and song. Recordings made by her are part of the Gaelic resources of Gairloch museum, there for 'future generations' to draw from. Whilst describing these as positive contributions, Coinneach felt survival of the culture should not be down to a few individuals. Another key figure locally is Roy Wentworth, who engaged in significant Gaelic work in the Gairloch area. However, not everyone engaged with him, and in essence the work 'died with him'. Coinneach's sense of Gaelic is that it should be a living culture and the everyday social fabric of life in Wester Ross, and not seen as a past relic or the object of a specific project.

Gaelic culture includes distinctive literary and musical traditions which are key mediums for transmission of culture and engagement with place. Coinneach sought to revive Gaelic cultural life in the biosphere, speaking during the pandemic about bringing back ceilidhs including 'in the sense of visiting, rather than dancing'. He described this as the most natural part of the Gaelic culture, which although known for the dance, 'is just a visit and a cup of tea'. He was keen to 'reclaim ceilidh' as an aspect of community but struggled to reconcile informal social relationships with formal funded projects. Informal house visiting with sharing of songs and stories is challenging to replicate in projects where older people tend not to engage. One idea he felt strongly about was asking younger people to record Gaelic songs and stories from older speakers, both to capture the material but to create local intergenerational relations; linking back to heritage-making processes as fostering connection (see [Chapter 5](#)).

However, projects are needed as mechanism to secure dedicated time and resources and conscious that WRB has no Gaelic Language Plan, Coinneach saw an opportunity to develop one through community consultation as a starting point for engagement. Given my interest in Gaelic for research, we co-organised a meeting on Gaelic in the Biosphere to discuss what work was already underway in Wester Ross. In attendance were Gaelic speaking WRB directors and key individuals from heritage centres and

museums in Wester Ross, including former director and cultural heritage WG chair, Jane of Gairloch Museum. Jane expressed support for WRB to develop a Gaelic Language Plan as the first step towards 'operationalising' activities around Gaelic. However, she also shared some of the implementation challenges from the Museum's Gaelic strategy. This included how those locally with most knowledge of the language and cultural heritage (and hence most able to help) were 'very seldom positive'. Moreover, they have struggled finding speakers for the board, and to complete paid work, once having to return unspent project funding to *Bòrd Na Gàidhlig*. The Museum previously had a 'Gaelic Champion', who I had interviewed the year prior. He had felt whilst Gaelic was recognised as an important part of heritage, many on the board did not want to actively use or promote it.

Jane also highlighted tensions around signage, following a move to a new building where the Gaelic name was not carried over for stylistic reasons. Criticism of the change had been difficult to deal with, and she reinforced that using Gaelic in the Museum, they have never sought to be fully bi-lingual and focus on using vernacular Gaelic in displays where it 'makes most sense'. For example, around crofting, bards and the social history of the area because this is more 'valuable and meaningful'. As a result of discussing the complex challenges of working with Gaelic in the community, Jane, among others, encouraged Coinneach to apply through WRB for a Gaelic Development Officer (GDO).

WRB actors agreed this would be a huge step forward, to have a GDO with time to engage with communities and find ways to move past tensions towards positive engagement. Coinneach saw this as a way to try and create intergenerational connection between two disparate Gaelic speaking groups in Wester Ross. Gaelic school leavers are a population with few opportunities to use the language beyond education settings and there is a 'dying population of native speakers' whose 'community has died around them'. He thought this essential, 'before the living historical memory dies', and to encourage younger generations to use and value the

language in everyday life.⁶² Elisabeth agreed, adding that the GDO could help break down barriers between ‘native speakers and learners’. She felt that no other language makes such a strong distinction between these categories, and in her view ‘*Is fheàrr Gàidhlig bhriste na Gàidhlig sa chiste*’ (it is better to have broken Gaelic, than dead Gaelic).

Gaelic in the Landscape

The proposal for a GDO, sent to *Bòrd Na Gàidhlig* had a strong theme of Gaelic in the landscape, building on WRB’s unique position as a UNESCO designation for connecting people and nature. The proposal referenced my work on biocultural heritage, which Coinneach had taken an interest in, and which highlights the broken link between culture and place (Poole 2018) in a context of rapid loss of biocultural diversity (Merçon et al. 2019). In the Scottish Highlands, this includes the ‘loss of local lore and communal knowledge’ since the 20th century due to the death of local speakers (Newton 2009). As noted by the Applecross Historical Society, this has also occurred in the last few decades, ‘many of those who were most intimately acquainted with the landscape have passed away taking their knowledge with them’.

Responses to this loss include placename collection activities carried out in Applecross (see Figure 35) and Torridon. WRB directors, have been keen to see this extended across the whole region. Gaelic placenames hold interest because of their relevance to understanding land use histories and practices, as well as local mythologies and interpretations of the land (Murray 2014). There is a high density of Gaelic place names as shown in Figure 35 because ‘every discernible feature... had a distinctive name to identify it’ (Newton 2009, n.p.).

⁶² The separation of these two groups and the overall ambivalence surrounding the use of Gaelic locally, is usually framed in a context where those from the area are less likely than those moving in to put their children through Gaelic Medium Education. The two groups thus have no familial connections, with the adults of the Gaelic speaking children not Gaelic speakers themselves.

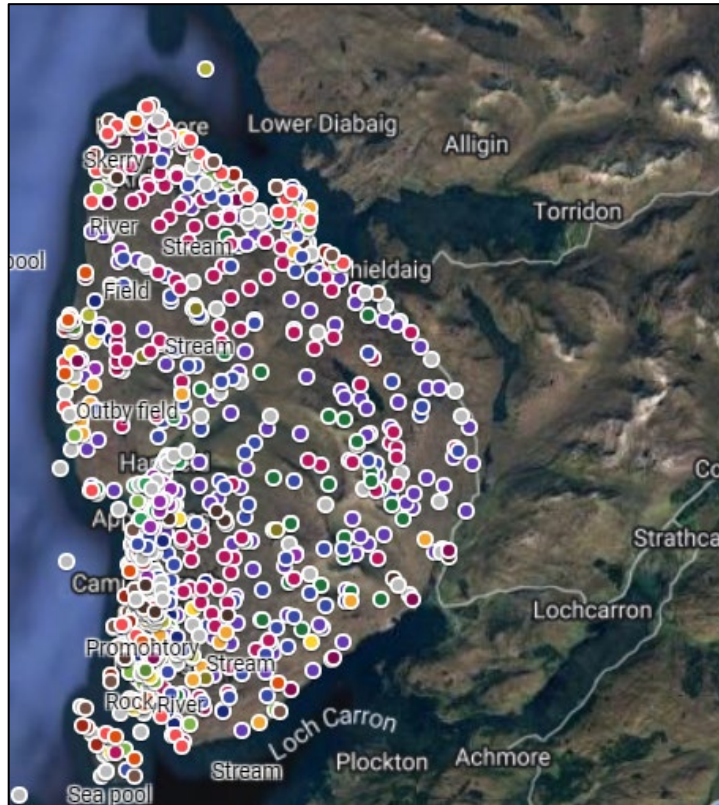


Figure 35 Gaelic Place Names Collected in Applecross © Applecross Placenames Project.

WRB director Seumas, uses placenames when teaching Gaelic locally, inspired by Roy Wentworth and has a three-layered typology. Names above 600m are largely shapes and colours, whereas between 300-600m they often record traditional community connectivity, e.g. paths, cattle movements and season activities such as lichen gathering and cloth dying, as well as topographical features associated with folklore. In Applecross, the *Bealach Na Ba* is a *Bealach*, which denotes a route for driving coach, horses or cattle. Finally, sea level to 300m reflects agricultural and other human activities and examples from Seumas' local area include *Taigh Mhic an Toisich*, a ceilidh place to tell spooky tales about the nearby standing stone *Clach nan Con-fionn*. Such names he said, are all 'part of the cultural heritage ignored by the dozens of hill walkers passing by most days.'

Collecting placenames is not just about recording the cultural heritage of the area but understanding a Gaelic cultural worldview, and even sustaining 'the values particular to a language and culture' (Poole 2018, p. 72). As Seumas explained:

It is great to record the names – but it's the meaning behind them that gives us a clue to the fragments of nearly lost heritage – the bones of dùthchas if you like... man's relationship with his landscape.

As discussed in Chapter 2, *dùthchas* is a concept that has generated significant interest ‘as a cultural, ethical and reciprocal relationship with place’ (McFadyen and Sandilands 2021, p. 173). It is considered part of the traditional ecological knowledge of the communities in the *Gàidhealtachd* (Ní Mhathúna 2021). Coinneach, speaking of Gaelic in the landscape during interview, conveyed the relationality invoked by *dùthchas*. He expressed that:

within landscape, Gaelic is a mode of communication... our response to the landscape, and the way we speak about Gaelic being a dialogue with the individual... it's a medium for the landscape speaking back to us, and us listening.

This relationality is part of a broader bidirectionality between humans and the natural world in Gaelic culture (Newton 2009). When Anndra spoke about Gaelic language, he described it being full of metaphor and layers of meaning, which offer an alternative way of thinking and seeing the world. Gaelic language can therefore add new ontological and epistemological layers to sense of place in Wester Ross and WRB actors place-making practices. However, such ontologies and epistemologies are not on steady footing, either within the region or the BR organisation. This is unsurprising given how processes over time negate the reality of the *Gàidheal* creating conditions of ontological vulnerability (Mackinnon et al. 2018).

The GDO post is a starting point for WRB actors to find ways to highlight and safeguard Gaelic ontologies in Wester Ross which are another example of ICH, or BCH that fall through the policy cracks in Scotland (see [Chapter 5](#)). Due to start in late 2022, activities outlined for the post included project work contributing to the biosphere remit to integrate local knowledge with other kinds of scientific conservation agendas, which can be very challenging in practice (Hockings et al. 2020). The activities are based on possibilities for partnership working with NatureScot associated with a commissioned report on Gaelic and Ecosystem Services (MacLean 2021). However, most of the report recommendations are about research, whilst most of the activities WRB actors wish to pursue are forms of heritage and future-making in practice with communities.

The report could be interpreted as a form of ‘grafting’ that in indigenous contexts, describes how cultural concepts are drawn into non-indigenous knowledge

frameworks (Ahenakew 2019). Ecosystem services is a western scientific framework that embodies the neoliberal discourse of nature as service provider, and shores up technocratic forms of environmental management that promote conservation in and through capitalism (Adams et al. 2014).⁶³ In the report, Gaelic language and knowledge is mapped against ecosystem services with few implications for Gaelic communities' involvement in conservation practice. NatureScot then use this report to evidence national and international conservation commitments, for example Aichi target 18 'traditional knowledge is respected and integrated'. This can be seen as a kind of 'transactional reality', a way of 'organising different realities' within a governmental rationality produced through 'distinct collecting and ordering practices' (Harrison, Breithoff and Penrose 2020, p. 57). For heritage, this is about assumptions made on how it should be managed (ibid) and similarly here, there is an assumption that Gaelic can become part of dominant rationalities of nature conservation policy without any changes being made to practice.

For comparison, Bolivia's reporting on target 18 on traditional knowledge, includes support for conserving biodiversity through 'integrated community-based management by indigenous peoples, campesino communities and small-scale producers'.⁶⁴ This demonstrates an assumption that communities and their cosmologies should play a role in the practices of conservation. Hence, beyond citing *knowledge of* traditional knowledge, such knowledge is given ontological power in conservation governance and more broadly, indigenous concepts of 'living well' have been enshrined in the Bolivian constitution.

As Ní Mhathúna (2021) has shown in Scotland, communities in the *Gàidhealtachd* have little power to shape conservation policy and practices nor are their cultural concepts

⁶³ Ecosystem services features in the Lima Action Plan for Biosphere Reserves (Bridgewater and Babin 2017) and frameworks are increasingly being applied to BRs in research (see Hugel et al. 2020; Müller et al. 2019; Negev et al. 2019; Palliwoda et al. 2021; Viirret et al. 2019). However, these fail to engage with the problematic 'neoliberalisation of nature' (see Apostolopoulou et al. 2014; Brockington et al. 2008) and critiques point to payments for ecosystem services as commodity fetishism (see Brockington 2011; Kosoy and Corbera 2009).

⁶⁴ <https://www.cbd.int/aichi-targets/target/18>

and worldviews part of national political frameworks. In such a context, it is important for WRB actors working on Gaelic futures to construct a 'third cultural space' where Gaelic knowledge systems are not displaced (Hockings et al. 2020). Moreover, although WRB has a research function, implementing this should avoid reproducing a research-practice gap and there should be benefits for communities. I will briefly suggest how this might work for two of Maclean's (2021) recommendations.

One recommendation is for research on the role Gaelic language and culture (and associated relationships to landscapes) have in 'promoting self-esteem, health and wellbeing' (ibid, p. 40). This could be carried out by WRB actors as participatory research with activities for community wellbeing. The Aultbea Stories project in Wester Ross is an example which although not focused on Gaelic, uses nature connection for local wellbeing and a research agenda. WRB are loosely affiliated in this project, and Coinneach delivered a Gaelic in the crofting landscape workshop. Learning from such work would be valuable, as would incorporating work on how crofting produces 'spaces of wellbeing' (Russell et al. 2021). Alongside scope to foster connections between Gaelic, landscape, and wellbeing through crofting, BCHTs and BCH as a community-led approach to creating 'holistic wellbeing' for people and nature (Swiderska and Argumedo 2017) could be sources of effective practices internationally and in the UK (see Russell 2021b).

Another recommendation is for research of the 'historical reaction' of Gaels to forest loss, as a way to inform rewilding debates and 'build bridges between the 'traditional' Gaelic community and the 'non-Gaelic speaking supporters of rewilding' (Maclean's 2021, p. 59). Given WRB actors desire to 'enter' the rewilding debate, using the BR remit for co-creation and participatory research (see Onaindia et al. 2013; Onaindia et al. 2020) would be a way to get started in this contentious domain. A recent WRB webinar, 'Manging Change in Our Land and Seas' identified the importance and loss of folklore and cultural traditions of forests and woodlands, including practices such as foraging and dyeing and woodland pasture.

Work on this could strengthen existing knowledges, including how the significance of forests in the Gaelic tradition bears scant relation to present Highland landscapes (Newton 2017). Moreover, although there are many values associated with forests,

including cultural importance as BCH and for communities' sense of belonging, Edwards et al. (2016) found management is predominantly based on biodiversity conservation. Hence, there is potential for WRB actors to pursue a more nuanced approach to rewilding debates alongside BCH revival with communities.

Place-Based Future-Making? Across the Crofting-Gaelic Divide

In previous work I identified the use of *dùthchas* as an alternative ontology in the discourse of crofting organisations responding to 'wild land' conservation agendas (Russell 2021a). However, in my ethnographic research in Wester Ross opportunities to connect crofting and Gaelic were scant. WRB is rather unique as an organisation operating at a significant spatial scale with a remit to conserve and promote both crofting and Gaelic. Whilst WRB actors and literatures reinforce the importance of both to the region, there were no sustained efforts to work with change to address contemporary unsustainability, colonial legacies of loss and marginalisation, and engage in place-based future-making across both domains.

Speaking of the divide between crofting and Gaelic, Coinneach said 'the death of Gaelic and the death of Crofting' was a bridge he failed to connect for 30 years. However today, he felt the two are in a relationship of 'mutual aid', and 'need each other', which makes it a problem that they currently bear no relationship in policy and legislation. In Scotland, crofting is largely an agricultural land issue, whilst Gaelic is a cultural and linguistic issue. This is one of the major challenges to pursuing as Harrison (2015) suggests, connections between heritage and broader social, political and environmental issues. Although crofting and Gaelic, just like natural and cultural heritage broadly may be threatened by similar forces (Lowenthal 2004), efforts around conservation are separated in policy and practice by a nature-culture divide (Konsa 2016).

When the SCF put out a call for topics for CPGC meetings, I asked about the subject of Gaelic. The response I received was that it is best not to make 'too strong a connection' between Gaelic and crofting, because many crofters are not from Gaelic heritage. MacKinnon's (2008) paper for SCF had previously framed crofters as indigenous people, with Gaelic cultural heritage and language a key component of this identity. SCF's

response noted whilst crofting and cultural heritage is acceptable, what political purpose for the lobbying group would this serve? A Crofting Commission representative suggested if I was interested in Gaelic, I should speak to *Bòrd Na Gàidhlig*, reinforcing the policy divide of separate organisational remits. These views among policymakers and national stakeholders are part of a governance context that ill serves arguments for cultural revitalisation, landscape imaginaries and regional futures in the *Gàidhealtachd* (see Camshron 2021; MacFayden and Sandilands 2021). As Camshron (2021, p. 244) explains ‘future-making’ is about ‘new imaginaries with Gaelic in a prominent place alongside the region’s other cultural and natural assets, informing lifestyle patterns, local decision-making, land management and ethical economic development.’

Conclusion

Narratives of loss and endangerment frame both crofting and Gaelic as objects for conservation moving from past, into present and thinking towards the future. The imperative of working with change necessitates considering how to move beyond the current unsustainability of crofting, and the politics of Gaelic revival, both of which have specific local and regional manifestations within a broader national context. This has been challenging for WRB actors and despite recognition of the importance of crofting and Gaelic for life in Wester Ross, local and regional efforts geared towards promotion and conservation have been somewhat elusive.

Actors involved in the promotion and conservation of Gaelic and crofting often look to a national scale of reference, and the power of the state and its agencies to create more sustainable futures. However, in these settings, Gaelic and crofting exist in separate policy domains which is a barrier to place-based heritage-making and future-making. Moreover, as will be explored in more depth in the next chapter, governance, is a multiscale activity from local to global and as Ostrom (2012) argues a polycentric approach that moves beyond focus on the national is required to address collective action problems.

WRB actors have begun addressing the collective action problems associated with Gaelic by securing funding for a Gaelic Development Officer. Work carried out by this

officer focusing on communities, heritage, and landscape in the biosphere, could open up new space to work with change and complexity in practice. Supporting the conclusions in Chapter 5, efforts to respond to loss, are unlikely to be about reversal, and returning to the past, but future-oriented and recognising present conditions of complexity as shaped by the past. However, unlike Gaelic, solutions to address the decline of crofting seem more elusive for WRB actors.

The extent of decline and unsustainability of crofting and Gaelic suggest that a regenerative approach (which applies across social, environmental, economic, and cultural domains) could be useful, as Moreno-Ramos and Müller (2020) have argued for other BRs. Additionally, WRB actors, Coinneach in particular, have shown an interest in applying the BCH model. As a holistic framework, BCH could be used to better articulate the relations between communities, heritage and landscapes, connecting crofting and Gaelic within place-based imaginaries for the future. WRB actors could work to develop more horizontal relations with local and regional stakeholders, adopting a prefigurative approach within the confines of current national frameworks. I would argue this is vital for crofting in particular, given the lack of action among national stakeholders on the most pressing challenges discussed in this chapter.

Alongside Chapters 4 and 5, this chapter has focused on what BR designation means for communities, heritage and sustainability in Wester Ross and unpacked how WRB actors negotiate and contest different aspects of nature-culture relations in discourse and practice. The next two chapters move on to the influence of scale, governance, and land ownership.

Chapter 7: The Politics of Scale: A Myriad of Spatialities

In much heritage research, scale has been treated as a 'setting' and a 'hierarchy of spatial scales' is often reproduced, with the nation holding most significance (Harvey 2015, p. 579). Harvey (2015, p. 580) argues that more attention must be given to 'what scale does' part of (re)theorising the politics of scale. I follow this logic applying a relational approach to understanding the complex, myriad spatialities of Wester Ross Biosphere. Scalar relations are central to 'meaning-making' and scale cannot be treated as 'static' or 'neutral' (Harvey and Mozaffari 2019, p. viiii). A critical approach to scale as performative and constructive offers insights into 'power hierarchies' and recognises that 'scalarly structured entities and their relationships are interconnected and constantly transforming' (Lähdesmäki et al. 2019, p. 3).

Such thinking accommodates the post-modern view of the 'throwntogetherness' of places; a changing 'constellation of trajectories' (Massey 2005a, p. 151) invoking fluidity, multiplicity, relationality and horizontality. However, I agree with Cox (2013) that we must not lose sight of the difference capitalism makes and how states and capital can both centralise and territorialise and de-centre and de-territorialise. Both are part of the complexity needed to understand how the BR as a multi-scalar governance model is situated in the 'messy middle' (Wilkes 2022), both shaping and shaped by negotiations of power relations and the development and construction of territories within neoliberal capitalism.

I begin with how a BR can cultivate a sense of place which is conscious of links with the wider world (Massey 2005b). I situate WRB within a multi-scalar context, as a locally and regionally implemented international designation operating in a specific national context. This highlights the local-global nexus for WRB actors within the World Network of Biosphere Reserves (WNBR) including interactions with other BRs. I move on to examine what scale does in development and conservation and for relations between WRB and key stakeholders. Finally, I consider moving towards scalar flexibility, unpacking what this means for navigating the complexity of 'multiple, intersecting social, political, and economic relations, giving rise to a myriad of spatialities' (Hubbard and Kitchen 2011, p. 7).

Think Global, Act Local

'The global' in the UNESCO MAB Programme is underpinned by the idea of BRs as constituting a 'kind of planetary concern' (Posocco 2008, p. 213). As outlined by UNESCO (2021a):

Our vision is a world where people are conscious of their common future and interaction with our planet, and act collectively and responsibly to build thriving societies in harmony within the biosphere.

Conceptually, Posocco (2008, p. 213) argues MAB illustrates an imaginary of 'cosmopolitan environmentalism' based on ideas of 'interconnection' and 'interdependence' within the World Network of Biosphere Reserves (WNBR). It is argued that BRs can strengthen and recover a sense of 'spirituality' through connections between people and nature and awareness that 'we are part of a planetary citizenship and a community of life' (Moreno-Ramos and Müller 2020, p. 265). However, other global designations have been criticised where universalising discourses are disconnected from the lives of locals whose worlds are defined as 'world heritage' and appropriated as a form of collective global ownership (MacRae 2017).⁶⁵

This connects to the process of 'downscaling', which captures how hierarchical power structures give agency to transfer values from international through national to local levels (Zhu 2019). In heritage-making, local heritage actors are influenced by discourses produced at higher scales of power, implementing these processes in practice (Lähdesmäki et al. 2019, p. 6). This is relevant to BRs which should 'translate high-level goals and multi-lateral environmental agreements' into practice through local organisations in each region (Reed and Price 2020a, p. 2). Staff within BRs report 'integrating local and international priorities in their programmes of work' including using MAB guiding documents actively (Matar and Anthony 2020, p. 142). The LIMA Action Plan (2016-2025) and the Roadmap for Biospheres (2015-2025) are key guiding documents, and part of MAB's discourses of governance. Fiske (2022) shows although

⁶⁵ See also Cocks et al. (2018) and Winter (2013; 2014) on notions of local and universal values in heritage contexts.

MAB governance is increasingly influenced by Anthropocene narratives, sustainable development and the SDGs remain most prominent.

Phoebe, WRB's co-ordinator, on the subject of operationalising global and national, agendas said:

I only focus on local stuff really. I occasionally look at where we're at with the national strategy which obviously has been kind of watered down from the overall MAB strategy, the LIMA Action Plan... It's just too much. I just can't go referring to that, I've got 20 hours in a week. So, I just say, this is what I can do.

Although not actively working with, or drawing from these internationally focused documents, Phoebe emphasises the SDGs at the forefront of implementing a global agenda in local and regional practice, in a Scottish context where SDGs are also aligned to the government's National Performance Framework. In conference presentations with Highlands and national stakeholders, Phoebe explains why and how WRB translate the SDGs into practice which has included developing a trail across the biosphere (see Figure 36).



Figure 36 Phoebe Presenting on SDGs - Upland Management in Scotland Conference

Trail posts mark activities embodying specific SDGs, such as Goal 4 Quality Education in Gairloch where pupils made a climate change graph (see Figure 37). Goal 7 Affordable and Clean Energy is sited at BroomPower Hydro, a community-owned scheme including plans to create new woodland crofts and Goal 8 Decent Work and Economic Growth is sited at Gairloch's GALE centre, a community-owned enterprise providing local, year-round employment. Not all SDGs are featured on the trail (1, 2, 5, 9, 10, 14,

16 and 17 are missing) and some are repeated, such as Goal 15 Life on Land which occurs in four different areas.



Figure 37 Posts for SDGs 4, 7 and 8

The SDGs are a positive way for WRB to translate a global change agenda into local everyday life and raise awareness of sustainable development regionally. In some respects, the SDGs as a response to sustainability challenges of the Anthropocene, are one mechanism to create what Sterling and Harrison (2020, p. 24) describe as new kinds of ‘collective planetary rethinking’. However, the SDGs embody, and thus WRB actors reproduce, some problematic ‘authorised’ discourses, particularly SDG 8 which advocates economic growth. Action based on ‘endless growth and progress in neoliberal terms is liable to result in even greater environmental degradation’ (ibid, p. 24). Moreover, the SDGs fail to capture the ‘need to protect local ecological knowledge or cultural heritage’ and ‘the interrelation of cultural and biological diversity as a pathway to sustainability’ (Poole 2018, p. 65). Given the importance of this for Wester Ross and WRB actors (as discussed in previous chapters), the SDGs are insufficient in their current form and a new goal on BCH would help to address this (ibid).

WRB’s translation of the SDGs highlights an example of how actors on ‘below’ scales, can (re)interpret the ‘upper scale heritage discourses from their own point of view and thus influence the form in which it is disseminated and transferred into heritage practices’ (Lähdesmäki et al. 2019, p. 11). Hence, part of tailoring UNESCO discourses through the local-regional point of view into practice could be finding space to engage

with more ‘marginalized, alternative and experimental ways of inhabiting the Earth’ (Sterling and Harrison 2020, p. 25), such as the Gaelic ontologies in Chapter 6. Moreover, MAB’s discourse of planetary consciousness could be interpreted radically as an opportunity for world-making beyond capitalism, as envisioned by anarchist thinkers on nature-culture relations. Reclus’ work on ‘planetary consciousness’ in the 1800s posited the importance of ‘unity-in-diversity’ and put forward a view of ‘global humanity, embedded in nature, yet undertaking an open-ended and creative project of liberatory self-realization’ (Clark 2016, p. 4). Reclus’ universalism suggests possibilities for futures based on social and ecological regeneration and ‘an end to the domination of humanity and of all other beings on the planet’ (ibid, p. 100).

As Peters (2015, p. 143) suggests, in terms of alternative conceptualisations of sustainable development, universalisms are ‘actively produced’ and ‘struggled over’. The active production of a sense of universal, shared humanity emerged in WRB actors’ negotiations of their identity as a UNESCO designation in the WNBR. With struggles to communicate WRB identity on Facebook (see [Chapter 5](#)), Phoebe prompted board discussion on the subject of generating a clear message relevant to Wester Ross, similar to UNESCO’s strapline of ‘connecting people and nature today to inspire a positive future’. Her main concern was sharing things ‘directly linked to Wester Ross Biosphere’ to avoid brand dilution. Whilst not suggesting distancing from UNESCO, Alan, WRB’s US director, interpreted her comments as such, arguing that ‘we are representatives of the international... why wouldn’t we try to broaden our perspective so that we think globally while we’re acting locally?’

This created a discussion amongst the board conveying a struggle over WRB’s identity as a community-led, regional designation that is inward facing, and a UNESCO designation that is more outward facing as part of a global programme. Alan, speaking at length on the latter position, explained his perspective that:

Wester Ross Biosphere is one area within Scotland and within the world, that can offer a local perspective on things, but I’m concerned that we might also consider aligning ourselves with a broader perspective on environmental responsibility. [...] why should we restrict ourselves to the geographic borders, which are more or less artificial lines which have been drawn by somebody else where we can potentially have an influence beyond those borders and show people what a biosphere is?

Similarly, Robert, a Highland Councillor felt that ‘we’ve got a responsibility’ to the wider world because ‘it’s our mess... that we’re trying to clear up’. He suggests that WRB should not be focusing only on ‘clearing our own place up’ given the environmental destruction happening elsewhere. He gave India as an example, conveying the responsibility of the global north, given export of its industries to the global south. He argued WRB has a ‘bigger thing to think about’ and should not ‘isolate’ in a ‘green bubble’, but also that ‘one line’ is unlikely to apply across the whole of Wester Ross, because the biosphere needs to bring everybody in. Alan and Robert’s commentary, invokes a cosmopolitanism that rejects a local-global binary, where local contexts are isolated and disconnected from larger processes (Meskell 2009; 2016). It also situates WRB within a broader context of responsibility for global environmental problems and ideas of solidarity.

According to Peters (2015, p. 143) universalisms embody ‘transformative potential and productive force’ in relation to the concept of solidarity. He argues from a cultural heritage perspective solidarity is important to alternative conceptualisations of sustainable development; part of ‘struggling for alternative, more sustainable economic, social, environmental, spatial relations [and] an act of ‘world-making’, with alternatives always part of the present (ibid, pp. 143-144). Alongside emerging from WRB actors, participation in the WNBR can act as a space for such solidarities to manifest.

Solidarity and Inequality in The World Network of Biospheres Reserves

A key feature of BRs is knowledge sharing within the WNBR which is described as a ‘vibrant network’ where global learning takes place about locally applied practices (Reed and Price 2020b, p. 323). BRs individually are characterised as sites to build solidarities (Mathevet and Cibien 2020) and arguably this extends to the WNBR. Relations of solidarity are cultivated based on feelings of ‘mutual identification’, reciprocity and are without compulsion involving non-hierarchical power and resource sharing (Gordon 2010, p. 64). Elements of this align well with my observations of how WRB actors worked with other BRs.

With Galloway and Southern Ayrshire (GSA) for example, Phoebe gained ‘invaluable’

resources from actors there about their business supporter scheme, which could be adapted for Wester Ross saving her significant time and resources. Close relationships have also been cultivated with BRs in regional networks in Europe and beyond. For Elisabeth, the most meaningful relationships are often with BRs facing similar challenges to Wester Ross, such as in Norway and Iceland, compared with English BRs. Such connections are enabled through NordMAB, a regional network within the WNBR, and WRB have partnered with, and learned from actors in this network on issues related to having; large expanses of land, difficult climates, young people leaving sparsely populated regions and tourism management.

A Canadian BR has also worked closely with WRB actors, visiting Wester Ross in 2019 and 2022 for knowledge exchange workshops on the BR as social enterprise.⁶⁶ Phoebe has cultivated a close relationship with the manager Pierre, who has invested time sharing extensive details on his and the BR's ethos, governance structure and community/industry relationships for WRB actors. BRs adapt to local and regional circumstances whilst fulfilling the UNESCO mandate and Pierre explained the value of doing this with an 'entrepreneurial mindset'. WRB actors have engaged in serious reflection on how to apply such a model and applied for funding to help support the process.

WRB actors felt in particular that a social enterprise model would increase autonomy and address the challenge of organisational sustainability in the absence of regular core funding. Pierre explained how this worked in practice in Canada including how they work beyond the biosphere boundaries as essential to the generation of income from a variety of sources. However importantly, this is invested back into the biosphere region. Working beyond Wester Ross did not appeal to some, which Pierre said is a common response. However, he explained BRs are not about governing a 'territory' but running 'regional development office' and this requires a hybrid funding model.

⁶⁶ A detailed outline of this model is included in George and Reed (2016).

Reflecting on the 2022 ‘international gathering’ as Alan described it at the subsequent WRB board meeting, he suggested it was ‘invaluable’, but also drew attention to key differences between the Canadian BR and WRB. Specifically, he felt WRB are a more ‘bottom-up’ organisation and must listen to and act as a voice for the community, compared with the Canadian organisation which could be described as more hierarchical and even ‘top-down’. Norman agreed that WRB are different as one of few BRs that are ‘bottom-up’ in their approach to governance. However, he saw value in learning about the Canadian experience, and identified their operationalisation of UNESCO BR principles into ‘checkpoints’ to guide social enterprise work as a useful approach that could be adapted for their own work in Wester Ross.

The kinds of relations of solidarity that can be cultivated between biospheres appeals to the idea of unity-in-diversity. The Wester Ross-Canada relationship demonstrates how difference is not a source of conflict, but a cosmopolitan engagement with the Other, invoking ‘openness towards divergent cultural experiences’ (Hannerz 1990, p. 239).⁶⁷ Knowledge exchange and learning within the WNBR in this sense is not about sharing how best to operationalise a one-size-fits-all universal MAB logic, but to inspire locally and regionally appropriate innovations and solutions whilst building mutually beneficial relationships under a shared ethos. Such productive relations are also possible through national partnerships as reported for Canadian BRs (see Reed et al. 2014). Coinneach, describing opportunities to engage with other European BRs through a cultural heritage and sustainability project, reinforced the importance of this in a pandemic context where WRB has been ‘forced to be very inward looking and very community-based’. He was excited by the chance to be more ‘international in our outlook’ including ‘to share and support across national boundaries.’

Whilst the WNBR offers opportunities to build solidarities across regions and countries, it also magnifies resource inequalities. Although BRs generally are under resourced,

⁶⁷ This should be viewed as degrees of otherness, and WRB actors often work with partners who face similar challenges. Otherness is more than geographic, including views of sustainability and governance models. Many possible connections can be made within the WNBR, and WRB are in networks which are place-based e.g., UKMAB, NORDMAB/EUROMAB, or thematic e.g., mountains. Deciding who to connect with is a strategic choice, to advance specific aims.

the challenge is more significant for some, partly related to governance arrangements.⁶⁸ For example, the Isle of Man Biosphere is run from within the Manx Government's Department for Environment Food and Agriculture as an 'entire nation' biosphere. For Phoebe, WRB can be like 'the little hick brother' in the WNBR:

It can be depressing sometimes going to national and international UNESCO meetings because it feels like we haven't done anything. And everyone looks at us cross-eyed when we say we operate on a budget of like £15,000 a year. So that's hard, it's hard feeling. I've learned to not have that mindset anymore and say, but look at what we've done, this is really little to you guys, but you might have a national government behind you, you might have a whole department behind you.

WRB's community-led model and lack of national and local government support, makes it one of the less well-resourced BRs. However, as Phoebe suggests, she has come to see this as an opportunity to work differently. Of working outside government, she said, 'it's awesome... because we can do whatever we want'. WRB actors can think beyond traditional policy silos, are not bound to short-term thinking around election cycles and thus can embrace uncertainty associated with the long-term future (see May and Holtorf 2020).

Resource inequalities between Scotland's two biospheres became increasingly prominent throughout the research and a source of frustration for some in WRB. GSA were awarded £1.9m investment by South Scotland Enterprise (SSE), a public regional development body. The funds were unrestricted allowing GSA to allocate money for core costs to deliver strategic aims and employ more staff. Whilst supportive of the success of their Scottish neighbour, WRB directors questioned the legitimacy of this geographically differentiated economic disparity. As Elisabeth said:

We would like to hope that if Galloway and South Ayrshire, are getting this much money, what's so different down there, that's not up here? I mean I do know deep down, it's all to do with, they feel that, well it's all political. And they're feeling that, they could do with putting some more investment down there, and this is one way of doing it.

⁶⁸ The UNESCO MAB strategy suggests states should integrate BRs into national and regional planning and development, as well as sectoral policies, legislation, and programmes supporting the effective governance of each BR. This has largely not occurred in the UK. Core funding for all UK BRs (excluding the Isle of Man as a crown dependency) is subject to the prioritisation of local government (Price 2020).

'They' refers to the Scottish Government, who for Elisabeth are a major 'stumbling block' for WRB. Regarding GSA's funding, she and others discussed how the Scottish Government have been politically focused on South Scotland investments. Reflecting on GSA's success it was also felt by Elisabeth and Norman in particular, that they had been more actively engaging with national politicians than WRB. However, GSA's governance structure also comprises a partnership with multiple local authorities, meaning significant local government buy-in. In contrast, WRB has a loose relationship with the Highland Council which contributes no financial resource. The disparity that Norman felt was most problematic was between the two regional development agencies SSE and Highlands and Islands Enterprise (HIE), which are equivalent, thus should HIE not be similarly investing in WRB?

In a sense, this is an issue of 'spatial justice' which denotes how justice and injustice manifest in 'different spaces and across different scales' (Jones 2019, p. 12). Jones et al. (2020, p.894) suggest that moving towards 'regional spatial justice' is about 'enabling regions to assert their own capacity to act and pursue positive visions of regional futures'. GSA have been resourced through their partnership model to pursue regional futures, whilst WRB, through their community-led model, are not. The next section adds context to this through an analysis of the scalar configurations associated with how territories are made and governed for regional sustainable development.

Enacting Regional Sustainable Development

From the Victorian period, through industrialisation and modernisation, the Highlands and Islands were constructed as a 'problem' region with lack of 'progress' and 'civilisation' largely blamed on Gaels and their way of life (Devine 1994). As McCulloch (2018, p. 433) describes, 'the "Highland Problem" rested on the assumption that there was something inherently wrong with the people and the area'. The 'problem' persisted until the 1960s with political debates centring around how to increase 'modernisation' and 'integrate the region, economically and socially, into the rest of Scottish society' (Burnett 2011, p. 104). The historic construction of the Highlands as a problem region was thus bound up in broader social, political and economic relations with the rest of Scotland and the UK, shaped by global processes of capitalist development.

Key issues included depopulation and a lack of employment opportunities, while suggestions for new developments had to be balanced around maintaining the Highland way of life and Gaelic culture (ibid). As previous chapters have indicated, similar challenges remain, set within a new context of sustainable development and responses to global crises. In the 1960s, the Highlands and Islands Development Board (HIDB) was set up to improve social and economic conditions and enable the region to play its part in the development of the national economy (Danson and Lloyd 1991). HIDB was replaced by HIE, a key stakeholder for WRB in terms of regional sustainable development.

Negotiating Territories of and for Sustainable Development

Throughout my observations of WRB meetings, it was evident that capacity to enact sustainable development was shaped by the extent of funding from HIE as the regional economic and social development body for the area. Support from HIE was described as challenging. Phoebe explained that they were 'on board' in the beginning but then 'just fell off the face of the earth and didn't want to talk to us, didn't want to know.' Elisabeth felt that within HIE perceptions of the biosphere were not always favourable. When Norman spoke of an upcoming meeting with HIE representatives, Elisabeth forewarned of an individual who 'has not been a fan of Wester Ross... he doesn't really see it as an entity'. She felt that his predecessor was more responsive and although he was not 'against the biosphere... he didn't see Wester Ross a significant area to him'.

HIE divide the Highlands and Islands into specific territories and Wester Ross is part of a larger area with Skye and Lochaber. There is a sense of scale misalignment here with WRB actors seeking support to operate regionally at a scale not recognised as territorially significant. As Norman suggested at a Sustainable Development WG meeting:

For our area, one of the problems we have is that we don't actually have a development plan for the area, whether it be sustainable or otherwise. HIE don't have an intention of creating one for Wester Ross. They're looking at it on a bigger area basis I think, and as usual Wester Ross will probably end up being the poor cousin to places like Skye.

Norman has been pushing for a sustainable development plan for the biosphere as a way to create a regional strategic approach based on local community priorities.

Rather than acting as an institutional mechanism in the planning system this is about 'how you develop the area sustainably' and a mechanism for cross-sectoral working, bringing together interests which are often in conflict. Discussing this with the board he said, 'you've got the environmental people as well as the development-focused people, industrial people...' and he felt that it was important to work to 'bring them together and try to develop some sort of consensus.' His description somewhat mirrored Shucksmith's (2010, p. 12) outline of processes needed for 'disintegrated rural development' by which local actors are mobilised by the state 'to develop strategic agendas' in a diffuse power context where strategies are 'multiple, non-linear, complex and continually emergent rather than conforming to a rigid development plan.'

A breakthrough for WRB was securing HIE funding for tourism management and in this context, HIE recognised the benefits of collaborative working to overcome stakeholder conflict. A similar approach could be applied to sustainable development, to work across the major industries which are contributing to unsustainability (see [Chapter 5](#)). However, Norman said a bottom-up approach at this scale is 'not the way most things are being done these days unfortunately', characterising development planning as either 'very localised to individual communities to take responsibility and develop ideas themselves or it's done strategically at a much higher level'. This symbolises the lack of horizontal and vertical integration essential to multi-scalar governance and community empowerment (ibid). Moreover, Robert's perception that HIE 'have no done that much for Wester Ross', is connected with the fact that at higher levels in Scotland, 'economic development support has been focused on larger businesses in more populated areas' (ibid, p. 10) rather than more peripheral ones.

Discussing HIE with individuals outwith WRB also highlighted criticisms of their approach to local and regional development. Rhona, a director of a local development trust, was critical of the logic of investing in individuals' small businesses, arguing this does not create sustainable, resilient communities over the long-term. She gave examples of individuals receiving HIE funding to purchase assets which they later sold off for profit, which has little community benefit. She proposed HIE should focus on funding activities which benefit the entire community. Lisa, an estate owner, felt

'there's nothing very grassroots' about HIE as a development body and their approach is lacking 'localised rural development' because Wester Ross is 'lumped in with Skye' which is a 'different scene to ourselves'.

WRB director Seumas, during interview argued that in recent years HIE's attitudes to community development have changed. He said development officers of community organisations were being encouraged to 'earn your own money, and not to rely on HIE as a source of funding', which is a dramatic shift from attitudes previously that 'HIE get money from central government, let's have our chunk of it.' As MacKinnon (2001) suggests, local and regional enterprise organisations such as HIE are sites of regulation used by central government to transmit a neoliberal economic agenda to communities. The shifting attitudes of HIE towards encouraging communities to generate their own income sources beyond grants reflects the broader shift away from 'state intervention' and 'welfarism' to a more select and indirect emphasis on neoliberal policies of 'governing through community' (MacKinnon 2002, p. 307).

Making communities responsible for the future of their locality (see Zebrowski and Sage 2016) constructs the state as 'enabler' rather than 'provider' (Elvidge 2014), reflecting how community-led development has gone hand in hand with the reduction of public expenditure (Markantoni et al. 2019). This explains why community development is often framed in ways which reinforce the needs and interests of the state (Cockburn 1977) embedded in growth-oriented development narratives at broader scales. Problematically, development models also focus on the internal and local community context, rather than wider economic, political, and social decisions beyond communities, which creates 'contextual myopia' (DeFilipis et al. 2010, p. 111). Hence, the idea of 'think globally, act locally' can be disempowering, discouraging action beyond the local level (ibid) in contrast with effective social and economic development that involves structural change (Stettner 1980).

This state-market-community dynamic helps to contextualise discussions from Chapter 4 on the biosphere as a lens for place-making. Returning to the tourism conference discussed therein, WRB's former youth ambassador who attended the event, reflected during interview on the dominance of neoliberal growth narratives and how these were normalised and left unchallenged. She felt development language in particular

reproduces problematic notions of growth, compared with alternatives for prosperity and wellbeing. The narratives underpinning development emphasise the ‘common sense’ of growth (Kallis 2018, p. 73) at both national, and regional scales. The Scottish Government’s ‘sustainable economic growth’ underpins national policy whilst HIE similarly argue ‘strong, capable and resourceful communities are vital for the social and economic growth of the Highlands and Islands’. Ross (2015) explains why this is problematic nationally; a failure to meaningfully engage with sustainable development and possibilities for a sustainable economy without growth.

Whilst HIE’s emphasis on social and economic growth in the Highlands and Islands is arguably a continuation of 20th century Highland regional development geared towards contributing to the national economy, they do recognise that their eight areas have different characteristics and face different challenges. As Kähkönen and Lähdesmäki (2019) describe for the Finnish context, regional actors do not merely reflect and implement national-level discourse, but are part of a networked and multi-scalar interaction of discourses, and can actively develop, interpret and concretize core concepts from a ‘regional point of view’ whilst translating policy into practice.

The growth imperative is embodied in regional development thinking, national policy, and internationally in the SDGs, part of the ‘common sense’ of authorised discourse and practice. This is not something that has been explicitly addressed by WRB actors in their development thinking, although ambitions to become a social enterprise indicate the economic development models they wish to emulate. BRs, as with interpretations of sustainable development broadly are likely to differ in terms of the extent to which economic growth is problematised (see Purvis et al. 2019). According to Stoll-Kleeman and O’ Riordan (2017, p. 93), in the Anthropocene context, BRs should ‘imagine and enact alternative visions to modern ‘development’ rather than a ‘greener’ version of the same. This links back to the pursuit of regional spatial justice, which in Wales has led to a shift from addressing ‘Welsh problems’ towards, ‘envisioning new futures’ and moving away from mainstream economic measures such as GDP towards alternative visions of wellbeing (Jones et al. 2020, p.895).

Thinking towards radical alternatives these could be drawn from the global degrowth movement, part of broader post-development framings that emphasise ecological

integrity and sociocultural wellbeing (see Gerber 2020; Kallis 2018; Neusiedl 2019; Payne and Phillips 2010). This includes being ‘open to alternatives that are context-specific’ (Andrews and Bawa 2014, p. 933) and grassroots, place-based initiatives are opportune spaces to examine alternatives in practice. One domain in which WRB actors have been more explicit about pursuing alternatives in practice has been in relation to the food system, partly in response to Brexit and the Covid-19 pandemic.

Creating New Food Futures

According to McCulloch (2018) from the 1980s, EU funding had a significant impact for the Highlands and Islands turning it from a ‘problem’ region into a ‘successful periphery’. This can be understood as part of the regional emphasis in EU policy discourse enabling a rethinking of identities emphasising the social, economic, and cultural uniqueness of regions (Kähkönen and Lähdesmäki 2019). Across Wester Ross EU flags capture some of this investment (see Figure 38).



Figure 38 EU-funded Path Network in Wester Ross

Local perspectives conveyed a sense of dependency on this political (and scalar) relationship with the EU. For example, the local economy of Wester Ross has been characterised as dependent on EU migrant labour; as one resident said, ‘communities like Applecross cannot survive without people coming from the EU to work in local businesses.’ The Chair of Applecross Community Council and a local business owner explained that there are no working-age people to take these jobs and younger people from the area often leave to go to university. Additionally, in terms of agricultural

produce, Wester Ross farmers and crofters, such as Lisa, described their dependency on export, 'the market for lamb is really on the continent of Europe'. In this context, the prospect of leaving the EU (Brexit) was seen as a threat to the viability of the local economy and communities of Wester Ross.

Whilst some characterised Brexit negatively as a barrier to the movement of capital, goods and people between Wester Ross and Europe, others were more critical of EU policy implementation in Scotland and open to change. The Chairperson of the Scottish Crofting Federation criticised how the Scottish Government channelled EU funding for 'less favoured areas' into larger more 'productive' farms on the East, to the disadvantage of crofters. This captures the tendency towards an 'authorised' development rationale, which devalues 'small-scale agriculture as inefficient and not profitable' (Wichterich 2015, p.80). The viability of small-scale agriculture in Wester Ross is determined through European politics and policy but implemented nationally by the Scottish Government in line with neoliberal economic agendas. When Brexit became reality, commentators thus called for future rural development policy to give more support to crofting and farming to provide 'public goods' as part of non-commercial farming (see Atterton et al. 2019; Sutherland 2019).

Brexit emerged at a WRB Sustainable Development WG meeting in late 2020, where directors were discussing their proposal for funding of a feasibility study into a local food hub. Patrick, WRB's director with fisheries expertise, suggested Brexit could be to 'the advantage of local fisherman to sell more product locally'. From his perspective, given the 'amazing seafood around the Wester Ross Biosphere...' he felt it was 'daft' that the available local fish was not eaten by local people as a 'staple'.⁶⁹ He also highlighted opportunities for fisheries 'co-management'. Fisheries co-management is used in the Isle of Man BR and has been highlighted as relevant to creating positive ecological, social and economic outcomes in the Marine Protected Areas (MPAs) of North Devon BR (see Rees et al. 2013). Given local concerns with Wester Ross MPA

⁶⁹ Local consumption is also about cultures of food. In Wester Ross, seaweed and 'bottom feeders' are interpreted as famine foods, so certain products exported are not desired locally (see Russell 2021b).

management and tensions around fisheries and conservation (see Russell 2021b) co-management would be a positive step forward.⁷⁰ WRB actors had a sense of optimism that new relations of production and consumption could be fostered, creating local chains within Wester Ross regionally in place of relations between Wester Ross and Europe.

The idea of (re)configuring food relations emerged more strongly from the Covid-19 pandemic, which Clapp and Moseley (2020, p. 1411) argue revealed ‘enormous vulnerabilities in the global food system’, a consequence of predominantly industrial production, complex supply chains and concentrated markets. Seumas, on the scalar aspect of food had told me, food to feed the region was all imported, ‘we don’t grow our own or grow very little... what we do produce here goes east’. Similarly, at a Sustainable Development WG meeting, Norman discussed the need for a local food hub for the biosphere given that ‘so much of our product is produced in crofting and fisheries... but it all disappears off elsewhere instead of being used locally’. He was critical of ‘food miles’ as an indicator of unsustainability, and the pandemic brought this into focus with communities dependent on the complexity of current food supply chains. With disruption caused by the pandemic, Anndra said local people were ‘ramping up efforts to provide local food’ and Norman spoke positively about being able to buy fresh local seafood direct from fishers at the local pier that would normally have been exported.

In this context, the Sustainable Development WG held a webinar to discuss the local food hub proposal with local communities, hear from food producers, and learn about the Open Food Network (OFN), who Norman described as bringing ‘a more global perspective’. The idea of a local food hub and the OFN is connecting local producers with consumers, creating new markets and food relations. The OFN map showed that

⁷⁰ Although the marine areas of Wester Ross have already been well interpreted through the lens of BCH in Russell (2021b) – a fruitful direction for research would be to analyse the conditions for successful co-management in the Wester Ross MPA areas using literatures including those referenced in Chapter 2 concerning decentralized and collaborative community management of fisheries in other BRs (e.g., Méndez-Medina et al. 2020).

there was no activity of this kind in the biosphere. Norman spoke of buying food from local producers in the pandemic suggesting:

If they can do that successfully now, then why can't they do that successfully all the time? Why should we be giving all of our best things away to Spain and Italy and France and wherever, when we need them here?

Hence, rather than accepting local markets exist only out of the necessity of the pandemic, WRB actors sought opportunities to create a longer-term, sustainable regional food system.

For Norman in particular, the value of such activity would go beyond the increased sustainability of reduced food miles and create space to better value locally grown, seasonal croft produce, thus improving livelihood opportunities for crofters. For example, speaking of the Balmacara Estate, he mentioned the idea of paying crofters premium prices for 'heritage' food products, produced in a sustainable way which could replace grants. Here, food can be understood as a form of cultural heritage, which is an important, yet marginalised element of food and sustainable development agendas (Kapelari et al. 2020). Alongside encouraging more ecological practices, for Norman, local food which 'everyone needs', is an important prospect to broaden the 'base of dependency' in Wester Ross away from tourism.

Examples elsewhere offer inspiration of such approaches in practice. In biocultural heritage territories in South America a core conservation aim includes protecting the diversity and improving the resilience of local food systems and traditional methods of agriculture (see Sayre et al. 2017; Winkel et al. 2020). In situ conservation approaches aim to regenerate lost agricultural biodiversity (see Graddy 2013). Closer to home, Dyfi biosphere in Wales, acts as an example of a biocultural heritage approach (Russell 2021b), advocating agroecological models and using oral histories with Welsh farmers to connect knowledge of past food growing with possible futures modelled spatially for different climate change scenarios.

WRB's funding bid to the Crown Estate Community Capacity Building Fund for the local food hub feasibility was unsuccessful; feedback suggested they had not evidenced the local need/support or demonstrated enough engagement with business. Reconfiguring the food system thus remains a future opportunity to create more sustainable resilient

rural livelihoods (Robinson 2019). Resilience has been a key concept framing responses to Covid-19 more generally, and in the case of the biosphere, a more radical conception would be useful to avoid the limitations of resilience policies which 'reify different spatial scales... as discrete... requiring local actors to adapt to a turbulent external environment which is taken for granted and naturalized' (MacKinnon and Derickson 2013, p. 264). Nightingale (2015) found working with communities in the northwest of Scotland, there is a 'scale mismatch' in how community resilience is defined in policy and how communities operate on the ground. It is assumed that resources and knowledge can be built into the local scale, rather than recognising multi-scalar networks. Moreover, there is a 'top-down imposition of policy without the same flow of centralized resources... characteristic of neoliberalism' (ibid, p. 204). Instead, a 'progressive and expansive scalar politics that both addresses local issues and appreciates systemic challenges' (MacKinnon and Derickson 2013, p. 264) is needed.

Brexit and Covid-19 were two quite explicit manifestations for exploring what scale does in practice in the development domain. The former signalling a new turn in the politics of development for Wester Ross after forty years of participation in a regional political union. The latter, a global crisis requiring adaptation and resilience from the BR and local communities. Such moments, along with the broader context of development invoke processes of (de)territorialisation. To deterritorialise denotes how a 'set of relations is undone or decontextualized, allowing new relations to occur' (Sterling and Harrison 2020, p. 30) and from an anarchist perspective, territorialisation is about 'building spaces of struggle and developing modes of organisation that prefigure future worlds' (Ince 2012, p. 1653). This is also known as 'building a new society in the shell of the old' (Gordon 2009, p. 256). However, as Wald and Hill (2016, p. 31) suggest, the challenge is maintaining such efforts 'beyond specific periods of crisis', which is also necessary to reactivate 'currently broken' co-evolutionary nature-culture relations (see Poli 2020, p. 53). Having explored the multiple intersecting social, political and economic relations relevant to the development domain and WRB's relations with HIE, I now turn to nature conservation.

Scalar Politics in Nature Conservation

In the conservation domain, WRB's most important stakeholder relationship is with NatureScot, their core funder and Scotland's body for nature protection. Scalar politics emerge in the relationship between WRB as community-led and NatureScot as nationally focused. Each year, WRB request core funding from NatureScot working with their advisor (Morag and subsequently Carla) to bid for funds internally. Although the small sum used to employ Phoebe for two days a week has been repeatedly granted, requests for additional funds are denied. Part of the problem appears to be that WRB's model for conservation is not valued by NatureScot at higher levels. Morag explained the biosphere designation had piqued some interest among NatureScot directors, however when they asked her questions of its powers and governance, and discovered it has no powers and is led by members of the community it became 'difficult to make the case for it'. Another employee of NatureScot, who works alongside Carla suggested that WRB are stuck in a vicious cycle where they cannot demonstrate value without funding to deliver akin to volunteer-led community councils.

This is especially challenging in a context of austerity, which is discussed by Kirsop-Taylor et al. (2020) in North Devon BR. National bodies withdraw from activities that do not directly serve their legislative remit, and Morag explained that NatureScot has faced staff cuts, with a tendency towards centralisation and pressure to make things cheaper and more efficient. There has also been increasing focusing on activities in areas with the greatest population in the central belt. However, more positively Morag suggested that NatureScot were attempting to turn 'more towards people and being about people' rather than being about conservation for its own sake. In discourse, NatureScot (2022) describe community empowerment as a 'top priority', stating that, 'empowering communities to look after nature and landscapes and be involved in decisions around them' strengthens the ecosystem approach.

However, in practice, WRB's community-led model has not been valued as a means to achieve this. No significant financial resources are offered that support the core costs of employing Phoebe full time. Instead, at the end of the financial year, WRB are often offered left over monies to be spent quickly. The gulf between empowerment in discourse and practice, has been shown at the level of most landscape decision making

in Scotland (Dalglish 2018). Whilst recognising the central role people should play in conservation, NatureScot stops short of devolving power for decision making to communities who perceive themselves as lacking 'control' and are critical of the organisation as a 'centralised' national body. Both communities and staff of NatureScot can be critical of centralised decision making. As one former employee living in the biosphere said, he felt the majority of decisions were made by 'pen pushers' in the central belt who had never set foot on Beinn Eighe nor the Highlands.

From the perspective of local people, NatureScot is a distant 'other', physically and symbolically. In Applecross, the local development officer was unfamiliar with any NatureScot work in the area. Lisa an estate owner, explained even when offices were set up in Inverness, people felt, 'well they're just moving Edinburgh people up there, or people from away up there.' This lowland-highland tension invokes specific kinds of identity politics and reflects how NatureScot as a national public body are part of a broader institutional power structure of centralised governance in Scotland and the UK out of cities of Edinburgh and London. There are parallels here with heritage conservation as illustrated in Jones (2005) work, which identified scalar identity politics of centre and periphery, including the notion that 'Edinburgh is coming' referring to actors from national bodies such as Historic Scotland visiting Easter Ross.

In Wester Ross, Lisa explained of those engaged in nature conservation practice, 'they come out of the area, and sometimes they don't know some of the very localised flora and fauna'. Chapter 6 identified tensions regarding Gaelic ontologies and scientific knowledges, but there exists a more general tension surrounding who conserves what nature and the kinds of knowledge and practices involved. For example, a local gamekeeper expressed irritation that a NatureScot ecologist sent to support work with red squirrels only had expertise with grey ones. There is also a historical legacy to contend with. As Carla, the NatureScot advisor to WRB described, there is a 'residual... wariness of government agencies of any kind' including legacies from the days of the Nature Conservancy Council and Scottish Natural Heritage.

When I asked Carla to join a WRB panel discussion on managing change, despite being based in Wester Ross and having local knowledge, she was reluctant to take this on, seeking to avoid perceptions of NatureScot 'telling people what to do'. In her

experience, shared during interview, criticisms of conservationists are often based on the idea of 'trying to preserve things as if they can't change'. Phoebe suggested that this could be an issue of discourse with NatureScot coming across as wanting to 'protect' and 'stop' rather than saying 'here's why this is special'. Carla resisted the idea that conservation is about preventing change. She explained that for NatureScot to intervene to prevent change, activities would have to be 'against the national interest at a Scottish level'. However, she recognises that for local communities, change can 'feel massive', such as a local fish farm expansion or tree felling.

Jones and Yarrow (2022, p. 4) characterise conservationist thinking as about the 'limits and problems of transformative change and an effort to actively resist the negative consequences.' The scalar aspect of this is clear in how conservation decision making for NatureScot is about national level change, such as deer numbers across Scotland, whilst communities can feel more impacted by local change. As Norman suggested from working with crofting communities, people are not usually interested in what is going on elsewhere, only in what will directly affect them. Whilst the two are not always mutually exclusive, this is a difficult gap to bridge and moreover, there is less focus on the regional landscape scale, a core operating space of WRB.

When discussing topics for the Sustainable Development WG webinars, WRB actors were unsure if regional landscape issues should be included. Phoebe felt that deer management and forestry for example, were mostly relevant to practitioners in those domains. She said even if local communities are interested in the subject, what would they get out of a webinar on it? Other important regional issues in Wester Ross such as fish farming and rewilding were considered important but too contentious, and Norman said crofting is 'too specific' and would be better as part of a broader topic on local food. Partnerships for landscape management though, was seen as a productive topic, a space to learn and discuss collaborative decision-making models at regional scales.

Avoiding regional land management issues could have been a missed opportunity to bridge the gap between local communities and landscape decision making at regional and national scales, starting important conversations. Indeed, Norman expressed his frustration that deer management is a subject that 'nobody ever talks about', with

historic and contemporary practices contributing to ‘mismanaging the vast majority of the biosphere’. A good example of bridging gaps was the invasive species conference produced through the Natural Heritage WG in partnership with NTS. Local communities and conservation practitioners came together in a dialogue on the landscape scale issues requiring collaborative action across scales.

Moving Towards Scalar Flexibility?

The local and national tensions described above for nature conservation are well illustrated in the heritage literature (see Harvey 2015; Jones 2005). Harvey (2015) warns against seeing the national as inherently problematic and the local inherently good. Romanticising the local is problematic because ‘the local is not always a fertile ground for progressive alternatives’ and can be a space of exclusion and narrow politics (Newman and Clarke 2015, p. 133). To move beyond scale as bounded, is to embrace notions of ‘throwntogetherness’ (Massey 2005a) and scalar flexibility (Harvey 2015). This merges well with the argument to move beyond dualistic politics of hegemonic and subaltern. As Jones and Yarrow (2022, p. 19) explain,

...conservation plays a role in reinforcing power relations through privileging certain perspectives and marginalising others. However, in locating the politics of heritage in a dualistic opposition between “authorised” professionals and other subaltern groups, analyses have often overlooked the more subtle and situated power differentials within and across these domains.

As well as perspectives which reify scales and reproduce ideas of top-down and bottom-up power, I also encountered discourses and practices that help to unpack what scalar flexibility could mean in practice. These emerged in local perspectives, and from staff working within national conservation bodies, including NatureScot, the John Muir Trust (JMT) and NTS. They brought to the fore how working across scales implies accommodating multiple values.

Lisa suggested interaction with NatureScot can act to multiply, rather than narrow the values associated with specific local landscapes. She described learning more about local landscape features and gaining greater appreciation for conservationists at NatureScot during a peatbog project:

Yesterday for example, when I was gathering the sheep off the bog, I was looking at all the mosses and thinking wow isn't this wonderful, this

is great, I want to protect this peatbog. And prior to that I would have been a bit more like, oh why should NatureScot tell me to get my sheep off this bog.

Hence, starting from the place of nationally valuing peatland for biodiversity, leads to a more locally situated appreciation of this form of value *additional* to, existing values held. This is one example of how scales fold together, rather than compete, and the multiplicity of values across scales is an important mechanism for moving towards conservation decisions based on ‘both/and’, rather than ‘either/or’ assessments of value. It aligns with what Jones and Yarrow (2022, p. 197) found in their observations of stakeholder management carried out by Historic Scotland around Glasgow Cathedral which was about the ‘recognition of, and respect for, plurality’ where ‘multiple perspectives... generate multiple meanings and values around heritage places.’

WRB director Seamus, described during interview the sense in which conservation bodies, such as the John Muir Trust (JMT) have increasingly learned of the importance of working with different perspectives, especially those in local communities where there have often been tensions. He suggested that conservationists now realise, ‘if you don’t get communities on your side, you are lost’. Matthew, who works at JMT and grew up in Wester Ross, gave his perspective as a conservationist during interview, outlining some nuance around multiple perspectives and a plurality of values. Firstly, he noted how ‘animosity’ between conservations and communities is often ‘overplayed’ by public bodies who are not working ‘on the ground’, and he perceived them as a ‘deaf to listening to voices they cannot hear’, failing to go beyond the local community ‘knee jerk reaction’. He gave an example of how supposedly crofters in the North, ‘hated’ JMT, but upon speaking to them found this to be exaggerated, stating, ‘they’ve just got an opinion’. In his experience, local communities may coalesce against an environmental agent seeking change, but this does not mean that local people do not value their natural assets.

He argued for a deeper understanding of the underlying conditions of disempowerment and livelihood dependency that shapes how local perspectives emerge. He highlighted two key dependencies, ‘to wealth in the landowning community’ and ‘to policies of government’. Moreover, Matthew felt local people, when confronted with alternative perspectives in a public forum, can feel that

'somebody's attacking them'. Hence, the mechanisms through which communities can voice their perspectives are as important as the content of discussions. From his perspective as an advocate of wild land conservation, he respects people's feelings, but will also challenge people on whether their perspectives are rooted in fairness and sustainability and on the information and evidence that inform their position. This draws attention to the relationship between perspectives and decision making and how organisations will accommodate multiple perspectives, but then ultimately seek to make sense out of them in ways that correspond in practice to a specific material reality.

Across nature and heritage conservation, organisations can be involved in what Jones and Yarrow (2022) call, following Mol, 'practicing perspectivalism'. This is part of the stakeholder model in heritage management and conservation that makes space for multiplicity, but ultimately resorts to an overarching expertise, 'a perspective on all perspectives' (ibid, p. 208). Whilst multiplying interpretations and observers, this can leave intact the singular objects of conservation (ibid), or as Mol (2002, p. 12) stated the 'nature that allows culture to attribute all these shapes to it'. Regarding diverse perspectives in Cape Horn BR, Berghoefer et al. (2010, n.p.) argue we must move beyond multiple perspectives on a singular nature, towards appreciating 'how different modes of living in the physical world engender different natures', recognising that the 'making of nature' is a 'political act' that occurs through power struggles.

The knowledge-power relations at stake in conservation management in Wester Ross invoke multi-scalar dynamics, particularly evident in a research workshop I co-organised with staff at NTS, who own and manage multiple properties in the region. Around ten staff comprising local estate managers and policy/planning staff attended and we discussed the challenge of working dynamically with multiple communities in practice. One person described NTS as 'a big institutional kind of organisation, that doesn't do flexibility very well, or any kind of change, and emerging creative ways of working.' A heritage planner also explained,

...for us, scales is an issue, so we've tended to look just at properties on their own in the past. For Wester Ross properties we're starting to look more at Wester Ross, but we've also got the national scale to look at things, so it's at what level do we make the decisions, is it the local

property scale, is it more regional, or is it that sort of national scale. [...] We are a bit of a pendulum that swings back and forward, and I think the pendulum's started swinging again and I don't know where it's going to end up. I think we struggle with that, struggle with the level. You can see an argument's perfectly acceptable at a local level, but if you look at it from a national one, it's maybe not working. [...] it's something we need to think more about, and we're obviously guided by higher-level decision making in the Trust.

Although the pendulum analogy captures some of the mobility of scalar flexibility, the notion of trying to anticipate when the swinging will stop and the emphasis on choosing the most effective scale for decision making conveys the struggle to, as Harvey (2015, p. 589) puts it, 'cut free from assumptions about the stability and essential characteristics of scale'. The dissonance between scales also seems to cause problems for NTS with decisions historically not based on reconciling priorities and values at multiple scales.

Norman, in attendance at the workshop conveyed this in his criticism of NTS decision making. He said, many people are unwilling to move away from top-down working and 'we've been very controlling over our history, very feudal at times [and] we don't like the idea of relinquishing control'. His sense was that things were currently worse than ever before with both local communities and staff not involved in decisions made at 'higher and higher' levels all the time. He framed this as partly a lack of trust, arguing 'whether they be staff, volunteers, communities of interest or resident communities' NTS must 'actually work with them instead of assuming that they somehow know better in their ivory tower.'

This is evocative of the sense in which higher-level staff are framed as experts 'assumed to hold the legitimate position of authority for asserting control over heritage' (Waterton 2010, p. 99) and thus have the power to exclude or arbitrate between multiple meanings and values at different scales. This occurs within the broader ethos of the Trust as conserving 'for ever, for everyone' which differs from the governance model of WRB which prioritises the participation of specific resident communities. In response to Norman, an NTS colleague said of centralised rather than localised decision making, this is because the Trust could 'lose a sense of what we are... and risk making bad decisions because they are people's decisions, not the Trust's

decisions'. This construction of NTS, invokes the idea of seeking a coherent identity as a hegemonic 'we' (see Massey 2005a, p. 154) which contrasts with the kinds of multiplicity that BRs as multi-scalar governance models seek to accommodate with more de-centralised decision making.

Wilkes (2022, p. 2) argues good multi-scalar governance should be 'inclusive, accountable and place-based' and she cites BRs as models that work well in the 'messy middle'. Norman conveyed this when explaining WRB to his NTS colleagues, describing the biosphere is a *mechanism* for 'bringing people together, facilitating discussions' and to facilitate a 'process'. As discussed in Chapter 5, this process is not always conducive to consensus and outcomes are uncertain prior to the enactment of the process. WRB actors create emergent priorities by aiming to work across multiple communities of place and collaboratively with other regional actors, part of the UNESCO BR participatory approach.

This way of working is challenging to reconcile with more outcome-driven, rigid institutional structures that separate expertise between natural and cultural, and rely on internal values, rather than those held by communities. Norman illustrated this when he highlighted that despite being one of the largest landowners in Wester Ross, with a similar remit for natural and cultural heritage conservation, NTS has not engaged much with the biosphere. Arguably though, the horizontally networked relations of WRB governance are also not necessarily conducive to bringing in nationally focused, vertically governed organisations.

A Multi-Scalar, Participatory Governance Model for Connecting People and Nature

WRB as a community-led body contrast with more rigid structural approaches of HIE, NTS and NatureScot. Carla described her first WRB board meeting as 'slightly bamboozling' due to the 'amount of stuff they were covering', describing it as like 'a spider web'. This analogy is a great example of the rhizomatic nature of the biosphere assemblage in action. There is no top or bottom, no hierarchical structure to a rhizome, which like a spider's web, or a piece of ginger can grow in multiple directions simultaneously and non-hierarchically. Conservation for WRB is only one thread in the web which connects to multiple other issues, eschewing the dichotomy between

natural and cultural heritage. In contrast, Carla works within a rigid institution which means there are many subjects she cannot advise on. For example, of cultural heritage she said, 'that's not our role'. This reflects nature conservation as an arborescent assemblage, characterised by bureaucracy, hierarchy and rigidity, with top-down decision making leaving little room for deviation from pre-set agendas (Horowitz 2016).

Phoebe is in between two such assemblages, her role with WRB being funded by both HIE and NatureScot who have 'completely different remits and mandates' for development and conservation and 'ne'er the twain shall meet'. The fact that this was happening suggested to her a need for the two to come together and 'share that vision' and transcend the positionality of 'I'm in conservation' and 'I'm in development'. From Carla's perspective as a local community member, this more joined up approach came through as she expressed interest in how the biosphere can 'make the most' of the diversity of interests in Wester Ross to foster sustainable development and a situation where 'it is all fitting together'. She also saw the value of the BR as a way to foster sustainable rural livelihoods, a subject which aligned with personal interests.

'Why Vote for a National Park When You've Got a Biosphere?'

For Kuutma (2019, p. 163), fostering projects that are bottom-up, top-down and involve 'horizontal cooperation between various stakeholders' is 'intricate and unpredictable'. WRB actors are engaged in such a project and thus far the chapter has demonstrated some of the complexities involved. Conservation and development are separate domains of practice with multi-scalar relations and stakeholder relationships to negotiate. In both domains, there are challenges associated with institutional power dynamics, territorial misalignments and enacting community-led regional, and transformational change. The non-hierarchical and rhizomic nature of the biosphere assemblage, is both part of the challenge and key to its value as a mechanism for moving beyond either/or scalar approaches and rigid, siloed thinking, towards scalar flexibility.

WRB actors work across the remit of multiple organisations when connecting people and nature, focusing on a regional scale, in the 'messy middle' (Wilkes 2022) between

the myriad of local community organisations and agencies working at a larger scale of the Highlands or Scotland. This has arguably been a difficult space to occupy where the value of this approach has not always been appreciated and therefore largely unfunded. When the prospect emerged for a new national park in Scotland (see [Chapter 5](#)) director discussions led to agreement that a stronger case needed to be made for the value of the biosphere model.

Norman argued given the ‘huge parallels’ between objectives and from the perspective of sustainability, conservation and cultural heritage, ‘we are in a strong position to argue, why vote for a national park when you’ve got a biosphere’. Commenting on the levels of funding for national parks, Phoebe suggested WRB could easily deliver a similar remit with only ‘a few crumbs off that table’. Taking a step forward in advocating for themselves, it was agreed that a written argument could be made to the Scottish Government to fund WRB as an alternative to a national park and doing this jointly with the UNESCO Geopark would help to bolster the value of UNESCO sites generally. A recent report on the national value of UNESCO sites in the UK draws attention to existing financial, social and cultural value, contributions to the SDGs and their huge potential (UK National Commission for UNESCO 2020).

As an alternative to a national park there are key differences with implications for nature-culture relations. National parks in Scotland, although clearly committed to sustainable development, are rooted in a set of objectives which do not carry equal weight; nature conservation, must be given priority where there is a conflict of interests (Barker and Stockdale 2008). In contrast, a BR has a holistic approach to conservation and development managing for both equally. However, as Aschenbrand and Michler (2021) argue, this more ambiguous narrative can lead to less recognition and awareness of biospheres compared with a clear national park narrative of spaces for nature. This is part of the challenge for communicating the value of WRB to policymakers alongside how the model works in practice.

Elisabeth noted that national parks have more authority and autonomy than WRB currently, the former having institutional power and legal role in planning. BRs are unlikely to have all the competencies for regional sustainable development, whereas national parks as state-driven models can organise such competencies to control

development for nature conservation (ibid). For WRB actors developing the region sustainably is not driven by institutional powers, but a participatory process, which requires decentralised decision making (see Walk et al. 2020). This participatory nature reinforces the value of multiplicity in terms of who is empowered to make decisions about an area, and who can establish the rules of land and resource use and distribution (ibid).

In some contexts, BRs and national parks overlap and operate similarly (Reed 2020). In Wester Ross, the new style, community-led model of WRB has more in common with biocultural heritage territories (BCHT). BCHTs have been described as offering 'fairer, effective and lower-cost alternatives to protected areas' (Swiderska et al. 2020, n.p.). They are a 'vernacular territorial approach' which emerged out of indigenous struggles for self-determination and decolonising and rather than emphasise conservation or development they strive for 'holistic wellbeing for both people and nature' (ibid). BCHTs are also 'food-centred' and strengthen indigenous exchange systems, create resilient livelihoods and promote values of ecological stewardship and solidarity (ibid). Many of these values and logics were present in Wester Ross, albeit with some adaptations and qualifications needed.

For example, the self-determination of BCH is tied into indigenous customary systems of land management, requiring a rights-based approach. In Wester Ross, local perspectives on self-determination were less rooted in specific cultural and political identities, and more focused on the effects of centralised power and decision making. A sense of disempowerment and lack of democratic governance were part of calls for more local participatory governance by many in Wester Ross. Morag cited Norwegian municipalities, whilst WRB director Rory cited the Faroes, where there is greater autonomy for communities to not only to participate in decision making but to self-determine and organise. Another adaptation is around customary land management, which in BCH tends to be based on commons, not easily translated into the complex land use and ownership in Wester Ross, which is considered in the next chapter. Nonetheless being inspired by BCHTs is one way for WRB actors to further differentiate themselves from dominant institutionally led, rather than community-led models such as national parks.

Conclusion

Harvey (2015, p. 579) argues that 'in a world of scalar uncertainty, we must not retreat either towards the warm glow of "localism", or to bland "universal" platitudes of globalisation.' Nor must we fall into the 'easy' tendency to denigrate the national, as if it is only a space of AHD and not also one of opportunity (ibid). This chapter examined the politics of scale and the myriad spatialities associated with Wester Ross Biosphere, to contextualise previous findings, and add new insights associated with themes of governance, development and conservation. Navigating the politics of scale is inherent to the biosphere model as an internationally defined, locally and regionally implemented model which exists in a specific national context. The idea of cultivating a universal planetary consciousness can occur alongside addressing local and regional needs, illustrating the intersection of UNESCO and Wester Ross agendas and priorities for action. This includes relations in the WNBR that rather than reinforce a universal one-size-fits-all approach, generate unity-through-difference and highlight issues of regional spatial justice.

The politics of scale is also highly significant in terms of WRB's relationships with key stakeholders, namely HIE and NatureScot. The ability to enact sustainable development is shaped by the broader territorialisation practices within the Highlands region, and conservation is shaped by a national perspective that tends to value local communities in discourse, but not necessarily in practice. As a multi-scalar model, the negotiation of these tensions in the BR is essential to valuing and working with multiplicity, relevant to Harvey's (2015) call for scalar flexibility. Herein I have shown how treating scale as a relation rather than a fixed container helps to unpack what scale does in specific contexts. The next chapter moves on to the politics of land use and ownership.

Chapter 8: The Politics of Land Use and Ownership in the Biosphere

This final findings chapter picks up on key threads from previous chapters. As discussed in Chapter 4, WRB has no jurisdiction over land management in the biosphere and must therefore develop and engage in collaborative governance with landowners. Private landowners who are prevalent in the region, are an important stakeholder group for WRB in this space, alongside conservation charities and public agencies (see [Chapter 1](#)). Chapter 5 highlighted regional conditions of unsustainability in Wester Ross tied to historic and contemporary land ownership and management practices and Chapter 6 extended such issues into the domain of crofting. This chapter focuses on understanding the politics of land use and ownership in the biosphere, including implications for regional sustainability. I bring together perspectives from WRB actors, landowners and communities in Wester Ross, set within a broader Scottish context.

Land reform and community empowerment are important national political and policy agendas in Scotland, including the aims to increase community land ownership as part of calls for systemic change to address the current monopoly of ownership. I consider how such agendas play out in the biosphere across the three themes of the chapter, current conditions of land use and ownership in Wester Ross, empowering communities to deliver sustainable development and balancing of individual-collective and public-private interests. I use an ethnographic case study of Applecross community to illustrate these themes in practice and explore the argument that ownership of land by communities,

...opens up the political terrain of particular places through the reconfiguration of practices of property and of nature to more socially just and sustainable possibilities than those prefigured through prevailing norms of neoliberal practice, specifically enclosure and privatization. (Mackenzie 2013, p. 4)

This is part of a 'counterhegemonic reading of property' where 'rights are constantly in process, their performance bound up with people's reworking of their individual and collective subject positions' (ibid, p. 186). The chapter concludes with what the politics of land use and ownership mean for WRB actors.

Land Use and Ownership in Wester Ross: The Good, The Bad and The Ugly

Chapter 5 introduced views on the unsustainable land management practices in the biosphere. Anndra, speaking to other WRB directors on the Sustainable Development WG webinars, argued that land management practices easily become about land ownership, and ‘it becomes very political, and I don’t think that’s our role’. Although WRB as a ‘neutral’ UNESCO organisation is unlikely to actively campaign on land reform, pursuing participatory regional governance as a BR, necessitates engagement with matters of land ownership. Given the lack of legal jurisdiction to manage land directly, WRB actors must work collaboratively with landowners, including privately owned estates, conservation charities, public bodies and communities. ‘Vast private estates’ are dominant in Wester Ross (see Figure 39), which Mackenzie (2013, p .216) suggests is evidence that land reform in Scotland has a long way to go.

Reflecting on WRB, Norman suggested that efforts to engage with larger private estates have ‘failed’. Alongside the challenge of lack of resource, he feels landowners are not interested in seeing any change to current land management which makes it challenging to engage with them. Contemporary land use and ownership is often contextualised by local people, including WRB directors, within the history of the Highland Clearances and their legacy. There is a feeling that owners of large areas of land, held, and continue to hold power over where communities live and their relationship with land.

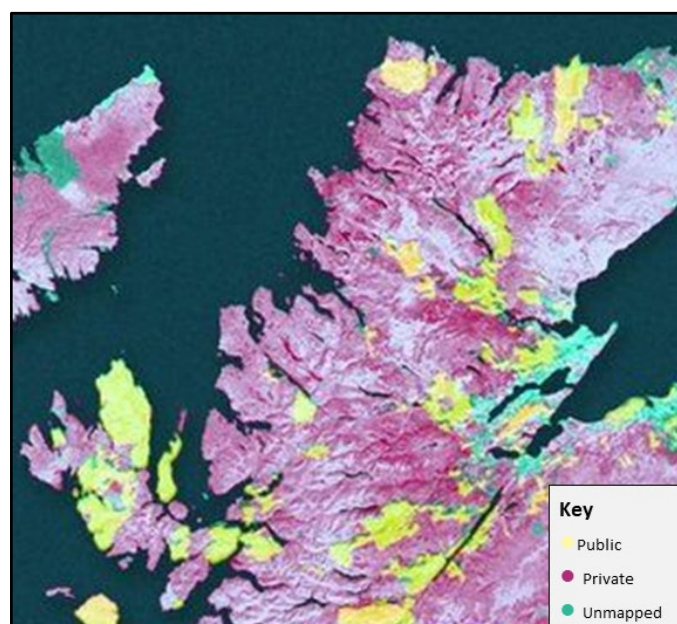


Figure 39 Land Ownership in Scotland. Credit: Lateral North, reproduced by BBC Scotland [amended by author]

Anndra, explained that in Wester Ross:

We've still got this legacy of old, aristocratic people that are keeping people out of their land, just so they can run it as a deer forest, or a place where they can have their own sport. The biggest offender here, just outside of Glenelg is Sheik Mohammed Rashir Al Maktoum, who owns everything that you can see when you come over the hill from here. The Highland Clearances continue with him. The few people that were here, 25 years ago when I first came here, are no longer on that land, they've been pressured to move away, houses demolished, so that it's just an empty place where nothing happens.

The Sheik is the billionaire ruler of Dubai who bought his estate in Wester Ross for £2million. He was one of the biggest beneficiaries in the UK of EU farming subsidies (Wightman 2014) and has been in the press regarding planning permission to expand his mansion properties. Whilst discussing their financial situation, Alan felt WRB should be more proactive with rich benefactors and mentioned the Sheikh. Other directors were sceptical, and unethical behaviour regarding the abduction of his former wife and daughters, gives context to Seumas' reply that, 'if you want to sup with the devil, you need a lang spoon'. Some estates in the western Highlands were and, in some cases, still are owned by beneficiaries of Britain's system of plantation and enslavement in the Caribbean colonies (MacKinnon and MacKillop 2020).⁷¹ Such historical realities illustrate how land as property depends on volatile market forces and unstable capital (ibid), rooted in power imbalances which often frame contemporary discourses about land ownership and land use in Scotland.

Absentee ownership is common in Wester Ross, landowners live away from the area, and only visit occasionally, if at all, and are not personally known in local communities. For example, as one local resident in Aultbea said of the estate owner there, 'I don't think I could pick her out in a crowd', everything is 'dealt with through the factor' who lives on the east coast and is very 'hands off'. Even where absentee owners are managing their land for 'sustainable' purposes, the disconnect with local communities

⁷¹ It is noted that in Wester Ross, >206,481 acres were purchased between 1726 and 1939 by families with financial connections to British slavery.

is problematised. As Coinneach WRB director, described of landowner and rewilder Anders Polvsen,

...he seems to have a notion of conservation that's not connected to the wellbeing of the communities that live in the area. And has a notion of the landscape being devoid of people, or at the expense of the rule of people.

The concern here is with a broader trend of 'green lairds', who in buying up estates for rewilding, reproduce historical inequalities of landlordism (see Macdonald 2021). Such trends are not unique to Scotland, part of global capital accumulation.⁷²

Where estate management contributes to unsustainable land use, there is little recourse to influence this especially when owners are absentees. Norman explains, there is 'no system of making landowners, whether they are large scale or small-scale landowners, accountable for their sustainability or lack of it'. Robert, as a political representative in his role as a Highland Councillor has a strong view on pursuing land reform. During interview he said, 'I have no problem with the biosphere taking on landowners', believing this to be the direction of travel in Scotland. For example, WRB could be encouraging those with the largest areas of land to see this as not just for 'running some deer and pheasants for shooting', and to use the land 'correctly', by which he means sustainably. Some, including Robert, support stronger national legislative action to tackle the monopoly of landownership and the issue of unsustainability. However, others focus less on ownership and more on use, encouraging alternative, sustainable land uses and greater community participation in land-use decision making. Partly this is because it is argued that not all landowners are a problem.

Not All Landowners?

During my research I spoke with some accessible landowners in Wester Ross, namely those living on, or regularly working on their private estates. In three cases in particular there were owner-community social relationships in contrast to absenteeism

⁷² Globally the search for new investment opportunities is driving land and water grabbing, which 'entails appropriation and displacement of local communities as well as the erosion of their livelihoods' (Wichterich 2015, p. 79).

and some engagement with WRB actors and events. The Attadale estate is privately owned by a family who at different times have lived in Wester Ross full-time. The current owner Catherine participates in WRB events and signed the estate up as a biosphere business supporter. She described relations with the communities of the surrounding area:

People who actually live here, I think would probably have quite a positive view of us as an estate... maybe I'm being naive. But I think we've given, we try and support the community, and that's why, when I came up here to live full time, my dad said join everything, do everything, then you can never escape! But try, try.

In contrast to absenteeism Catherine is more embedded in the surrounding community. She visited often as a child, and since taking over from her father has become involved in running of the local paper and hosts the local Highland Games on the estate. Catherine described when the Scottish Land Commission (SLC) visited the area promoting their work on 'good practice' protocols for community engagement with land. She said, the chair of the community council was asked 'how often do you talk to the laird?' and responded that, 'well I can talk to him anytime I want', referring to Catherine's father. This informal relationship led Catherine to find SLC's more formal approach, 'they want you to have meetings or something', quite bemusing, although she recognised that the reforms are 'a power for good'.

As McKee (2015, p. 27) suggests 'sense of familiarity' is important for fostering positive interactions between landowners and communities which seems relevant here. However, Catherine also referenced perceptions of the 'wicked landowner' removing people from land but felt these come from outside the local community. Regardless, she seemed keen to avoid any negativity, and of community politics, said she tends to keep her 'head below the parapet' and would not 'interfere' and instead 'just support anything that's going on'. This includes the biosphere, which she spoke of positively, saying publicly 'I'm 100% behind it'.

The owner of Leckmelm estate Lisa, is also a WRB business supporter, and has spoken at WRB events (see [Chapter 5](#)). She described how the ownership is 'very transparent' in her area because people know her and that she lives on this land. She said for anyone who does not know her, there are signs to get in touch with her, and 'the land

hasn't passed from hand to hand'. The Leckmelm estate has been owned by her family since the 1950s, purchased by her father to pursue an agricultural lifestyle. Lisa lived there since she was two weeks old, left for education but returned to run the estate full time for the last twenty years. Speaking positively of the biosphere, she described it as 'about the interaction between man and the environment, it's not saying man shouldn't be there, and I think if people really knew that they might think this is a good thing, a good way to describe ourselves and a model for sustainability'.

Lastly, Graham, a member of the family that owns and manages Dundonnell estate, took part in the earlier stages of biosphere consultation pre-designation. Although not particularly engaged with WRB, his views were well aligned with some of the priorities of the organisation. He said for example that, 'in any biosphere it is very important to maintain the human culture' and speaking in the context of local tourism schemes argued, 'what is more important, is that things work for the locals... if you can get the local culture right for local people, the tourists will come'. Like Catherine and Lisa, he explained that communities 'know where to find us, we're not difficult to get a hold of.' He spoke of taking part in community events, and argued that estates 'have a big part to play' in local culture. He argued that people who are not interested in this, should not own a Highland estate, describing Dundonnell as 'very special... because it's got communities like Scoraig'. He felt there was a 'good relationship with the local community' and that if anything was wrong, they could reach out.

Given the sense that WRB have failed to engage with estates, a productive step forward would be to build stronger relationships with those showing an interest in the biosphere ethos and more embedded in local communities. However, landowners are a large heterogenous stakeholder group to engage. There is a spectrum of more or less positive land management practices (in terms of sustainability), and more or less accessible landowners. With finite resources and capacity, there will need to be strategic choices on where engagement might have the biggest impact in terms of regional biosphere governance. The BR participatory approach and WRB's community-led model also prioritise communities, and in the Scottish context, the empowerment of communities to deliver sustainable development through land ownership is another important consideration.

Empowering Communities to Deliver Sustainable Development

Across current land reform and community empowerment legislation communities have rights to acquire land (from willing and unwilling sellers) as part of community right-to-buy regimes (Ross 2019). Currently, 2.9% of land in Scotland is under community ownership (SLC 2022). Sustainable development is a primary duty underpinning these regimes, which community bodies looking to acquire land must demonstrate in their proposals (Ross 2019). A major challenge is that sustainable development remains undefined in legislation (Glass et al. 2020). Recent calls for defining sustainable development point to the need for both clarity and breadth to avoid narrow implementation (see Davis et al. 2022).

For WRB actors and communities, sustainable development and land tend to be treated holistically within broader understandings of the sustainability and empowerment of communities. This includes the overall viability of sparsely populated rural areas because for communities to be ‘empowered’, they must first exist. When I asked Phoebe during interview her thoughts on community empowerment and land ownership, her response brought this to the fore:

Community empowerment comes by having communities. People are getting older, and people aren't coming back, there aren't houses. So, community empowerment means communities can keep, not even necessarily growing just sustaining themselves by making sure that there's still people there to do it, and those people need to have meaningful relationships with one another, not just based on that place. Not just a Disney world in the summer, retirement home kind of community. Community empowerment for me is the ability of communities to keep their young people there, and jobs and to be able to sustain themselves, go a step further and growth is fine but at this point it's about sustaining those communities.

As she explains here, communities of Wester Ross are gradually disempowered over time as living, working communities give way to an ageing, retiree population due to out-migration, lack of employment and housing. Across Wester Ross, such issues are being tackled at a local level by community development organisations, including through the purchase of land and assets, such as those associated with WRB's SDG posts (see [Chapter 7](#)). An excellent example of a holistic approach, centring the sustainability of communities and places is found in Applecross Community Company

(ACC). ACC have a strategic set of priorities, a community vision and land use plan, the latter of which was presented at a WRB webinar on planning for sustainability.

Speaking during interview, an ACC local development officer explained the challenges of using this plan for subsequent sustainable developments; namely, the disconnect between the Highland Council local development plan, and the community land use plan which were 'not truly matched up'. ACC did not get planning permission for certain sites despite significant resource going into the overall project as a multi-partner, community-led activity. The frustration here was evident in how the officer explained, 'we're making so much effort, building our own houses, and yet there's endless hurdles to get through'. She criticised the lack of joined up approach, leaving community bodies struggling to implement their plans. As Norman previously identified, there are no collaborative, strategic, regional approaches to this kind of sustainable development planning. Moreover, planning and land reform are separate policy and legislative issues in Scotland.

This raises problems for communities and WRB actors on the receiving end of policy (in)coherence and lack of vertical and horizontal policy integration. This has been a subject of discussion and critique (see Jordan and Halpin 2006), and interest in policy coherence for sustainable development (PCSD) has been rising in prominence.⁷³ Atterton (2018) argues that a major weakness of rural policy in Scotland is the lack of integration across agriculture, environment, land use and socio-economic development. In the absence of PCSD and joined up working, the onus is on community organisations to navigate bureaucratic complexity, including to identify land available for purchase, negotiate with current owners, find funding for purchase, and have capacity remaining for development and long-term management.

The Burden of Responsibility

Given the capacity needed within communities to own and manage land, some residents of Wester Ross and WRB directors were dubious that this was in the interest

⁷³ See Righettini and Lizzi (2022) for an overview of the literature

of community empowerment and sustainability. Rory WRB director said that for 'the community to take over a big estate is a huge, tall order', and he felt there is not always people available with the interest in land to do it. Reflecting on his local area, he felt a smaller estate that is closer to the community, purchased from a private owner would be 'welcome'. In contrast, 'taking land off a conservation charity to put into the community, I'm not quite sure where the benefit lies.' Similarly, with publicly owned land, he felt the community 'will be unable to match the level of expertise available in the existing organisation'. This suggests that organisations such as NTS and public bodies owning land are legitimate because of their institutional expertise compared to that held within the local community.

As well as concerns around the knowledge and capacity within communities, there are overarching discourses about the role the state should play in taking responsibility for how land and natural resources are managed. Lisa conveyed this when she explained that the government should be taking responsibility, and it should 'not be down to communities' because of the fluctuations in capacities over time, and between communities. In relation to a community ownership bid for forestry, she felt that because the Forestry Commission owns the forest, an organisation which exists 'for the people' this should remain a government priority. She felt the Commission and national park authorities were established post-war to 'protect these assets and wood is an asset and it's a national asset', so in this sense should a community really take this on, and do they have sufficient knowledge to run a woodland?

On multiple occasions, I heard how community ownership is difficult to sustain over the longer-term. Thomas and Banks' (2018) research of a village in Comrie, highlights how community ownership of a heritage site, can come to be considered as a burden, a source of stress for those involved and create disagreement within the community. I heard first-hand from communities in Wester Ross about the burnout, community politics, struggle with bureaucratic systems and the financial liability and risks involved in becoming 'owners' of an asset. Hence, placing responsibility onto communities to achieve sustainable development and manage natural resources is not a panacea.

However, larger organisations are not always capable of delivering the kinds of sustainable development in practice that communities can, despite their institutional

resource and expertise. A former representative of the Community Woodlands Association, and employee of Forestry Land Scotland, Callum, explained during interview that:

Communities buy forests because the state isn't doing what they want it to do with the forest that has been sat outside their village for the last hundred years or so. They do it because it gives them that control. [...] the communities that have bought forest and are doing things with them, so the Lochcarrons... Laide and Aultbea, they are doing amazing things... with bugger all money just with hard work... they're doing inspirational things with none of the resource that I'm sitting here with.

In response to the claims of some local residents that communities buying land get the 'worst bits' that current owners consider a liability, he acknowledged that it may appear as 'just flogging off the difficult to manage stuff to local communities.' He said this was 'repositioning' to sell remote and inaccessible forest blocks in favour of land in the central belt areas where more people live. Explaining this more positively, he drew attention to the difference of values. The Forestry Commission, for example, value land they sell economically, whilst for locals there is a different set of values that the Commission would 'never put on that piece of land'. For example, whilst Lochcarron community woodland is a 'poor piece of woodland' that is 'difficult to manage', it offers the community local firewood and opportunities for affordable housing as land available for development. Moreover, he said of communities, 'it's not being forced on them.' Hence, as elaborated here, community ownership is a way for local people to cultivate alternative values associated with land (Mackenzie 2013). However, the idea that ownership is a choice not forced onto communities draws attention to a broader context regarding power and agency with possibilities for communities shaped by neoliberal modes of governance involving states and capital circulation.

For the Scottish Government (n.d.), community empowerment is about 'supporting our communities to do things for themselves, and to make their voices heard'. Whilst such narratives can have democratising effects, they must be read as part of a longer history of social policies in the UK rooted in 'idealised' and 'common sense' notions of community as 'unproblematic, unified, cohesive and compliant' (Cooper 2008, p. 25). They leave intact the complex power relations and structural causes of social inequality and injustice, leading Cooper (2008, p. 101) to the conclusion that under

neoliberalism, responsibility for tackling the effects of economic and social disintegration has been placed on the shoulders of the most vulnerable and disadvantaged. The burden of responsibility is on communities to manage the inequitable distribution of and unequal access to land.

In Wester Ross, the retreat of the state is evident in the declining provision of public services, which have meant that communities are left to organise to meet their own needs. Whilst communities are not forced to own assets, when public bodies will not deliver, there is a degree of necessity which compels communities to act due to lack of other options. ACC in their strategic plan state:

Communities are being asked to step in where the public and private sector is unable or unwilling to operate. ACC is acutely aware of this having taken on the ownership and management of the petrol station in 2008, local public toilets in 2011, and ongoing service provision of broadband.

Similarly, Peggy from community-owned enterprise Gairloch and Loch Ewe Action Forum (GALE), explained they are operating in the space of 'market failure'; a space where the public sector has stepped back or is inactive, and where it is not profitable for private business. She described this as a challenging space to be in, especially given how funders will hold GALE to the standards of economic efficiency and profit-generation that created the public/market failure in the first place.

On the one hand, community organising might be conceived negatively as the burden of responsibility for dealing with the uneven development of capitalism and inequitable distribution of land and assets. On the other hand, it could be viewed more positively through the lens of creating relationships of mutual aid and co-operation, through a 'caring geography of togetherness' (Springer 2020, p. 114). Rather than relying on the state or capitalism to meet their needs, communities can rely on their collectivity. Economies, based on mutual aid, can satisfy both personal needs and collective welfare (Shantz 2013, p. 7), especially through 'self-valorising' acts that produce and circulate values for the benefit of those who produce them and their communities, rather than for the benefit of capital.

In rural contexts, evidence supports the value of co-operative models for the development of local economies (Simmons et al. 2010) and in Scotland there are co-

operative models in a range of sectors, including agricultural co-operatives engaged in learning on what sustainable resilience means in an uncertain future (see Simmons et al. 2015). Co-operation is vital to small-scale common pool resource management (see Combe et al. 2020, p. 9) and the BCH model is also an example of valorising commons under community governance. Such models can lead to desirable outcomes for both communities and the environment meeting local needs in ways that keep the benefits of development local (Hoffman 2018).

A local crofter in Kinlochewe described being against new hydro schemes on surrounding privately owned estates, not only because of environmental impact, but because public money was being used for energy infrastructure upgrades and private landowners are the main beneficiaries despite not contributing financially. In comparison, a smaller scale hydro scheme for community use is less objectionable because the outcome is not private gain but community self-sufficiency and sustainability. However, he also suggested that central funding of community ownership of land is a 'drain on the public purse'. He felt it unfair to spend millions buying land for rural communities when those living in urban poverty get very little financial support. Hence there is a broader set of issues here on the intersection of public-private and collective-individual interests at different scales.

Balancing Individual/Collective and Public/Private Interests

The idea of balancing individual and collective, public and private interests emerged as a broader theme in the research. In both Gairloch and Applecross, local residents spoke of how some in the community disliked the community-owned development organisations because they represent a source of competition to private individuals and their businesses. Some felt it should not be the role of the state to use public funds to create local 'competition' through community enterprises or were generally against community owned organisations. A director of ACC said those 'philosophically opposed' to the organisation were political conservatives against use of public funding to 'profit' community-owned ventures. Hence, part of micropolitics in Wester Ross are views on the 'proper' role of the state in a neoliberal capitalist context.

For WRB actors operating at a regional scale, this creates caution, to avoid competition with communities and individuals, trying not to, as Phoebe put it, 'step on anyone's toes'. Discussing their funding bid to HIE for regional tourism management she raised concerns about how communities and stakeholders would perceive WRB should they 'soak up' all the funding and create jobs 'through the biosphere'. Despite being at the coalface of lack of resource and capacity, Phoebe suggested WRB 'should not ask for too much' to avoid taking away from others. Alan resisted this arguing that 'the biosphere needs the resource in order to make this happen'. How WRB acts in the collective interest of the people of Wester Ross and their source and concentration of capital become a careful mediation of interests. As a new staff member told me, she is regularly asked who is paying for her job at the biosphere when communicating the value of the BR to local actors.

WRB actors are thus mediating the ever present 'dual motors of social change' which are competition and mutual aid (Denham 2018, p. 265). They must negotiate their own forms of 'collective-action dilemmas' in Wester Ross, in which the interest of individuals and communities can diverge (Acheson 2011). Arguably, WRB actors are describing the challenge to provide a public good (activity that benefits multiple communities) in a context where individuals may have few incentives to invest in this themselves (ibid). Moreover, the task for BRs like WRB is as described in Bray et al.'s (2012) work in Mexico, to foster and negotiate the turbulence of 'inter-community collective action'. Such collective action is vital component of multi-scalar governance and biosphere stewardship (ibid; Plummer et al. 2020).

The challenges associated with balancing individual and collective interests, especially when it relates to questions of land ownership are particularly prominent within crofting (see [Chapter 6](#)). Some felt that public money should not be spent subsidising crofting, essentially a 'hobby', putting wider public interests against individual interest. Similarly, at the NTS workshop, discussed in Chapter 7, a local estate manager spoke about how crofting is not working well at the moment:

There's only a handful of people who actually actively get involved. We had a croft sell quite recently for half a million pounds. There was a new house on it and things of course, but even so, you know, the Trust as a landlord gets no benefit from that and I don't think particularly

community will get a huge benefit from it either.

The economic value of crofts brings individual benefits but not wider community benefits. On how NTS might encourage alternative values associated with croft land (social and cultural) rather than economic, Norman commented that it 'goes back to sustainability'. He argued it is 'ironic' that descendants of 'crofters who fought against land ownership and exploitation' are 'selling land... treating land exactly the same way as the private landowners were doing' to make profit from it. The fact that crofts are becoming part of a private market, and ownership depends on financial capital, is a reflection of the 'dominant norms of property that rely on practices of privatisation and enclosure' and 'land as a commodity with exchange value' (Mackenzie 2013, p. 24).

The individual interest of crofters can be privileged above the collective interest of the crofting community in development and planning decisions. In Gairloch, a local resident criticised the Highland Council for ignoring Crofting Commission objections to planning permission for a house on croft land. She said, 'the sad thing is they think they are arguing in the interests of crofters, but they are going against the crofting community'. For example, taking the best agricultural land locally out of productive use, making it difficult to continue crofting as a collective practice. This was interpreted as most problematic where housebuilding is instrumental or speculative for individual gain, as opposed to providing a young person accommodation to live locally. Crofters were at times seen as 'property developers', with non-crofters arguing that, 'all crofting land is community land, and it shouldn't be possible for one individual to be able to sell it for profit/individual gain'.

Building on the findings in Chapter 6 the protection of individual interest to the detriment of the collective interest of crofting is part of the complex relationship that crofting has to neoliberalism and a challenge to the idea of crofting as part of an 'alternative post-neoliberal future' (Shucksmith and Rønningen 2011, p. 285). Elements of crofting are no longer producing public goods but are framed by individual property rights and the treatment of crofts as valuable commodities. However, in the absence of processes to take crofts into collective ownership, disrupting neoliberal norms (Mackenzie 2013), the onus is on individuals to act in the collective interest, rather

than in their own financial interest. Some consider this problematic arguing that as a historically disadvantaged class, crofters have worked in difficult conditions and had precarious livelihoods and are deserving of the right to access wealth through property.

Concerning land more broadly, I encountered one example of an individual placing the collective interest above their financial interests. Lisa at Leckmelm, has had opportunities to enrich her private wealth with offers to purchase her estate in the realms of millions of pounds, including from a foreign American investor. She said although this would have significantly lessened her financial hardship and allow her to stop working multiple jobs, she turned this down to protect the families living and working on the estate and its agricultural and heritage value. She feared a new owner could transform the estate into a holiday park. However, this is a rare example in a context where land in Scotland is continually bought and sold in a market at prices unaffordable to the majority (see Figure 40).

Ledgowan deer shooting estate on the market for £4.5m

A STUNNING Highlands estate is on the market for £1.1m - and it comes with EIGHT lochs.

Morefield Estate, in Ross-shire, also includes a four-bedroom mansion with a tower set amongst 4,600 acres of land.

Morefield Estate is just north of the coastal village of Ullapool Credit: Strutt and Parker

5

The image is a composite advertisement. On the left, a photograph shows a large, grassy hillside with a winding path, likely the Ledgowan estate. On the right, a photograph shows a large, white, multi-story mansion with a tower, surrounded by greenery, identified as Morefield Estate. Text overlays provide details about the estates' prices and features.

Figure 40 Wester Ross Estates for Sale Advertised Online.

Intervention in the land market, was discussed by the land reform policy group in the 1990s and considered justifiable if in the public interest to secure sustainable development. As Ross (2018, p. 4) explains, a 'strong link' was established between sustainable development and the balance of public interests with private property rights. However, there are still few measures to address the scale of ownership, and which act as land market interventions including ultimately defining who can own land,

and how much land can be owned by individuals (Glass et al. 2020). The work of the SLC has been important in raising awareness of the broader rights and responsibilities associated with land in Scotland. They promote the Scottish Land Rights and Responsibilities Statement (LRSS) which emphasises how public and private interests should be balanced and can coincide.

However, in the balance of public and private in terms of land ownership, the former is the 'other', and the latter is 'normalised'. Whilst NNRs such as Beinn Eighe in Wester Ross, are managed for the 'public interest', Morag suggested it is 'strange' for a public body to own so much land and if someone wanted it, NatureScot might seriously consider selling it. Such comments can only be understood with reference to Scotland's history of large-scale private land ownership compared for example to Norway's history of small peasant proprietors (Bryden 2015). Moreover, with forty-three national parks, today the average Norwegian has much greater access to land and ownership of land than people in Scotland (Riddoch 2015). In the absence of constitutional or legislative change to the current situation, one mechanism identified for managing public and private interests in land-use decision making are Regional Land Use Partnerships (RLUPs).

A New Model for Land Use Decision-Making

RLUPs were a commitment in the Scottish Government Programme for Government 2020/2021 and have the function of driving collaborative approaches to land use decision-making. They will,

help national and local government, communities, landowners and stakeholders work together to find ways to optimise land use in a fair and inclusive way – meeting local and national objectives and supporting the journey to net zero. (Scottish Government 2021)

SLC recommended RLUPs should integrate with existing structures rather than add a new layer of bureaucracy. Additionally, they should align with Scotland's Land Use Strategy and the LRSS, especially to promote and fulfil human rights in relation to land, and to contribute to public interest and wellbeing, and balance public and private interest.

WRB have taken some interest in RLUPs and were invited to early stakeholder discussions with SLC. However, Phoebe and others were reluctant to dedicate their limited capacity to unfunded activities in Edinburgh surrounding future policy. Subsequently, SLC (2020) published recommendations on setting up RLUPs for the Scottish Government, discussed by the Sustainable Development WG. Norman felt that the document, 'didn't really provide any answers'. Others agreed or had not read it fully, given the length and perceived inaccessibility. Norman explained Galloway and Southern Ayrshire Biosphere (GSA) had been involved in the process, and that biospheres are briefly mentioned in the report.⁷⁴ Similarly, Phoebe noted the extent that GSA were present in the process and Elisabeth responded, 'not to put ourselves down... it's the fact they have got more capacity than we have to be able to do that'. Speaking of the proposed model for RLUPs, Norman, reflected on how the structure would seem to 'fit the GSA model better than it would us, because that's what they are already, they are a mixture of statutory bodies'.

Given recommendations to establish between 12-15 RLUPs across Scotland, Norman and others felt it would be worth trying to engage in discussions going forward. This included inviting Hayley, an SLC representative to speak on RLUPs at WRB's webinar on 'partnerships for land management' a couple of months later. The webinar also featured speakers from NTS estates and NatureScot, designed to share learning around collaborative land management. The webinar was a chance for Norman to ask Hayley about RLUP governance, such as the scale at which partnerships would be set up. After her presentation, he commented that the Highland area would surely be too large for an RLUP and asked about how Highland Council will be involved, will they lead it? Hayley said SLC were recommending flexibility to allow areas such as Highland to subdivide into smaller areas, whilst adopting a clear national standard because 'there had to be almost a base layer in order for fairness across the whole of Scotland'. She

⁷⁴ Biospheres are mentioned as a place-based approach at a regional scale and the biosphere approach to sharing practice through networks is mentioned as useful for developing 'collective learning' around RLUPs.

clarified that whilst local authorities would likely be involved, SLC recommendations do not specify who should be the 'accountable body' for RLUPs.

Norman, explained to Hayley and others that he was concerned it was being assumed that potential accountable bodies including the biosphere are 'resourced adequately already to take on these responsibilities'. For biospheres, and WRB especially, that's 'not an option' he said, because they are 'not resourced at all'. Hayley said the implementation of RLUPs, including financing, would be for Scottish Government, rather than SLC to determine. Whilst the potential of RLUPs remained to be determined, other webinar contributors including the speakers from NTS and NatureScot described them as possible 'game changers in terms of setting up regional priorities...' and securing 'proper targeting and prioritization of public funding.' Regarding the role of WRB specifically, it was said that 'the biosphere is a great model for that, if people actually understood how it worked.' This reinforces the challenge of ambiguity associated with BRs compared with other models.

Pilot areas for the RLUPs were announced in 2021 in Scotland's two national parks Loch Lomond and the Trossachs and the Cairngorms; the South of Scotland Dumfries and Galloway and Borders area (including GSA); the northeast in Aberdeenshire; and North-West Sutherland, where there was already a partnership of landowners, conservation charities, and a UNESCO geopark working on a community visioning project.⁷⁵ Whilst too early to assess how these are working, RLUPs could successfully guide resource and development to meet local needs and deliver public goods through a governance mechanism where 'private land use can, in some measure, be subjected to local democratic control' (Hoffman 2018, p. 141).

However, lessons from other collaborative partnerships in Scotland (see Ponta et al. 2020; Peskett 2021) suggest key challenges. For example, land ownership tends to remain the decisive authority in terms of land management and there are often tensions between communities and agencies due to top-down approaches (Ponta et al.

⁷⁵ The project set out to create a vision for 2045 based on community consultation across the North-West Sutherland area.

2020). If RLUPs bring together statutory bodies already invested with specific institutional aims these could dominate the agenda compared with priorities derived from local communities. RLUPs, I would argue, could simply repackage old problems in a new skin, failing to deliver significant transformations of benefit to people and nature, whilst reproducing existing inequalities and power dynamics. RLUPs are described as ‘locally-led economic recovery’ which can make more of land for driving community resilience (SLC 2020). However, it is unclear what this will mean in practice, especially given that ‘most Scottish communities of place remain disconnected from decisions that affect them and from local land and resources, limiting their ability to self-organize and develop’ (Revell and Dinnie 2020, p. 15). The final part of the chapter will illustrate this using a case study from Applecross community to unpack the politics of land use and ownership in practice.

‘One of the Only Prerequisites of Being a Trustee is That You Don’t Live Here’

Applecross Estate⁷⁶ was owned historically by the Mackenzies for 300 years until 1857 when it was sold to the Duke of Leeds (Applecross Heritage Centre). Since 1929, it has been owned privately by the Wills (a tobacco family), who had it for three generations starting with Captain Arnold Stancomb Wills who died in 1961 and was succeeded by his son and grandson.⁷⁷ The estate became a Charitable Trust in 1975 and today focuses largely on conservation of archaeological heritage and environment, including deer management and woodland restoration. The Trust also manages holiday cottages and residential properties and is the landlord for twenty crofting townships across the peninsula.

One of the major sources of tension regarding this estate, is its governance, and community representation on the board of the Trust. The Trust is governed by a small board of individuals, none of whom live in Applecross, including the Chairperson Keith based in Edinburgh. He has been involved in the estate for over 45 years, as the Will’s

⁷⁶ See Figure 11 Chapter 4

⁷⁷ The history of the family as beneficiaries of slavery-produced tobacco (MacKinnon and MacKillop 2020) is not discussed in the Heritage Museum but has been noted in the context of debates in Bristol spurred on by Black Lives Matter and decolonising heritage.

solicitor, and helped to set up the Trust to take over ownership from the family. A campaign led by land reformer Andy Wightman, launched in 2012, targeted the Trust as a 'nepotistic clique' and called for greater democratisation. Keith, during an online interview, described this campaign as based on the 'misconception' that someone was owning 68,000 acres of land and 'not engaging'. He explained that the Wills family have completely moved out, and that the Trust is 'trying to modernise a bit'. To put this into context, a local resident said although the Trust was created in the 1970s, it was 'still very much a fiefdom... owned by King Richard as we called him'. Keith emphasised that current Trustees do not 'take anything out of the Trust' financially and do it because 'we think that the preservation of the traditional way of life is worthwhile'.

From the perspective of some local residents the lack of local representation on the Trust is problematic. One resident Patricia, explained, 'there needs to be more transparency and local control', and she cited Scottish Government advice on the importance of communities having influence over land in their local area. Whilst local representatives are sometimes invited to listen in to Trust board meetings, she said this felt like 'lip service', with 'local governance missing'. Having a community representative on the board, would enable feeding in 'local knowledge' and 'awareness of community issues'. A local resident who had attended Trust board meetings, described it as 'embarrassing' how little Trustees 'understand or know about anything in Applecross'. They described the Trust's local knowledge as 'shocking' and suggested 'one of the only prerequisites of being a Trustee is that you don't live here.'

Indeed, another resident, argued that the Trust believe living in Applecross means you are unsuitable to be a director because you are too 'emotionally' attached to the place, akin to colonial attitudes that the 'natives cannot be trusted'. In his view the Trust are reluctant to allow communities more control over land because they fear that this will lead to changes which threaten the 'character' of the area. When some locals have asked Trustees to define this special character, they felt answers were vague. I asked Keith about the special character of Applecross, and he said:

You'll know it when you see it... It brings people in, time and time again, because there are, just sort of intangibles there. It's the, well the old

family used to call it the wilderness, and the wilderness is not dead, it's an ecosystem which is unique.

The Gaelic name for Applecross is *A' Chomraich*, which means the Sanctuary, and the notions of character described by Keith, are part of conceptualisations of Applecross on the Trust website as a 'haven' away from the 'bustle and noise that many people experience on a day-to-day basis'. The spirit of Applecross is part of the tourist gaze and tends to exclude local understandings of place, particularly how to sustain the area as a living, working community. Some locals feel without development, 'the community will not survive'.

One of the central challenges between perspectives is who benefits from the Trust and its activities. Keith explained:

The Trust is quite different from private ownership, in that we're a mini sort of national trust. We are there for the public benefit, rather than for the benefit of the community. We take actually nothing out of it ourselves. It's all, for the benefit of the wider public, otherwise known as tourists [laughs].

Many trusts hold land in Scotland, often 'expressly for the benefit of the public' and there is broader support for this (Sellar 2006, p. 105). However, from the perspective of a local resident, the Trust seeing themselves as a 'quasi-national park' is troubling if this means 'their duty is to the greater visiting public and not specifically the resident population'. This was as the local explained, 'the worst of all worlds' for the community because 'under a benevolent laird, you at least get some of the scraps, the benefits of hanging onto someone's coattails whose got shitloads of money', compared with a charity aiming to promote and preserve wildness. The latter makes some local residents 'very nervous', especially in terms of directing focus towards tourism which has caused problems for local residents in recent years.⁷⁸

Despite ongoing tensions, Keith and local residents have described relations as improving over time. Part of the process of relationship building between the Trust

⁷⁸ The NC500 according to local interpretation has changed Applecross from a place in and of itself, to a place people drive through. Moreover the area suffered heavy tourist traffic during the pandemic pressuring local services managed by ACC.

and the wider community has been facilitated discussion through a new community forum, creating space for dialogue where there was none before. Keith's perspective on the forum and the impact on perceptions of the Trust locally suggested things were 'transformed completely'. He said the catalyst,

...was the removal of the family with their sort of traditional landowner aura about them. I mean they were actually quite benevolent, but the locals didn't perceive that and I'm not certain that they [the family] actually understood what the local's life was like.

The removal of the Wills family in recent years, appeared to have gone some way to disrupting local acceptance of the landowner's authority, as a local resident suggested, less people 'have the deference', and with 'King Richard' gone a 'window of opportunity' has opened for people whose families were tenant crofters under the Wills. He explained that 'indigenous' folk do not feel deference towards the new laird, because 'no one's even met him'.

However, some are critical about the extent to which the 'traditional landowner' approach has been removed, with attitudes in the Trust branded 'sexist', 'classist' and feudal. This supports McKee's (2015) argument that perceptions of feudal attitudes are part of the challenges of partnership working between 'the laird' and communities. A resident, speaking on the Trust's discourse of supporting a 'sustainable community' in Applecross, felt that this is only on 'their own terms', because they want to retain 'their current power over the community'. This is not only material power in the sense of owning land and housing but occurs through the processes that 'normalise' landowner power, including social relations and individual subject positions through which neoliberal norms about property are reproduced (Mackenzie 2013).

A resident explained how in the community, there are those with least security of tenure and those advocating alternative land uses who are opposed by a significant portion of the community 'in the middle' who support the Trust because they disagree with those at the bottom who want to see change. Alongside support for the status quo, ambivalence, and lack of interest in land are prominent in large segments of the community. A key difficulty is those at the 'bottom' are too precarious to challenge the Trust directly who are owners of their accommodation. Efforts towards 'destabilizing the hegemony of the ownership model of property' (ibid, p. 22) are stymied by

economic inequalities. Patricia explained that the ‘clear split’ in the community, is between an older generation with land, crofts and houses who have no issues with the Trust and appreciate acts of ‘estate benevolence’ (McKee 2015),⁷⁹ and ‘the other side where if you’re struggling with your housing situation, or you are trying to access land and you can’t, the landowner can seem very overpowering, and non-engaging’. The latter group are more likely to see the need for ‘rethinking property’ and reconfiguring social and material relations for more just futures (Mackenzie 2013, p. 24).

ACC is an actor that tends to advance the interests of the latter group, as a local development Trust with a vision for the ‘small (but amazing) community of Applecross to be sustainable, resilient and prosperous’ (Action Plan 2020-2025). Directors and employees of ACC have spoken of their frustration by the lack of opportunities for development that are needed for community viability and self-sufficiency and the difficulties in both working with the Trust and acquiring Trust land. Nonetheless ACC has managed to purchase small parts of the Applecross Estate through the support of the Scottish Land Fund (SLF), essential to the delivery of their strategic priorities and community land use plan. ACC also own and manage other assets such the local broadband infrastructure, petrol station, public toilets and a hydro project meeting a variety of community needs.

Regarding the possibilities opened up by such ownership, an ACC local development officer described how assets ‘allow you to develop and become stronger and viable in the future’. She said the land they had bought was offering many opportunities for the community, including those which are not yet realised. She mentioned long-term aims like moving towards a ‘greener economy’, ‘tackling the climate emergency’ and adapting to become ‘self-sufficient’ and ‘stronger communities’ with assets creating space to ‘adapt and change’. For example, the creation of new allotments and local food growing addresses the overreliance on external food sources. Documentation for

⁷⁹ ‘Estate benevolence’ can make positive contributions to local communities, such as in Applecross residents receiving free firewood, and feeling the Trust has been ‘good to us’. However, it also reproduces ‘unequal and paternalistic power structures’ and can enable avoidance to challenges of accountability (McKee 2015, p. 729).

woodlands purchase also notes that ‘community ownership of the woodland will give the community and generations to follow, permanent control of decision making about the woodland and the benefits derived from it’.

In trying to achieve their aims and address the challenges facing the community, ACC face limitations based on if and how the Trust are willing to engage. The land buyouts were on Trust terms; one site ACC were keen to buy, the Trust refused to sell. Communities can thus find it easier to take ownership of publicly owned assets, especially buildings compared with land and the Land Fund has been supporting this (Baynes 2020). For example, the public toilets were sold by Highland Council, and whilst an ACC asset in some senses, are also a financial liability and difficult to manage. Additionally, land for affordable housing was purchased not from the Trust but from NHS Highland. ACC also describe themselves as being ‘very lucky’ because they have paid roles to advance development work and navigate land purchase, whereas most communities in Wester Ross do not.

Unlike cases where communities have purchased entire estates, which might offer more radical opportunities for reconfiguring property and nature as Mackenzie (2013) suggests, ACC remain a small fish in a big pond; a pond owned by the Applecross Trust, who retain significant power to shape futures for community and landscape. Despite slowly improving relations between both parties, and small-scale disruptions of property with possibilities for creating new just futures, the sustainability of the community remains uncertain. ACC’s development officer explained that in Applecross, as elsewhere in Wester Ross, there is ‘a real danger in that a lot of communities will just kind of disappear and become these areas of just holiday homes... sort of like an empty shell in a way’. The future of biosphere communities is thus defined by the politics of land use and ownership.

WRB: Between Micro and Macro Land Politics

Although WRB directors were not directly involved with the above case study, their experiences of living in communities in the biosphere (see [Chapter 4](#)) have been similar in terms of the micropolitics of land use and ownership. Directors, often active in local groups for example, have engaged in efforts to purchase land and assets

through other community organisations including in the Gairloch and Lochcarron areas. WRB as a UNESCO organisation pursue 'neutrality' with some directors expressly rejecting a role associated with the politics of land ownership.⁸⁰ However, the kinds of facilitation between communities and landowners described in the case study, are perhaps where WRB actors could create a suitable role for themselves, offering facilitation and engagement services. In a development context, the Canadian social enterprise BR carries out such exercises as part of their 'social acceptability model'. Hence, WRB actors might work with landowners on community engagement with land use decisions and ownership transfers in a similar fashion.

Regarding the politics of land use and ownership, WRB actors are in the middle, negotiating the bottom-up (community land movements) and the top down (land ownership patterns and national legislation). Linking back to the previous chapters on the politics of scale, and the biosphere as assemblage, this suggests a negotiation of micro and macro politics which are the constellation of relations contributing to the throwtogetherness of the BR. How to pursue collaborative land management and participatory governance in this context is not straightforward. Work in this political sphere is needed to avoid persistent inaction and move towards more sustainable land uses and equitable land ownership. Similar to findings from a German BR, there is a need in Wester Ross for 'a process guided by the idea of landscape stewardship' that is place-based and participatory, bringing together multiple stakeholders (Winkler and Hauck 2019).

Property ownership became an explicit focus for WRB actors recently, when an opportunity arose to purchase a building that the Highland Council wished to release through asset transfer.⁸¹ Located in a central area of the biosphere, Phoebe noted this could be used as a meeting space among other things. This was met by positive

⁸⁰ The Wester Ross Tourism Partnership, chaired by WRB does have a remit to encourage and support local communities within a strategic regional approach to tourism infrastructure planning. This could involve acquiring property, however assets targeted are likely to be public, such as toilets, waste disposal and car parking rather than assets from the vast private estates.

⁸¹ As a community organisation, WRB would be eligible for this transfer, however it was noted that the organisation is not likely to have 'community right to buy'.

feelings from the board to investigate further. A starting point was to assess whether the local community was interested in the asset. When Phoebe confirmed that they were not, directors agreed further discussions should take place about how best to utilise the space, in collaboration with the community, and based on feasibility and liabilities. As with other issues WRB actors' negotiation of this opportunity provoked different perspectives. Some called it a 'no brainer', particularly due to the location, whilst others were cautious of buying 'the first site that comes along' and taking on financial liabilities. There was contention associated with the location because there are many other potential sites in Wester Ross that could be acquired.

No conclusion was reached on this by June 2022, with discussions ongoing. Acquiring a building in Wester Ross is arguably a positive step forward for WRB, and would solidify its existence in the region, as well as opening up opportunities for projects requiring physical space. Moreover, becoming an asset owner would give WRB actors increased organisational knowledge that could be used to support local communities across the biosphere who want to engage in a similar process, but may lack the knowledge and capacity to do so.

Conclusion

Collaborative land management, although key for BR participatory governance and addressing unsustainability, has been elusive in Wester Ross. As a community-led organisation, engaging with a plethora of private landowners, community bodies and public and charitable bodies is difficult for WRB actors. To achieve collaborative participatory governance requires negotiation of complex and sensitive socio-political conditions shaping historic and contemporary land use including private landowner power and absenteeism. These conditions are part of the complexities on the ground that must be considered in any future efforts to establish stronger forms of place-based governance or biosphere stewardship. The findings here are similar to those from a German BR where the main challenge was how to engage stakeholders across scales and integrate pre-existing societal structures into new governance structures for landscape stewardship (Winkler and Hauck 2019).

Another common finding with the situation in Wester Ross, is that ultimately, some stakeholders have more power than others, and landowners in particular tend to have the deciding influence over what happens with land (ibid). This emerged in the Applecross case study in particular where disruption of neoliberal property relations (Mackenzie 2013) is occurring in a limited way within broader efforts to achieve greater community sustainability. Moreover, the case study and the chapter broadly illustrated how community responsibility for land and sustainability is not a panacea. Although there is scope to open up alternative values, communities are operating in spaces of market failure and state retreat/transformation. This is a significant collective action problem for WRB actors, and opportunities for co-management to overcome this need to be further explored.

Whilst community organising to meet local needs can also be conceptualised more positively as mutual aid beyond the state and neoliberal capitalism, shared notions of collective interests are elusive at multiple scales in practice. This is because of tensions that play out between co-operation and competition, individual and community and public and private rights interests. This has arguably illustrated in the context of land and development how, 'ideologies of domination actually materialize in the immediate experiences of individuals' and their relationships with one another (see Portwood-Stacer 2018, p. 130). Again, this is part of the collective action problem for WRB actors and is well described in the literature. Individual interests and societal interests can diverge (Acheson 2011) and without mechanisms for good governance (see Wilkes 2022), WRB actors will struggle to address land ownership and use in the biosphere in any meaningful way.

Finally, the chapter findings suggest the politics of land use and ownership in the biosphere are no different to the politics of heritage. Breglia (2006, p. 209), in the context of Mexican cultural patrimony, found that 'private interests have consistently been allowed – and even encouraged – to territorialize and exploit heritage resources'. She argues this 'stems from a monumental ambivalence of who counts as "everybody" and as "nobody"' (ibid). National custodianship is based on 'everybody's' rights and the 'public good', whilst privatisation leaves 'nobody accountable for its future' (ibid,

pp. 9-10). Between these positions are local social actors, who face the dilemma of who should have the right to possess heritage properties (ibid).

In the Scottish context, extensive privatised land ownership constitutes the 'nobody' responsible or accountable for the future of land, whilst the 'everybody' reflects the Scottish Government and SLC narratives that land is there to serve the 'common good' and that all communities (through community empowerment) have the rights to access land and make decisions about its use. Existing between the 'nobody' and the 'everybody', is the BR, and WRB actors are in the messy middle needing to foster a place-based, collaborative approach to land use and ownership, which creates a more accountable structure for decision making, to foster sustainability at a regional scale.

Chapter 9: Conclusions: Many Alternatives for Just and Sustainable Futures

This research sought to move beyond 'common sense' nature-culture relations in the Anthropocene. Chapter 1 and 2 introduced the interdisciplinary, 'cross-world' dialogue which framed the research questions (RQs) and key literatures on nature-culture relations, heritage studies, biosphere reserves (BRs) and communities, heritage, and sustainability in the Scottish Highlands. The need to theorise nature-culture for complexity, relationality and multiplicity beyond dichotomies was brought to the fore, alongside the pursuit of more just and sustainable futures. Chapter 3 explained the critical ethnographic methodology designed to answer the RQs by engaging with local actors in Wester Ross in both discourse and practice. This chapter summarises findings for each RQ and three key contributions to knowledge; the biosphere as alternative, as assemblage and as anti-dichotomy. It then discusses implications for practice, namely the navigation of complexity in WRB governance and decision making and how to move beyond 'common sense' in Scottish politics and policy. It concludes with research limitations and future directions.

Summary of Findings

What does the BR designation mean for communities, heritage, and sustainability in Wester Ross, according to local actors?

Chapter 4 unpacked how the biosphere works as designation, organisation, and lens for place-making. The findings illustrated how the BR created a new regional scale of emphasis for communities, heritage and sustainability that local actors perceived differently to pre-existing designations of a more narrow and top-down nature. In particular, the softer boundaries of the BR were considered appealing, and the designation viewed positively as a way to create a stronger regional identity and a mechanism for community empowerment. However, local actors also explained how BR designation has not necessarily influenced current land use in the three zones, a consequence of the soft boundaries and lack of jurisdiction brought by a BR.

Chapter 4 also introduced the BR community-led governance model, the organisation Wester Ross Biosphere (WRB). Unlike designations which are driven by state or universal logics, WRB actors are adopting a place-based approach to implementing the

designation in the form of a horizontally networked rhizomatic assemblage of individuals. The combination of designation and organisation creates a lens for place-making where communities, heritage and sustainability become objects for negotiation by WRB actors in discourse and practice. For instance, across Chapters 4-8, these local actors are problematising the fragmentation of communities, unsustainable land use, unsustainable tourism, loss of traditional knowledge and skills, lack of opportunities for resilient livelihoods, landownership conditions, lack of sustainable developing planning at a regional scale, lack of resources for Gaelic in the community and the unsustainability of crofting. Hence, the BR designation gives local actors a holistic lens through which to interpret a breadth of complex nature-culture relations. This contrasts with those BRs cited in the research literature that predominantly focus on conservation and reproduce the concept-reality gap by failing to manage for the whole site.

Although WRB actors embrace the BR designation as a way to bring together conservation and development, special and degraded, and heritage and sustainability, this requires ongoing negotiation to overcome the nature-culture dichotomy. Local actors outside of WRB, if they are aware of the BR at all, can interpret the designation more narrowly, as environmentally or tourism focused. There have also been critiques of the pace of change of WRB, which some interpret as a talking shop. In this sense, what the BR designation and organisation mean for communities, heritage and sustainability are contested among different local actors, some of whom will not understand or see value in the model. Such lack of awareness and misperceptions are also frequently identified in research as a challenge for BRs.

These findings for RQ one convey a rich qualitative understanding of how the UNESCO biosphere concept has been applied and interpreted locally by actors involved in the BR and beyond, addressing gaps in the literature on Scottish BRs and of community-led governance which is unique in the World Network of BRs. They show that there are many opportunities to strengthen place-based governance and collective action in the Wester Ross context, illustrating the complexities and challenges for a community-led model in practice.

How are Wester Ross Biosphere (WRB) actors negotiating and contesting different discourses and practices of nature-culture?

Chapter 5 focused on how WRB actors negotiate and contest different discourses and practices of nature-culture. It highlighted the conceptual integration of natural and cultural heritage, and a practical distinction in the BR working groups. Although a practice distinction reflects divergent interests and expertise, it remained possible to cross the nature-culture divide because WRB actors drew from place-based experiences rather than narrower domain expertise. Moreover, WRB actors are conscious of the value of the BR model relating to the blending of the natural and cultural. Although for some this is challenging to communicate. The chapter also indicated that WRB actors are overcoming the narrative tension between innovation and conservation, by conceptualising change as relevant to addressing (un)sustainability and as necessary for cultural heritage viability. This emphasis on managing change is a conceptual approach that other BRs could learn from to overcome tensions between development and conservation agendas.

Across Chapters 5 and 6, WRB actors were drawing on the endangerment sensibility in their discussions of the value associated with particular forms of natural and cultural heritage at risk. Local actors are also practicing different forms of nostalgia regarding both the desire to remember lost pasts, and the desire to restore lost practices. Whilst this does not differ significantly from other contexts, the negotiations also acted as a way to tease out the importance of how heritage-making practices are carried out, which are directly linked to the BR participatory governance ethos and the community-led WRB model. The kinds of practices that actors sought to implement, whilst aligning with notions of heritage-making practices, were also about creating new social relations, transmitting place-based knowledges and giving local communities power over their own heritage futures. However, this was not always possible to achieve in practice, for WRB actors, especially when working in projects and contexts not of their own making.

WRB actors across a multitude of areas were negotiating nature-culture in ways that bring out complexity, without always finding a path forward. Although solutions and actions could be elusive, such negotiations were actively shaping the identity of the

BR, including emphasis on developing the unique voice of the organisation. This was especially prominent as WRB actors engaged with external agendas and actors and considered how they wished to be perceived by communities and wider stakeholders. A reoccurring theme was the pursuit of neutrality associated with UNESCO status, which was framed as desirable for inclusion. This led some actors to distance WRB from overly political subject matters and campaigning, in favour of practical solutions. This was about the desire to avoid alienating people in local communities and aligning with the UNESCO BR ethos. WRB actors were thus often more overt in a personal capacity when it came to challenging particular 'common sense' discourses of nature-culture than the organisation as a whole. On certain issues difficult to work with in practice, such as crofting and Gaelic, both sensitive and political, actions to address loss and unsustainability are lacking despite the importance of each in WRB literature and to certain actors.

The findings regarding the scope and nature of WRB actors' negotiations, reinforce the conclusion that a major issue is the aforementioned lack of collective action. This is not for lack of recognition of the issues that need to be addressed, however tackling unsustainability in the biosphere requires a stronger form of place-based governance that helps to create conditions for managing common resources in the region through locally based, bottom-up decision making.

In what ways do the politics of scale, governance and land ownership influence communities, heritage and sustainability in Wester Ross and WRB actors?

RQ three was answered in Chapters 7 and 8 which unpacked the politics of scale, governance and landownership relevant to communities, heritage and sustainability. Chapter 7 focused on what scale does in practice in relation to the BR as a multi-scalar governance model, showing how WRB actors can be guided by universal logics of solidarity and responsibility, and local and regional priorities in ways that make space for both. This was part of the negotiations that are inherent to being a community-led, regional BR implemented in a national context within a global network. The WNBR itself is a space where this is negotiated as BRs can share learning without falling into a one-size-fits-all mindset. Hence, what biosphere governance looks like in practice is

always shaped by conditions on the ground and specific relationships between stakeholders at different scales.

The politics of scale was part of how WRB actors are influenced through relations with key regional and national stakeholders in conservation and development domains. The findings drew attention to the scalar tensions associated with enacting sustainable development at a regional scale in the Highlands, and funding community-led approaches to conservation in a national context. Across both domains, WRB actors were facing challenges to convince other stakeholders that their scale of working, methods and process were valuable and necessary. Currently, both development and conservation are carried out in separate domains, and in ways that WRB actors see as lacking for communities, heritage and sustainability in Wester Ross.

As was argued for crofting, these findings reiterate that more generally there is a need to move beyond the reification of scales towards models that are polycentric and multi-scalar, allowing communities in the BR and WRB actors to work productively with other stakeholders towards more sustainable futures. However, the current emphasis on the introduction of new institutional models, such as national parks and regional land use partnerships could diminish the potential of the BR by adding new layers of bureaucratic decision-making to existing land use and ownership challenges.

On the politics of land use and ownership these were shown to have a significant influence over communities, heritage and sustainability in Wester Ross, and for the pursuit of BR collaborative governance. The findings showed that WRB actors have few working relationships with landowners, a heterogenous group that is difficult to engage. The BR's lack of influence over land use is therefore a specific challenge for regional sustainability and was also relevant in terms of conservation landscapes as discussed in Chapter 4. WRB actors exist between the macro politics of land ownership in Scotland including the vast private estates of the region, and the complex micropolitics of community empowerment and land ownership. As above, WRB actors will need to find ways to work in a polycentric, multi-scalar context that delivers collective action through biosphere stewardship.

Communities can be empowered to deliver sustainable development through the purchase of land and assets, but this can also be seen as a burden in the broader political context of state retreat and market failure. Although in other parts of Scotland research points to the disruption of 'common sense' property norms, this was happening in a limited way in Wester Ross with landowner power having a significant effect on possibilities for community sustainability. For local actors, the community empowerment agenda is not simply a matter of access to land but connects with the broader challenge of ensuring that communities can be maintained in this sparsely populated region of the Highlands. Hence, my findings add weight to well established thinking that ownership of land by communities is not a panacea for achieving sustainable governance and for supporting local people to live well in rural Scotland.

There was little consensus on the responsibility for, and desirability of, solutions around managing land and assets more sustainably and equitably, including in crofting. This reflects the complex negotiation of individual-collective and public-private interests. The divergence between interests is an ongoing challenge for collective forms of action through the BR. Whilst new governance models such as national parks and regional land use partnerships are being proposed at a national level for better land use decision making and to balance such interests, WRB's community-led model is marginalised as a mechanism for improving the overall approach in Scotland to governance of land and resources. WRB actors are aware of this issue and are taking steps to advocate for the value of the BR model. Within Scotland, BRs are not equally valued, seen in the disparity of public funding between the two BRs in the North and South of the country. Tackling this regional spatial injustice, and adequately funding WRB must be a priority action. It is essential to enable communities of a geographically deprived area to create more sustainable regional futures.

How might alternative approaches create opportunities to achieve more just and sustainable futures?

RQ 4 was addressed across Chapters 4-8. Throughout my critical ethnographic narrative, I identified the specific discourses and practices that challenge 'common sense' and bring alternative approaches to the fore. This includes those of my participants, those arising out of my observations, and those which are my own

interpretations of where alternatives could be articulated relevant to the context under discussion. In Chapter 7, I emphasised space for degrowth narratives, and in Chapter 5, biocultural heritage, as alternative approaches needed for more just and sustainable futures. However, a key finding was that the BR itself was perceived locally as an alternative to conservation designations that displace local imaginaries in Chapter 4. In Chapter 7, it became apparent WRB could act as an alternative model of multi-scalar governance. Bringing these threads together leads to the first of my three key contributions, biosphere as alternative.

Biosphere as Alternative

Describing possibilities for moving beyond existing approaches in the Global North Wichterich (2015, p.83) argues ‘there are many alternatives’ for practices and development paths. A key issue for sustainability is moving beyond ‘common sense’ economic growth which is embedded in top-down governance arrangements but ‘out of sync’ with the needs of people and nature in the Anthropocene (Schmid et al. 2021, p. 155). In this context, civil society movements are working towards more socially, economically and environmentally just and sustainable relations (ibid).

WRB is one such movement driven by the volunteer efforts of local communities. The BR as an alternative conveys how the designation is bringing together local, regional, national and global in multi-scalar governance for connecting people and nature. Wilkes (2022) has characterised BRs as working in the ‘messy middle’, a useful term to describe the positionality of WRB actors. This messy middle can be ambiguous, and actors are cautious in how alternatives are negotiated and contested and whether to pursue them in practice, seeking to build practical solutions rather than participate in political campaigning (see [Chapter 5](#)).

To make sense of the many scenarios that illustrate the plurality of alternatives, it is helpful to use Fuller and Jonas’ (2003) typology of institutions as ‘additional’, ‘substitute’ and ‘oppositional’ alternatives. Schmid et al. (2021, p. 155) argue that this heuristic is useful to examine ‘alternative economic and political spaces created by community initiatives’ and I extend this to alternative nature-culture relations. The additional-alternative denotes activities that exist alongside and do not threaten

hegemonic institutions. The substitute-alternative replaces established relations, especially when the hegemonic has failed to provide for specific groups, and the oppositional-alternative challenges the hegemonic with 'defiant intent' (ibid). WRB actors have enacted all three types of alternatives in the negotiation and contestation of nature-culture relations both implicitly or explicitly.

WRB actors employed 'additional-alternatives' when seeking to partner with NatureScot and Highlands and Islands Enterprise in domains of conservation and development on activities that are not a threat to existing institutional agendas. Additionally, WRB actors' promotion of everyday and marginalised forms of local and regional heritage, knowledge and skills added to those heritages already valued nationally. For example, emphasising intangible cultural heritage can broaden what and how heritage is conserved without directly challenging the authorised heritage discourse (Robertson 2018).

Additionality was also implicitly part of biosphere zoning (see [Chapter 4](#)), where zones of human habitation were added to pre-existing spaces of 'wild' nature, which were not fundamentally challenged in the designation ordering of nature-culture relations. This is part of the BR 'mille-feuille' effect, where the designation builds on, rather than challenges, the logic of existing protected areas.

Although some of the above examples might also be characterised as 'substitutes', there were more explicit examples where WRB actors actively sought to replace current hegemonic relations in spaces of state or market failure. For example, advocating for a sustainable development plan for Wester Ross to address the gap left by hegemonic institutions that do not find the biosphere area territorially significant. In Chapter 4, WRB actors tried to replace current relations of unsustainable tourism (not being addressed by public or private bodies) and set up the Wester Ross Tourism Partnership to achieve this.

Substitutes also emerged as WRB actors put forward contrasting narratives to the 'common sense' of growth and profitability, advocating for sustainability and responsibility, and argued good places to visit must first be good places to live. The alternative-substitute is also about action out of necessity, and local communities

engaged in this by entering spaces of state retreat and market failure to meet local development needs (see [Chapter 8](#)).

Oppositional-alternatives emerged in Chapter 5 when some WRB actors challenged the turning wheel of colonisation and the exclusion of communities from decisions about land. Such discourses countered the hegemony of the nature-culture dichotomy and current power relations. In Chapter 7, defiant intent emerged as some WRB actors took Brexit and Covid-19 as an impetus to challenge food systems and propose alternatives. Similarly in Chapter 4 and 5, WRB actors problematised the lack of control that local communities have over planning, conditions of landownership, economic dependencies, and unsustainability. Such problematisation tends to be about opening up possibilities for alternative place trajectories which implicitly work against hegemonic structures and discourses.

The idea of a BR as an alternative to common sense conservation is an important contribution to the literature discussed in Chapter 2 on BRs. Whilst it is recognised that BRs adapt to their specific circumstances, it is not always made explicit how these different forms can reproduce, challenge, or replace existing nature-culture relations. Alongside the broader acknowledgement that BRs adapt to context and the accepted concept-reality gap, it should also be recognised that BRs always engage action that is situated on a spectrum from common sense hegemonic to counter hegemonic. Where BRs sit affects an array of existing power relationships, and the ability (and indeed desire) of actors involved to move beyond the common sense. Power relations are embedded in BR governance structures and discourses and practices for heritage and place-making.

My pilot study in the Isle of Man, concluded that BRs can reproduce the status quo or be instigators of social change (Russell 2022). Combined with the above, my findings in this thesis lead me to the conclusion that if BRs are to be seen as a useful tool for moving towards more sustainable and just futures, and as an 'alternative' to the status quo, then the idea of BR neutrality must be abandoned. WRB actors have shown their desire to use the designation as a mechanism for socio-political change and must move beyond problematisation of the common sense towards forms of collective action that make new futures a reality.

The biosphere as alternative, enacting multiple forms of additional, substitute and oppositional, is part of the complexity of the biosphere as a rhizomatic assemblage. It is an outcome of the emergent properties when WRB actors come together in horizontal networks of decision making, working *through* rather than on behalf of communities and working across scales with a relational approach to nature and culture. Hence, WRB as an alternative is also non-hegemonic, rather than counter-hegemonic, which brings me to the second major contribution of the thesis, biosphere as assemblage.

Biosphere as Assemblage

I have shown in this thesis how WRB exists as a rhizomatic assemblage; with 'acentered and non-hierarchical' elements linking 'horizontally on an equal footing' (Purcell 2012, p. 520). The biosphere is, as Deleuze and Guattari (1987) said of assemblages, 'constantly opening up to new lines of flight, new becomings' (Anderson and MacFarlane 2011, p. 126). Just as there can be overlapping forms of 'alternative', different assemblages can hybridise. The rhizomic biosphere assemblage interacts with what Deleuze and Guattari (1987) called 'arborescent assemblages' which are more rigid and hierarchical, acting as 'striating forces' (Horowitz 2016, p. 170). Rhizomes are part of smooth space with 'infinite possible trajectories', whereas striated space is segmented and controlled (ibid, p. 169).

Chapter 7 showed in particular how such striating forces exist in conservation and development in Scotland. For example, actors like Highlands and Islands Enterprise, NatureScot and National Trust for Scotland, operate in ways which are more territorialised and coded, characterised by bureaucracy and top-down decision making. In contrast, the biosphere rhizome is looser and more flexible. Chapter 8 also illustrated how the biosphere assemblage exists between the spaces of top-down structural land-owning power and bottom-up community movements.

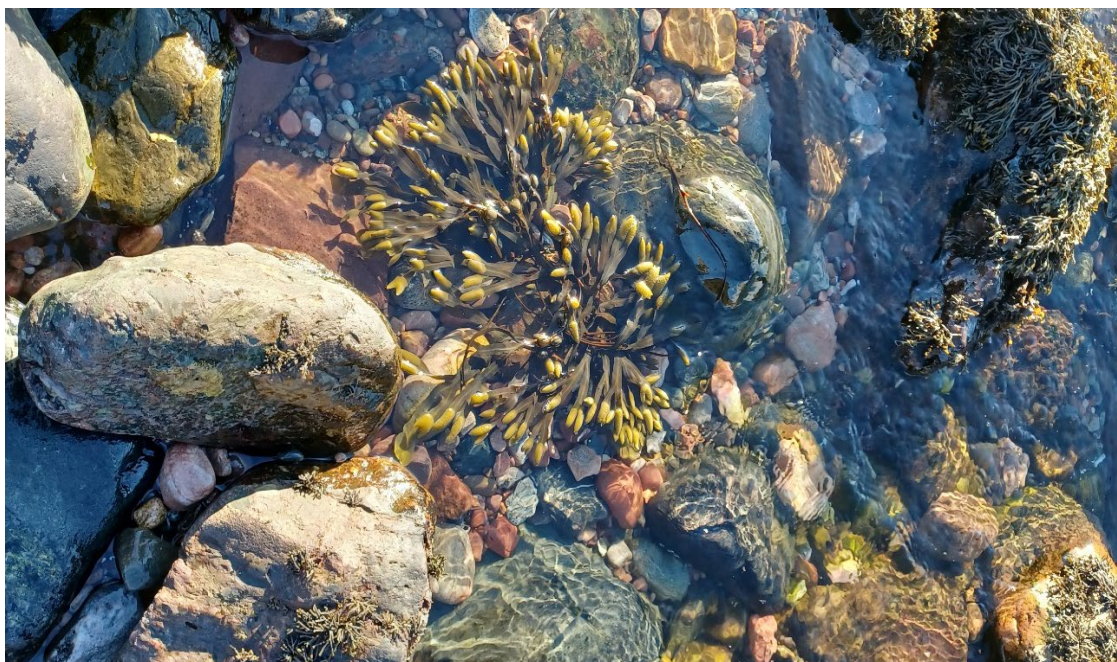


Figure 41 Seaweed on the Beach in Gairloch.

I captured Figure 41 in Gairloch during my final visit to Wester Ross. Understanding the biosphere as an assemblage, I often conceptualised WRB as the seaweed in the centre, growing in multiple directions as a rhizome. This imagery adds to understanding WRB positionality in a wider, changing environment. Although growing in multiple directions in the (currently) smooth water, free to grow and expand, there are also more rigid larger rocks, symbolic of relatively unchanging actors and their associated discourses and practices.

WRB can hybridise with these, as shown where seaweed branches interact with rocks, or they may have little to no contact at all. The smaller rocks represent the multiple communities of place in the biosphere and WRB actors, members of these communities, are anchored to the same base but have their own distinctive identity working across this multiplicity. The sunlight provides the seaweed with food for growth however this could easily be clouded over, symbolic of how the BR is supported or hindered by a wider national funding and legislative environment. Although this image is fixed, its features are continually changing. Both micro and macro conditions affect the viability of the seaweed in this particular location at this particular time. In this thesis I have captured a snapshot of WRB actors in space and time, just as I have captured this image. There are forces beyond the frame too, that

will influence this changing complexity including planetary processes and the uncertain futures of the Anthropocene.

Based on the literatures included in Chapter 2 of this research, no studies have used assemblage thinking as a way to understand BRs. My findings show the value of such theory for moving beyond the taken for granted institutional frameworks to analyse BR governance. By using assemblage theory as part of my analysis of Wester Ross, I open up new possibilities for arts and humanities scholars to engage with BRs. I have started to address the dearth in creative and critical approaches in the literature on BRs and created more space for analysis of BRs using flat ontologies, considering BRs as always 'becoming'. Approaches following 'new materialism', recognising the agency of nature (see St Pierre et al. 2016) can open up new analyses and research directions in Wester Ross, working with local communities. As Barker and Pickerill (2020) have argued, land and sea are active agents in the making of beings and knowledge, and more diverse voices are needed to decentre the academic as a source of knowledge production.

As useful as assemblage thinking is, it can often leave the question of power largely untouched, which is a critique of post-modern approaches emphasising horizontal, networked relations. To compensate for this, I have drawn on a more critical anarchist lens, following others who bring Deleuze and Guattari into anarchist thinking (see Purcell 2012; Shantz 2013; Springer 2014a). Considering the biosphere as an assemblage through an anarchist lens, can draw attention to notions of working across state and non-state space. The former is characterised by the presence of 'permanent hierarchies' which create social order, and the latter denote spaces of active organising to 'prevent the emergence of hierarchical order' (Flexner 2018, p. 255). This has more commonly been discussed in the context of archaeology of social organisation (see Flexner 2014, 2018), but can also apply to WRB actors and BRs, especially following from my conclusions above about the BR as alternative to neoliberal common sense.

There is no either/or dichotomy between state and non-state space (ibid) and this thesis also shows how the biosphere hybridises across such spaces. What is particularly interesting here, is that the WRB assemblage has emergent properties of the kinds normally analysed across different kinds of assemblage. Horowitz (2016) describes an encounter between UNESCO as an arborescent assemblage and the rhizomic

assemblage of activists in New Caledonia. He argues that in this context, hybridisation through alliances can result in disempowerment of the rhizome. However, WRB is a hybridisation of UNESCO and community action, producing a complex form of multi-scalar positionality that is 'both/and' and which must constantly be negotiated, as was shown at the local/global nexus in Chapter 7. This is potentially a unique example that shows how the spaces of 'creative friction' between local and global (Harrison 2013) can move beyond binary ideas of (counter) hegemonic power.

The fact that the BR as hybrid assemblage has properties that are emergent, also makes relevant anarchist thinking which suggests it is possible to build a new society in the shell of the old (Ince 2012). This is a form of prefigurative politics that involves working non-hegemonically and horizontally to craft alternatives in the here and now, creating new futures in the present beyond the state and capitalism (see Maeckelbergh 2011; Yates 2015). This is about more than 'imagining' a new future; it is also about 'enacting elements of the desired future' (Pellizzoni 2021, p. 365). Importantly, this is not just what is enacted, but how it is enacted and by whom, because anarchist prefigurative politics requires that the means reflect ends (Wigger 2016). Hierarchical social relationships, even if in the pursuit of laudable ends like sustainability, will produce problematic hierarchical ends. Anarchists thus seek to create 'inclusive and equitable forms of organisations' and 'social relations without coercion' or domination (ibid, p. 135).

As shown across the thesis, the interactions of WRB actors allow space for multiplicity and emergence which invokes elements of prefiguration and suggests 'no becoming-majoritarian' (Deleuze and Guattari 1987, p. 106). WRB actors often seek ways of working similar to Purcell's (2012, p. 522) 'networks of equivalence'. Rather than seek to achieve 'consistency and resolve tension by excluding perspectives that do not fit', networks of equivalence offer a 'both/and' approach 'to include multiple opposing perspectives and provoke productive relations among them.' Whilst more commonly analysed in political social movements negotiating different interests, my research shows this also applies in understanding how a community-led UNESCO BR approaches nature-culture relations.

Biosphere as Anti-Dichotomy

A key contribution of this thesis has been to illustrate the complexity of nature-culture relations in a Scottish biosphere, in discourse and practice. BRs are a model designed to overcome the human-nature dichotomy and create connections between people and nature in their respective areas. The findings of this thesis highlighted the breadth of what this means, and the ways in which this occurs in Wester Ross, an under researched area of Scotland, rich in cultural heritage but historically constructed as wilderness. Actors in Wester Ross, on the whole, recognise the value of the designation as the bringing together of nature and culture, and WRB actors embrace this as part of how they distinguish themselves from other designations.

Academic literatures emphasise the possibilities for overcoming the nature-culture dichotomy through the connectivity ontologies of indigenous peoples (Harrison 2015; Barker and Pickerill 2020). This aligns well with my findings around Gaelic ontologies, where specific ways of knowing and being create explicit forms of relationality and understanding of place. However, I would also argue that there is a broader sense in which diverse actors in the Scottish Highlands are overcoming the nature-culture dichotomy. The BR model has prompted an explicit recognition of the idea that people have been managing landscapes over time, and that this is valuable, not only in terms of understanding past and present nature-culture relations, but in how the associated knowledges, practices, and skills, can be part of a future-oriented approach to sustainability which embraces change. However, a challenge for WRB actors is that these elements of nature-culture relations fall between the cracks of a dichotomised policy landscape, which has historically prioritised conservation of materiality, rather than relationality, complexity and intangibility.

The biosphere in Wester Ross has huge potential as a place-based approach to sustainability and heritage-making, and it is not only about what is conserved and why, but *how* things are done. The value of the BR lies in its emphasis on participatory methods which are much needed in the ways that people and nature are governed in Scotland, moving beyond hierarchies of decision making. The BR model embraces multiplicity and complexity and creates space to negotiate difference which is significant given the history of tension and polarisation across sectors and interests. Differing from many other models and ways of thinking, the BR brings together nature-

culture, tangible-intangible, conservation-development and local-global. This overwhelming sense of the BR in Wester Ross as overcoming dichotomous thinking arguably cannot be separated from the fact that the designation is community-led, and that actors involved in the decision-making, view nature-culture relations from within place, rather than as external institutional actors. However, the impact of this model in achieving specific objectives for the region, is limited in practice by a lack of organisational resource and capacity, arguably because of this anti-dichotomous nature where BR projects rarely sit neatly within one particular domain of policy in Scotland.

The value of the BR as a model for complex nature-culture relations is enhanced through learning within the World Network of BRs (WNBR). The WNBR is a rich resource of knowledge about sustainability in practice, and from the perspective of a cross-world dialogue, there is scope for even greater international connectivity to inspire actions towards more just and sustainable futures. Based on existing interactions, cosmopolitanism and solidarity can emerge whilst pursuing local modes of working in specific regions and national contexts. Importantly, this shows that forms of planetary consciousness (universalisms) do not have to displace local and regional spatial justice (particulars). This is an important contribution to ongoing debates in the literature where UNESCO designations in particular, including BRs and World Heritage Sites, have been implemented in ways which place the universal/global in dichotomy with, and as marginalising the particular/local.

Implications for Politics, Policy and Practice

Although the rhizomic nature of the BR assemblage can be interpreted as a positive comparison to overly coded and rigid institutionalised thinking, there are some challenging implications for how this works in practice. Towards the end of the research, it became increasingly apparent that new directors struggled to navigate the complexity and relationality of the biosphere. Issues emerged around decision making between particular working groups, staff and the board, and broader discussions questioned the effectiveness of organisational mechanisms. Moreover, when consultants were brought in to develop a communications strategy, some directors

found it challenging to communicate core visions, purposes and priorities for the organisation.

Biosphere Governance and Decision Making: Navigating Complexity

To help WRB actors navigate complexity, it could be useful to implement in practice something akin to Simmons' (2018) 'map' and 'compass', which are tools to navigate complexity and change in the policy process. The compass refers to the kinds of beliefs held by policymakers that inform their decisions, similar in many respects to how personal interests and motivations for joining the biosphere shape directors' perceptions. The 'map' element is about orienting oneself in the broader context and having the necessary information that allows space for new possibilities and understandings, whilst making sense of complexity to enable decision making.

Lack of orientation is certainly an issue for directors faced with the multiple interconnected domains and scales of the biosphere. It was recently also agreed among the board, that they need to improve bi-directional flows of information, especially with community councils. It would therefore be useful for such a 'map' to integrate local contexts and priorities, regional strategic aims, national stakeholder relations and priorities and global UNESCO agendas. Whilst this thesis goes some way towards mapping multi-scalar complexity, a practical resource to guide directors would be better placed to help address my finding that complexity causes difficulties for effective decision making and is a barrier to action.

Such a resource should not reduce complexity but should help WRB actors to hone decision-making strategies that align with the core BR ethos. Key learning can be found in research of governance and decision making in organisations with broader social, environmental and economic objectives such as social enterprises and co-operatives. WRB actors could also implement such a model themselves, increasing focus beyond what decisions are made to include who is making them. A charitable, membership model has been adopted, but members are distant from core organisational activities, not particularly engaged in governance. Increasing participation of members would be a positive step forward. This is important because as Simmons et al. (2015, p. 39) suggest, in the context of agricultural co-operatives in Scotland, addressing wicked

problems and achieving organisational resilience requires going beyond board and management to pursue a 'broad and deep alliance between all of the people who should be making decisions and shaping the outcomes of their co-operative.' This aligns well with WRB actors' ambitions and the BR participatory model.

Another kind of 'map' I cited throughout this thesis is biocultural heritage (BCH). This model could be used for navigating the complexity of nature-culture relations. At the level of governance, articulating connections across natural and cultural heritage and across the BR remit for conservation and development would help orient WRB actors' decision making and prioritise activities and funding where most needed. This could be included in work towards WRB's new strategic plan due in 2023. Additionally, a workshop with the two English BRs using BCH to guide tourism practice would help to unpack the value of the model in UK practice. Information on this work is included as a case study in my report on BCH in the UK, produced during an internship alongside this PhD.

It also contains a marine case study in Wester Ross and an agricultural case study from Dyfi biosphere in Wales as examples of BCH. The findings outline a BCH model for the UK which could be applied in Wester Ross BR to help navigate complexity. In so doing, it must be understood there are no homogenous communities or BCH, rather a 'spectrum' of practices and 'different places and different communities can be at multiple points on the spectrum simultaneously related to different practices' (Russell 2021b, p. 115). This spectrum avoids reproducing the nature-culture dichotomy, accommodates complexity and multiplicity and embraces change over time.

This thesis reinforces the value of the BCH approach. Given the findings herein regarding the unsustainability of specific BCH in Wester Ross and the ambitions of actors to restore and revive certain practices, I would argue that it would be beneficial to drive BCH work further forward. For example, the BCH spectrum (see Figure 42) could help to map conditions of BCH in the biosphere and create impetus to prioritise action and decision-making. A BCH lens could also be applied in other Scottish contexts, drawing not only on my own research, but other BCH frameworks as relevant (see Swiderska and Argumedo 2017; Lindholm and Ekblom 2019).

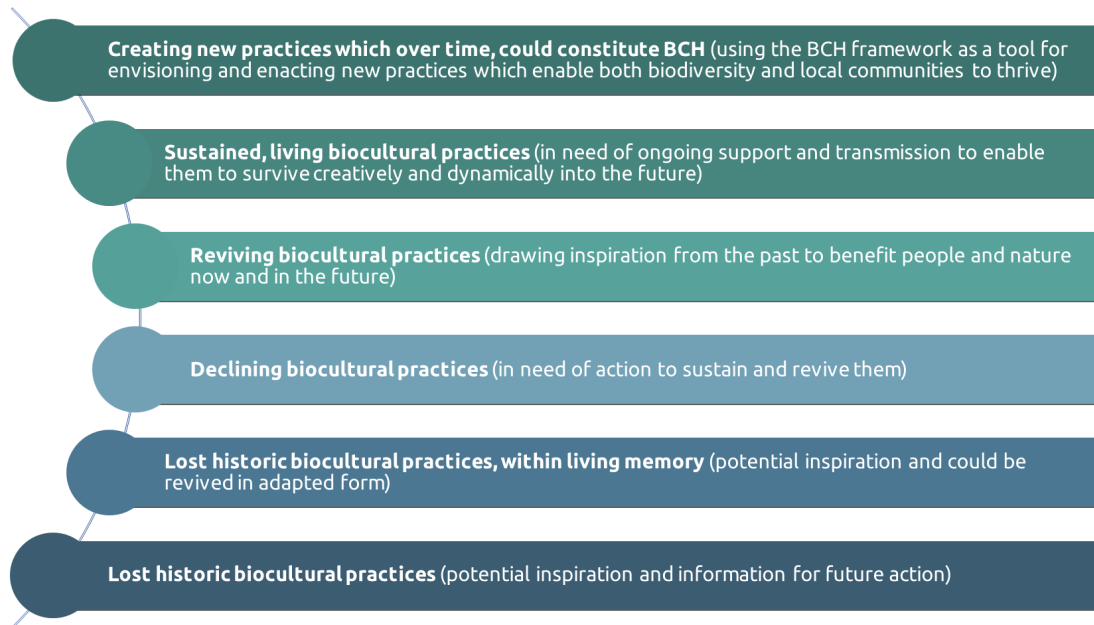


Figure 42 Biocultural Heritage 'Spectrum' (Russell 2021b)

Considering the overall findings from this research, one of the main differences in how BCH might be applied in Wester Ross compared with in contexts globally, is that participatory governance will be closer in nature to co-management than to the strengthening of commons and customary systems as found in BCHTs (Swiderska et al. 2020). Co-management is critiqued in some indigenous contexts (see Grey and Kuokkanen 2019) and BCH relies on the notion of 'collective, rather than individual rights, within a framework of heritage rather than property' (Swiderska 2009, p. 339). Although historical customary land management through collective rights such as *dùthchas* are relevant in Wester Ross, they are significantly weakened to the point of dysfunctional.

Creating new commons and relations of commoning will be necessary, as has been happening elsewhere (see Federici 2018; Pickerill 2016; Rodgers and Mackay 2018; Shantz 2013) to move beyond the dominance of individual and private property paradigms in Scotland. However, given WRB actors pursuit of neutrality, a co-management approach which aligns with the BR ethos (see Baird et al. 2018; Plummer et al. 2017; Schultz et al. 2011) is likely to be more appropriate. Any collaborative and participatory approach to land or resource management will be a positive step forward. WRB actors could consider how governance of CPRs in BRs elsewhere in the

UK (such as fisheries in the Isle of Man) and internationally (see Chapter 2) could be used to support new forms of community resource management. Here, unlike indigenous communities who may be the direct users of resources, WRB actors as members of a civil society organisation, are more likely to play a facilitator or bridging role, akin to that discussed by Van Laerhoven and Barnes (2019).

Moving Beyond the Politics of 'Common Sense'

One of the practice implications of the research is the undervaluing of, and lack of awareness of WRB as a model for community-led sustainability in the Highlands of Scotland. The organisation has been consistently undermined in its efforts due to the lack of financial investment. Although WRB has achieved much while operating within the confines of extremely limited resources, on a volunteer basis, and in a sparsely populated area, their potential is unnecessarily limited by this lack of investment. WRB actors have discussed the need to advocate for the value of their community-driven model to national government and politicians. WRB's new communications plan could help form a broader political engagement strategy, which should garner funding and resources, increasing core capacity and ability to deliver projects.

National government and public bodies must recognise the merits of community governance models moving beyond community empowerment in discourse to decentralise power and resources in practice. WRB as a community BR have not been offered the same financial support as the partnership model in Galloway and Southern Ayrshire in the South of Scotland. For a truly effective approach to sustainable development nationally and to overcome regional spatial injustice, the only UNESCO BR in the Highlands should be given equal opportunity alongside its lowland neighbour.

This, and other research has shown that community alternatives can only go so far, and there must also be policies that address structural challenges (Kallis 2018). Although community action includes positive relations of mutual aid which can and should operate beyond the state and capitalism (Springer 2020; Shantz 2013), policies addressing problems at higher scales are still needed. This includes moving beyond contextual myopia in community development and resilience thinking (DeFilippis et al.

2010) and beyond the 'common sense' of economic growth. In Scotland calls are being made for transformational resilience 'building alternatives to current high-carbon, neo-liberal, capitalist and consumerist orthodoxy from the bottom up' (Revell and Dinnie 2020, p. 3).

Internationally, alternative economics such as solidarity economies are also being pursued as a 'way of producing, exchanging and consuming values (produced directly by the people involved)' (Shantz 2013, p. 7). As Newman and Clarke (2015, p. 109) suggest, state agencies should 'seek out and promote alternatives to the current culture of 'growth'; and invest in a range of forms of social value'. Moreover, 'state intervention must try to reverse the subordination of social and political life to the economy, and instead pose the question of how the economy might serve collective wellbeing now and in the future' (ibid). The upcoming Wellbeing and Sustainable Development Bill for Scotland is an opportunity to solidify the move beyond economic growth as the central organising principle of society. This was argued in a research paper I co-produced to inform the bill (Davies et al. 2022) and the need for a Scottish politics and policy beyond 'common sense' also emerged clearly in this thesis.

This includes moving towards greater policy coherence for sustainable development (PCSD). Crofting and Gaelic for example are agricultural and linguistic issues respectively and dealt with separately at a national level. Other dichotomies of tangible and intangible and conservation and development are also problematic. Working towards PCSD is about better recognising interconnection and complexity in discourse, such as adding a new SDG 18 on biocultural heritage (Poole 2018), but it also requires empowering implementation of such approaches in practice. Communities and BCH are an important pathway to sustainability and current policies and practices are absent of this thinking.

Learning on this from within the Wester Ross BR and the WNBR is being missed. I have partially addressed this in my thesis, and I encourage policy makers to go beyond the usual institutionally driven models to engage the harder to reach. Inspiration and innovation beyond 'common sense' can be found in the BR multi-scalar governance model for connecting people and nature that takes a myriad of forms globally. In the

Northwest Highlands of Scotland, the community-driven approach to regional sustainability is especially novel and worth supporting.

Research Limitations and Future Directions

The Covid-19 pandemic prevented in-person fieldwork which contributed to key research limitations. Firstly, a loss of informal interaction with older local residents including crofters and Gaelic speakers; an original target group. Future research could engage with these populations to better understand local interpretations of nature-culture relations. How might crofters and Gaelic speakers draw on or contradict ideas of *dùthchas* as an ethical relationship to land? What role can the biosphere play in supporting this? Ideally research should be carried out by a Gaelic speaker and involve WRB's Gaelic Development Officer.

A second limitation was loss of in-person collaborative workshop activities, especially beyond-text methodologies such as photovoice and interactive mapping. Countermapping can be 'constitutive of an imaginary of place' and a way for communities to reclaim space and resources (Martin 2009, p. 494). Spatial mapping as a way to bring to life local narratives of place would allow further exploration of the living landscapes of the biosphere through its people and culture. This is important given 'common sense' constructions of Highland regions as empty and natural, and dominant conceptions of static and timeless space (Campbell et al. 2019). The power of such discourses emerged strongly in the pandemic, as certain actors encouraged people to flee highly populated areas, to find safety and solitude in the 'wild' of the Highlands.

A subject for future research that builds on this study could focus on WRB's research and education arm, which is currently underdeveloped in the sense of how a BR can operate as a site for sustainability learning and research. Current activities are largely youth work carried out by one volunteer, and research tends to be at an arm's length from WRB actors. Firstly, activity and research are needed to support youth participation in the BR as an important stakeholder group for sustainability governance (Barraclough et al. 2021). Current research of young stakeholders' perceptions and participation within BRs generally is lacking (ibid). Secondly, participatory research is

needed around WRB's research function. Any research *of* the biosphere should be carried out in collaboration *with* the biosphere and feed into their strategic priorities. Currently opportunities for this are ad hoc. There are also research gaps related to Wester Ross landscapes and seascapes and work is needed to map current knowledge and enable future researchers to contribute to advancing WRB aims, such as becoming a priority site for climate change research.

Building on the findings herein, future comparative BR research could include WRB to highlight the merits and challenges of a community-led approach compared to other governance models. Comparison of BR approaches to collaborative land management in different land ownership conditions would also be useful. There is some literature as discussed in Chapter 2 that touches on matters of landownership, but no studies have yet to focus on this element comparatively as a critical factor in possibilities for biosphere stewardship and governance. Finally, given disparity among UK biospheres, research of local and national governments and public and regional bodies could map current perceptions of BRs. This would help BRs like WRB to tailor communications to key political actors to garner more support for activities that contribute solutions to pressing sustainability challenges.

Thesis Conclusion

Awareness of planetary scale change caused by human activity is a defining characteristic of the 21st century and of much concern to researchers of nature-culture relations. In the Anthropocene we are failing to live within the limits of planetary boundaries and to value culture and heritage as pathways to sustainability. This thesis sought to examine how the UNESCO Biosphere Reserve in Wester Ross might act as a mechanism to overcome the nature-culture dichotomy and move beyond 'common sense'. It has focused on addressing the absence of understanding of this community-led designation, inspired by a global agenda for sustainability, and the ways it has been implemented in this particular region of the Scottish Highlands. My research questions emphasised the need to understand actors' negotiations of nature-culture relations and how such negotiations are situated within broader politics of scale, governance, and land ownership. Unpacking this in discourse and practice has contributed new

knowledge to a burgeoning interdisciplinary field of research, which I brought together in a 'cross-world dialogue'.

My findings overall have highlighted the nuances of what the BR means for communities in Wester Ross and how it exists as designation, organisation, and lens for place-making. I showed how the BR exists as a rhizomatic assemblage and how WRB actors negotiate complexity, ambivalence and multiplicity across domains and scales. The findings fully illustrated the challenges of sustainability governance and land ownership in Wester Ross. Namely, the difficulties facing the BR in terms of achieving sustainability and community empowerment given the extensive private ownership of the area, the prevalence of problematic land use practices and over-tourism, a sparsely populated area with a declining number of residents, and the loss of Gaelic and crofting. A community-led BR, in conditions not of its own making, can only go so far to achieve regional sustainability without adequate financial support and a recognition from policymakers and agencies of their value as a model.

My work adds an analysis of BRs informed by critical literatures, hitherto excluded from much BR research globally. BRs are ways of organising nature-culture relations, and I have shown how assemblage theory in particular can unpack what a BR means and the doing of a BR in practice. Using anarchist theory and critical heritage studies literature, I have opened up new ways of understanding nature-culture relations in a BR, focusing on notions of complexity, change and power. BRs *can* move beyond the common sense, but this can never be taken for granted, and the messy and ongoing negotiations discussed in my thesis are a testament to this.

My findings add support to global voices calling for many alternatives and have arisen from a critical problematisation of nature-cultures through the lens of both local actors in WRB and my interpretations of these actors through theoretical literatures and concepts. As an explicitly critical ethnography, my thesis differs from much of the research on BRs. This helped to contribute new knowledge to academia and as a way to enact change through research as political praxis. I have started a dialogue between empirical findings and theoretical problems concerning communities, heritage, and sustainability in Wester Ross. This can help tackle local/regional problems that are

contextually specific and contribute to a global agenda for sustainable and ethical futures.

Regarding how new naturecultures and futures are assembled, the introduction highlighted the imperative of 'learning to die' as a civilisation, in order to learn how to live well (Savransky 2022). Although I sought to explain how local actors can deterritorialise the future, my work showed the inherent difficulties and nuances of so doing. The task for Scotland, as much as for other countries in the Global North, is to decolonise the coloniser and to think beyond the 'common sense' of neoliberal capitalism. As researchers we must continue to question the world we are living in and what is being assumed about the future when we take certain ideas for granted. Arguably this thesis has shown that problematising assumptions in discourse and practice can prefigure new ways of working towards just and sustainable futures in the present.

References

- Acheson, J. (2011) Ostrom for anthropologists. *International Journal of the Commons*, 5 (2), pp. 319-339.
- Adams, W.M. and Mulligan, M. eds. (2003) *Decolonizing nature: strategies for conservation in a post-colonial era*. London: Earthscan Publications.
- Adams, W.M., Hodge, I.D. and Sandbrook, L. (2014) New spaces for nature: the re-territorialisation of biodiversity conservation under neoliberalism in the UK, *Transactions of the Institute of British Geographers*, 39 (4), pp. 574-588.
- Adkins, B. (2015) *Deleuze and Guattari's a thousand plateaus a critical introduction and guide*. Edinburgh: Edinburgh University Press.
- Agar, M.H. (1996) *The professional stranger: an informal introduction to ethnography*. Bingley: Emerald Group Publishing.
- Agnoletti, M. and Rotherham, I.D. (2015) Landscape and biocultural diversity. *Biodiversity and Conservation*, 24 (13), pp. 3155-3165.
- Ahenakew, C. (2016) Grafting indigenous ways of knowing onto non-indigenous ways of being: the (underestimated) challenges of a decolonial imagination. *International Review of Qualitative Research*, 9 (3), pp. 323-340.
- Ahmad, Y. (2006) The scope and definitions of heritage: from tangible to intangible. *International Journal of Heritage Studies*, 12 (3), pp. 292-300.
- Alfarè, L.T., Ruoss, E. and Boumaour, A. (2020) Governance and management systems in Mediterranean marine and coastal Biosphere Reserves. In: J. Nared and D. Bole, eds. *Participatory research and planning in practice*. Cham: Springer., pp. 51-73.
- Alonso Gonzalez, P. (2014) From a given to a construct. *Cultural Studies*, 28 (3), pp. 359-390.
- Alvesson, M. and Kärreman, D. (2011) *Qualitative research and theory development: mystery as method*. London: Sage.
- Amit, V. (2003) *Constructing the field: ethnographic fieldwork in the contemporary world*. 1st ed. London: Routledge.
- Anderson, B. and MacFarlane, C. (2011) Assemblage and geography. *Area*, 43 (2), pp. 124-127.
- Andrews, N. and Bawa, S. (2014) A post-development hoax? (re)-examining the past, present and future of development studies. *Third World Quarterly*, 35 (6), pp. 922-938.
- Angelbeck, B. and Jones, J. (2018) Direct actions and archaeology: the Lil'wat peoples movement to protect archaeological sites. *Journal of Contemporary Archaeology*, 5 (2), pp. 219-229.
- Angrosino, M. (2007) *Doing ethnographic and observational research*. London: Sage.
- Armitage, D., Charles, A. and Berkes, F. eds. (2017) *Governing the coastal commons: communities, resilience and transformation*. London: Routledge.
- Armstrong, T.C., McLeod, W., Dunbar, R., Dunmore, S., O' Rourke, B. and Macleod, M. (2022) Gaelic and identity: a response to Iain MacKinnon. *Scottish Affairs*, 31 (1), pp. 64-83.
- Arya, D. and Henn, M. (2021) COVID-ized ethnography: challenges and opportunities for young environmental activists and researchers. *Societies*, 11 (2), p. 58.

- Aschenbrand, E. and Michler, T. (2021) Why do UNESCO Biosphere Reserves get less recognition than national parks? a landscape research perspective on protected area narratives in Germany. *Sustainability*, 13 (24), pp. 1-18.
- ASA (2021) Association of Social Anthropologists of the UK: ethical guidelines 2021 for good research practice. Available: https://www.theasa.org/downloads/ethics/asa_ethicsgl_2021.pdf [Accessed 6 June 2022].
- Apostolopoulou, E., Bormpoudakis, D., Chatzipavlidis, A. Cortes Vazquez, J.J., Florea, I., Gearey, M., Levy, J., Loginova, J., Ordner, J., Partridge, T., Pizarro, A., Rhoades, H., Aymons, K., Verissimo, C. and Wahby, N. (2022) Radical social innovations and the spatialities of grassroots activism: navigating pathways for tackling inequality and reinventing the commons. *Journal of Political Ecology*, 29 (1), pp. 143-188.
- Apostolopoulou, E., Bormpoudakis, D., Paloniemi, R., Cent, J., Grodzinska-Jurczak, M., Pietrzyk-Kasynska, A. and Pantis, J. (2014) Governance rescaling and the neoliberalization of nature: the case of biodiversity conservation in four EU countries. *International Journal of Sustainable Development & World Ecology*, 21 (6), pp. 481-494.
- Astuti, R. (2017) On keeping up the tension between fieldwork and ethnography. *HAU: Journal of Ethnographic Theory*, 7 (1), pp. 9-14.
- Atterton, J. (2018) The future of rural development policy in Scotland. SRUC. Available: https://pure.sruc.ac.uk/ws/files/36752262/3_4_2_The_Future_of_Rural_Policy_in_Scotland_Aug_2018_FINAL_1.pdf [Accessed 17 June 2022].
- Atterton, J., Copus, J. Glass, J., Liddon, A., De Lima, P., McCracken, D., Moxey, A., Phillip, L., Shortall, S. and Shucksmith, M. (2019) *After Brexit: 10 key questions for rural policy in Scotland*. Newcastle: Centre for Rural Economy. Available: https://pure.sruc.ac.uk/ws/portalfiles/portal/42101586/2018_After_Brexit_10_key_questions_for_rural_policy_in_Scotland.pdf [Accessed 17 June 2022].
- Auclair, E. and Fairclough, G.J. (2015) Living between past and future: an introduction to heritage and cultural sustainability. In: E. Auclair and G. Fairclough, eds. *Theory and practice in heritage and sustainability: between past and future*. London: Routledge., pp. 1-22.
- Badley, G.F. (2019) Post-academic writing: human writing for human readers. *Qualitative Inquiry*, 25 (2), pp. 180-191.
- Baird, J., Plummer, R., Schultz, L. Armitage, D. and Bodin, O. (2018) Integrating conservation and sustainable development through adaptive co-management in UNESCO Biosphere Reserves. *Conservation and Society*, 16 (4), pp. 409-419.
- Baird, J., Schultz, L., Plummer, R., Armitage, D. and Bodin, Ö. (2019) Emergence of collaborative environmental governance: what are the causal mechanisms? *Environmental management*, 63 (1), pp. 16-31.
- Baldwin, J. (1994) *Peoples and settlement in North West Ross*. Edinburgh: University of Edinburgh Press.
- Banks, S., Armstrong, A., Carter, K., Graham, H., Hayward, P., Henry, A., Holland, R., Holmes, C., Lee, A., McNulty, A., Moore, N., Nayling, N., Stokoe, A. and Strachan, A. (2013) Everyday ethics in community-based participatory research. *Contemporary Social Science*, 8 (3), pp. 263-277.
- Bannister, J. (2019) The death of a crofting community? *The Crofter*. Scottish Crofting Federation. Available: <https://www.crofting.org/wp-content/uploads/2020/03/crofter117.pdf> [Accessed 1 June 2022].

- Bargheer, S. (2014) Conserving the future: UNESCO Biosphere Reserves as laboratories for sustainable development. In: F. Vidal and N. Dias, eds. *Endangerment, biodiversity and culture*. New York: Routledge., pp. 115-133.
- Barker, A.J. and Pickerill, J. (2020) Doings with the land and sea: decolonising geographies, Indigeneity, and enacting place-agency. *Progress in Human Geography*, 44 (4), pp. 640-662.
- Barker, A. and Stockdale, A. (2008) Out of the wilderness? Achieving sustainable development within Scottish national parks. *Journal of Environmental Management*, 88 (1), pp. 181-193.
- Barraclough, A.D., Schultz, L. and Måren, I.E. (2021) Voices of young biosphere stewards on the strengths, weaknesses, and ways forward for 74 UNESCO Biosphere Reserves across 83 countries. *Global Environmental Change*, 68, pp. 1-10.
- Bartolini, N. (2020) Fixing naturecultures: spatial and temporal strategies for managing heritage transformation and entanglement. In: R. Harrison, C. DeSilvey, C. Holtorf, S. MacDonald, N. Bartolini, H. Fredheim, A. Lyons, S. May, J. Morgan and S. Penrose, eds. *Heritage futures: comparative approaches to natural and cultural heritage practices*. London: UCL Press., pp. 375-395.
- Bartolini, N. and DeSilvey, C. (2020) Transforming loss. In: R. Harrison, C. DeSilvey, C. Holtorf, S. MacDonald, N. Bartolini, H. Fredheim, A. Lyons, S. May, J. Morgan and S. Penrose, eds. *Heritage futures: comparative approaches to natural and cultural heritage practices*. London: UCL Press., pp. 347-356.
- Bateman, M. (2009) The landscape of the Gaelic imagination. *International Journal of Heritage Studies*, 15 (2–3), pp. 142-152.
- Baynes, R. (2020) Scottish Land Fund spent millions on publicly owned buildings. Available: <https://theferret.scot/scottish-land-fund-millions-publicly-owned-assets/> [Accessed 15 June 2022].
- Bazeley, P. and Jackson, K. (2013) *Qualitative data analysis with NVivo*. 2nd ed. London: Sage.
- Biehl, J. G. and Locke, P.A. eds. (2017) *Unfinished: the anthropology of becoming*. Durham: Duke University Press.
- Bechhofer, F. and McCrone, D. (2014) What makes a Gael? Identity, language and ancestry in the Scottish Gàidhealtachd. *Identities*, 21 (2), pp. 113-133.
- Berghoef, U., Rozzi, R. and Jax, K. (2010) Many eyes on nature: diverse perspectives in the Cape Horn Biosphere Reserve and their relevance for conservation. *Ecology and Society*, 15 (1), 18. [online] URL: <http://www.ecologyandsociety.org/vol15/iss1/art18/>.
- Berkes, F. and Folkes, C. eds. (1998) *Linking social and ecological systems*. Cambridge: Cambridge University Press.
- Berkes, F. (2017) Environmental governance for the Anthropocene? Social-ecological systems, resilience, and collaborative learning. *Sustainability*, 9 (7), p. 1232.
- Blake, H., Byrns, S., Hurst, E., Masterton, W. and Russell, Z. (2021) Fostering connection and transcending division: a peer-led network for interdisciplinary doctoral researchers, *Spark*, 6, pp. 1-25.
- Blunt, A. (2003) Collective memory and productive nostalgia: Anglo-Indian homemaking at McCluskieganj. *Environment and Planning D: Society and Space*, 21 (6), pp. 717-738.

- Bonnett, A. (2009) The dilemmas of radical nostalgia in British Psychogeography, *Theory, Culture & Society*, 26 (1), pp. 45-70.
- Borake, T.L. (2019) Anarchistic action. Social organization and dynamics in southern Scandinavia from the Iron Age to the Middle Ages. *Archaeological Dialogues*, 26 (2), pp. 61-73.
- Borck, L. (2019) Constructing the future history: prefiguration as historical epistemology and the chronopolitics of archaeology. *Journal of Contemporary Archaeology*, 5 (2), pp. 229-238.
- Bouamrane, M., Mathevet, R., Levrel, H., Huntington, H. and Agrawal, A., (2017) Community participation and adaptation to change in Biosphere Reserves: a review and a Mediterranean European coastal wetland case study (Delta du Rhone Biosphere Reserve, southern France). In: D. Armitage, A. Charles and F. Berkes. eds. *Governing the coastal commons*. London: Routledge., pp. 120-138.
- Boym, S. (2001) *The future of nostalgia*. New York: Basic Books.
- Brand, U. and Görg, C. (2013) Regimes in global environmental governance and the internationalization of the state: the case of biodiversity politics. *International Journal of Social Science Studies*, 1 (1), pp. 110-122.
- Braunholtz-Speight, T. (2015) Scottish community land initiatives: going beyond the locality to enable local empowerment. *People, Place and Policy*, 9 (2), pp. 123-138.
- Bray, D., Duran, E. and Molina, O. (2012) Beyond harvests in the commons: multi-scale governance and turbulence in indigenous/community conserved areas in Oaxaca, Mexico. *International Journal of the Commons*, 6 (2), pp. 151-178.
- Breglia, L. (2006) *Monumental ambivalence: the politics of heritage*. 1st ed. Austin: University of Texas Press.
- Bridgewater, P. (2016) The Man and Biosphere programme of UNESCO: rambunctious child of the sixties, but was the promise fulfilled? *Current Opinion in Environmental Sustainability*, 19, pp. 1-6.
- Bridgewater, P. and Rotherham, I.D. (2019) A critical perspective on the concept of biocultural diversity and its emerging role in nature and heritage conservation. *People and Nature*, 1 (3), pp. 291-304.
- Brockington, D. (2002) *Fortress conservation: the preservation of the Mkomazi game reserve, Tanzania*. Bloomington: Indiana University Press.
- Brockington, D. (2011) Ecosystem services and fictitious commodities. *Environmental Conservation*, 38 (4), pp.367-369.
- Brockington, D., Duffy, R. and Igoe, J. (2008) *Nature unbound: conservation, capitalism and the future of protected areas*. London: Earthscan.
- Brodkey, L. (1987) Writing critical ethnographic narratives. *Anthropology & Education Quarterly*, 18 (2), pp. 67-76.
- Brossette, F., Bieling, C. and Penker, M. (2022) Adapting common resource management to under-use contexts: the case of common pasture organizations in the Black Forest Biosphere Reserve. *International Journal of the Commons*, 16 (1), pp. 29-46.
- Brown, A.P. (2008) Crofter forestry, land reform and the ideology of community. *Social & Legal Studies*, 17 (3), pp. 333-349.

- Brown, K.M. (2006) New challenges for old commons: The role of historical common land in contemporary rural spaces. *Scottish Geographical Journal*, 122 (2), pp. 109-129.
- Brown, K.M. (2007) Understanding the materialities and moralities of property: reworking collective claims to land. *Transactions of the Institute of British Geographers*, 32 (4), pp. 507-522.
- Brown, S.G. (2004) Beyond theory shock: ethos, knowledge, and power in critical ethnography. In: S.G. Brown and S.I. Dobrin, eds. *Ethnography unbound: from theory shock to critical praxis*. Albany: State University of New York Press., pp. 299-317.
- Brown, S.G. and Dobrin, S.I. (2004) Introduction: new writers of the cultural sage: from postmodern theory shock to critical praxis. In: S.G. Brown and S.I. Dobrin, eds. *Ethnography unbound: from theory shock to critical praxis*. Albany: State University of New York Press., pp. 1-12.
- Brown, C., McMorran, R. and Price, M.F. (2011) Rewilding – a new paradigm for nature conservation in Scotland? *Scottish Geographical Journal*, 127 (4), pp. 288-314.
- Brunckhorst, D. (2001) Building capital through bioregional planning and Biosphere Reserves. *Ethics in science and environmental politics*, 1, pp. 19-32.
- Bryden, J. and Geisler, C. (2007) Community-based land reform: lessons from Scotland. *Land Use Policy*, 24 (1), pp. 24-34.
- Bryden, J. (2015) Towards a theory of divergent development. In: J. Bryden, O. Brox and L. Riddoch, eds. *Northern Neighbours: Scotland and Norway since 1800*. Edinburgh: University of Edinburgh Press., pp. 27-41.
- Bryden, J., Bort, E. and Refsgaard, K. (2015) The evolution of local government and governance in Scotland and Norway. In: J. Bryden, O. Brox and L. Riddoch, eds. *Northern Neighbours: Scotland and Norway since 1800*. Edinburgh: University of Edinburgh Press., pp. 92-123.
- BSA (2017) Statement of ethical practice. Available: https://www.britsoc.co.uk/media/24310/bsa_statement_of_ethical_practice.pdf [Accessed 16 June 2022].
- Burnett, K.A. (1998) Local heroics: reflecting on incomers and local rural development discourses in Scotland. *Sociologia Ruralis*, 38 (2), pp. 204-224.
- Burnett, J. (2011) *The making of the modern Scottish Highlands*. Dublin: Four Courts Press.
- Busby, N. and Macleod, C. (2010) Rural identity in the twenty-first century: a community of crofters or crofting communities? *Journal of Law and Society*, 37 (4), pp. 592-619.
- Büscher, B. (2016) Reassessing fortress conservation? New media and the politics of distinction in Kruger National Park. *Annals of the American Association of Geographers*, 106 (1), pp. 114-129.
- Butler, M. (2021) Analyzing community forest enterprises in the Maya Biosphere Reserve using a modified capitals framework. *World Development*, 140, p. 105284.
- Butler, M. and Current, D. (2021) Relationship between community capitals and governance: the perspective of local actors in the Maya Biosphere Reserve. *World Development Perspectives*, 21, p. 100294.

- Byrne, D., Brockwell, S. and O' Connor, S. (2013) Introduction: engaging culture and nature. In: S. Brockwell, D. Byrne and S. O' Connor, eds. *Transcending the culture–nature divide in cultural heritage views from the Asia-Pacific Region*. Canberra: ANU E Press., pp. 1-12.
- Calhoun, C. (2008) Foreword. In: C. Hale, ed. *Engaging contradictions: theory, politics, and methods of activist scholarship*. Berkeley: University of California Press., pp.xiii-1.
- Campbell, C.J., Giovine, A. and Keating, J., eds. (2019) *Empty spaces: perspectives on emptiness in modern history*. London: University of London Press.
- Campbell, G., Smith, L. and Wetherell, M. (2017) Nostalgia and heritage: potentials, mobilisations and effects. *International Journal of Heritage Studies*, 23 (7), pp. 609-611.
- Campbell, C. and Sacchetti, S. (2017) Community-based, collaborative solutions to sustainable economic development in and around Biosphere Reserves. *Journal of Entrepreneurial and Organizational Diversity*, 6 (1), pp. 1-9.
- Camshron, G. (2021) Resisting dismissal in the *Gàidhealtachd*. *Scottish Affairs*, 30 (2), pp. 240-250.
- Carías Vega, D. (2019) Community-based forestry and community forestry enterprises in Quintana Roo, Mexico and Petén, Guatemala: how have policies, history, and culture shaped their trajectories? *Journal of Sustainable Forestry*, 38 (7), pp. 651-669.
- Carter, T., Harvey, D., Jones, R. and Robertson, I. eds. (2019) *Creating heritage: unrecognised pasts and rejected futures*. London: Routledge.
- Cerwonka, A. (2007) Nervous conditions: the stakes in interdisciplinary research. In: A. Cerwonka and L. Malkki, eds. *Improvising theory: process and temporality in ethnographic fieldwork*. Chicago: University of Chicago Press., pp. 1-40.
- Chacón, C., Mantilla, S. and Romero, R.R. (2018) Possible joint management of the Seaflower Biosphere Reserve in the Colombian-Nicaraguan maritime border. *Revista de Relaciones Internacionales, Estrategia y Seguridad* 13 (2), pp. 39-71.
- Chatterton, P. and Pusey, A. (2019) Beyond capitalist enclosure, commodification and alienation: postcapitalist praxis as commons, social production and useful doing. *Progress in Human Geography*, 44 (1), pp. 27-48.
- Clapp, J. and Moseley, W.G. (2020) This food crisis is different: COVID-19 and the fragility of the neoliberal food security order. *The Journal of Peasant Studies*, 47 (7), pp. 1393-1417.
- Clark, J. ed. (2016) *Anarchy, geography, modernity: selected writings of Elisée Reclus*. Translated by C. Martin. Oakland: PM Press.
- Cockburn, C. (1977) *The local state: management of cities and people*. London: Pluto Press.
- Cocks, M.L (2006) Biocultural diversity: moving beyond the realm of “indigenous” and “local” people. *Human Ecology*, 34 (2), pp. 185-200.
- Cocks, M.L. and Wiersum, F. (2014) Reappraising the concept of biocultural diversity: a perspective from South Africa. *Human Ecology*, 42 (5), pp. 727-737.
- Cocks, M., Vetter, S. and Wiersum, K.F. (2018) From universal to local: perspectives on cultural landscape heritage in South Africa. *International Journal of Heritage Studies*, 24 (1), pp. 35-52.

- Coetzer, K.L., Witkowski, E.T.F. and Erasmus, B.F.N. (2014) Reviewing Biosphere Reserves globally: effective conservation action or bureaucratic label? *Biological Reviews of the Cambridge Philosophical Society*, 89 (1), pp. 82-104.
- Coffey, A. (1999) *The ethnographic self: fieldwork and the representation of identity*. London: Sage.
- Cole, S. (2016) A gendered political ecology of tourism and water. In: M. Mostafanezhad, R. Norum, E. Shelton, A. Thompson-Carr, eds. *Political ecology of tourism: community, power and the environment*. London: Routledge., pp. 31-49.
- Comaroff, J. and Comaroff, J. (1992) *Ethnography and the historical imagination*. Oxford: Westview Press.
- Combe, M., Glass, J. and Tindley, A. (2020) *Land reform in Scotland: history, law and policy*. Edinburgh: Edinburgh University Press.
- Connell, L. (2004) Scottish nationalism and the colonial vision of Scotland. *Interventions*, 6 (2), pp. 252-263.
- Cooper, C. (2008) *Community, conflict and the state*. Basingstoke: Palgrave.
- Corsane, G. and Bowers, J. (2012) Sense of place in sustainable tourism: a case study in the rainforest and 249 Savannahs of Guyana. In: I. Convery, G. Corsane and P. Davis, eds. *Making sense of place: multi-disciplinary perspectives*. Suffolk: Boydell Press., pp. 249-260.
- Costello, E. (2020) Hill farmers, habitats and time: the potential of historical ecology in upland management and conservation. *Landscape Research*, 45 (8), pp. 951-965.
- Course, M. (2018) Houses of Uist: memory and dwelling in the Outer Hebrides. *Journal of the Royal Anthropological Institute*, 25 (1), pp. 51-65.
- Cox, R. (1981) Social forces, states and world orders: beyond international relations theory. In: R. Cox and T. Sinclair, eds. (1996) *Approaches to world order*. Cambridge: Cambridge University Press., pp. 85-123.
- Cox, K.R. (2013) Territory, scale and why capitalism matters. *Territory, Politics and Governance*. 1 (1), pp. 46-61.
- Crehan, K. (2011) Gramsci's concept of common sense: a useful concept for anthropologists? *Journal of Modern Italian Studies*, 16 (2), pp. 273-287.
- Crofting Commission (2021) Appointment of common grazings committees. Available: <https://www.crofting.scotland.gov.uk/election-of-grazings-committees> [Accessed 4 June 2022].
- Cronon, W. (1996) The trouble with wilderness: or getting back to the wrong nature. *Environmental History*, 1 (1), pp. 7-28.
- Daglish, C. (2018) *Community empowerment and landscape report*. Community Land Scotland, BEFS, Inherit.
- Dahlberg, A., Rohde, R. and Sandell, K. (2010) National parks and environmental justice: comparing access rights and ideological legacies in three countries. *Conservation and Society*, 8 (3), pp. 209-224.
- Danson, M.W. and Lloyd, M.G. (1991) The Highlands and Islands Development Board: the beginning or the end? *Economic Perspective* 3, 16 (4), pp. 76-79.

- Davis, J., Erasmus, I., Long, G., Molloy, S. and Russell, Z. (2022) *Towards a Wellbeing and Sustainable Development (Scotland) Bill*. Edinburgh: Scotland's International Development Alliance. Available: <https://www.intdevalliance.scot/how-we-help/policy-and-advocacy/wsd-bill> [Accessed 15 June 2022].
- Deary, H. and Warren, C.R. (2017) Divergent visions of wildness and naturalness in a storied landscape: practices and discourses of rewilding in Scotland's wild places. *Journal of Rural Studies*, 54, pp. 211-222.
- DeFilippis, J., Fisher, R. and Shragge, E. (2010) *Contesting community: the limits and potential of local organizing*, London: Rutgers University Press.
- DeLanda, M. (2006) *A new philosophy of society: assemblage theory and social complexity*. London: Continuum.
- Deleuze, G. and Guattari, F. (1987) *A thousand plateaus: capitalism and schizophrenia*. Minneapolis: University of Minnesota Press.
- De Lucio, J.V. and Seijo, F. (2021) Do Biosphere Reserves bolster community resilience in coupled human and natural systems? Evidence from 5 case studies in Spain. *Sustainability Science*, 16 (6), pp. 2123-2136.
- De Moor, T. (2019) From historical institution to pars pro toto: the commons and their revival in historical perspective: In: B. Hudson, J. Rosenbloom and D. Cole, eds. *Routledge handbook of the study of the commons*. London: Routledge., pp. 319-333.
- De Nardi, S. (2014) Senses of place, senses of the past: making experiential maps as part of community heritage fieldwork. *Journal of Community Archaeology & Heritage*, 1 (1), pp. 5-22.
- Denham, T. (2018) Collective action, mutual aid, and wetland agriculture in the Highlands of Papua New Guinea. *Journal of Contemporary Archaeology*, 5 (2), pp. 259-267.
- Dey, C. (2002) Methodological issues: the use of critical ethnography as an active research methodology. *Accounting, Auditing Accountability Journal*, 15 (1), pp. 106-121.
- DeSilvey, C. and Harrison, R. (2020) Anticipating loss: rethinking endangerment in heritage futures. *International Journal of Heritage Studies*, 26 (1), pp. 1-7.
- DeSilvey, C., Bartolini, N. and Lyons, A. (2020) Living with transformation. In: R. Harrison, C. DeSilvey, C. Holtorf, S. MacDonald, N. Bartolini, H. Fredheim, A. Lyons, S. May, J. Morgan and S. Penrose, eds. *Heritage futures: comparative approaches to natural and cultural heritage practices*, London, UCL Press., pp. 359-374.
- DeWalt, K. and DeWalt, B. (2011) *Participant observation: a guide for fieldworkers*. Lanham: Altamira Press.
- Devine, T. (1994) *Clanship to crofters' war: the social transformation of the Scottish Highlands*. Manchester: Manchester University Press.
- Dinnie, E. and Fischer, A. (2020) The trouble with community: how "sense of community" influences participation in formal, community-led organisations and rural governance. *Sociologia Ruralis*, 60 (1), pp. 243-259.
- Donevska, N. (2020) *Participatory governance of UNESCO Biosphere Reserves in Canada and Israel: resolving natural resource conflicts*. London: Routledge.

- Durand, L., Figueroa, F. and Trench, T. (2014) Inclusion and exclusion in participation strategies in the Motes Azules Biosphere Reserve, Chiapas, Mexico. *Conservation and Society*, 12 (2), pp. 175-189.
- Edwards, D., Collins, T. and Goto, R. (2016) Does the conservation status of a Caledonian forest also indicate cultural ecosystem value? In: M. Agnoletti and F. Emanuelli, eds. *Biocultural diversity in Europe*. Cham: Springer, pp. 369-388.
- Eid, R. and Haller, T. (2018) Burning forests, rising power: towards a constitutionality process in Mount Carmel Biosphere Reserve. *Human ecology*, 46 (1), pp. 41-50.
- Eklblom, A., Shoemaker, A., Gillson, L., Lane, P. and Lindholm, K.-J. (2019) Conservation through biocultural heritage—examples from Sub-Saharan Africa. *Land*, 8 (1), pp. 1-15.
- Elbakidze, M., Hahn, T., Mauerhofer, V., Angelstam, P. and Axelsson, R. (2013) Legal framework for Biosphere Reserves as learning sites for sustainable development: a comparative analysis of Ukraine and Sweden. *Ambio*, 42 (2), pp. 174-187.
- Ellis, E.C., Gauthier, N., Klein Goldewijk, K., Bliege Bird, R., Boivin, N., Díaz, S., Fuller, D.Q., Gill, J.L., Kaplan, J.O., Kingston, N., Locke, H., McMichael, C.N.H., Ranco, D., Rick, T.C., Shaw, M.R., Stephens, L., Svenning, J.-C. and Watson, J.E.M. (2021) People have shaped most of terrestrial nature for at least 12,000 years. *Proceedings of the National Academy of Sciences*, 118 (17), pp. 1-8.
- Elvidge, J. (2014) *A route map to an enabling state*. Dunfermline: Carnegie UK Trust.
- Eriksson, O. (2018) What is biological cultural heritage and why should we care about it? An example from Swedish rural landscapes and forests. *Nature Conservation*, 28, pp. 1-32.
- Esfehani, M.H. and Albrecht, J.N. (2018) Roles of intangible cultural heritage in tourism in natural protected areas. *Journal of Heritage Tourism*, 13 (1), pp. 15-29.
- Essebo, M. (2018) A mythical place: a conversation on the earthly aspects of myth. *Progress in Human Geography* 43 (3), pp. 515-530.
- Falzon, M.A. ed. (2009) *Multi-sited ethnography: theory, praxis and locality in contemporary research*. Farnham: Ashgate.
- Federici, S. (2018) *Re-enchanting the world: feminism and commons*. California: PM Press.
- Fenton, J. (n.d.) *The story of Gairloch: a brief history of Gairloch and district*. pp. 1-36. Available: <https://www.jeremyfenton.scot/Booklet%20Gairloch%20History%20lo.pdf>
- Fernández-Llamazares, Á. and Cabeza, M. (2018) Rediscovering the potential of indigenous storytelling for conservation practice. *Conservation Letters*, 11 (3), pp. 1-12.
- Ferreira, M.I.P., Shaw, P., Sakaki, G.K., Alexander, T., Donnini, J.G.B. and Rego, V.V.B.S. (2018) Collaborative governance and watershed management in Biosphere Reserves in Brazil and Canada. *Revista Ambiente & Água: An Interdisciplinary Journal of Applied Science*, 13 (3), pp. 1-11.
- Fischer, J., Gardner, T., Bennett, E.M., Balvanera, P., Biggs, R., Carpenter S., Daw, T., Folke, C., Hill, R., Hughes, T.P., Luthe, T., Maass, M., Meacham, M., Norström, A.V., Peterson, G., Queiroz, C., Seppelt, R., Spierenburg, M., Tenhunen, J. (2015) Advancing sustainability through mainstreaming a social–ecological systems perspective. *Current Opinion in Environmental Sustainability*, 14, pp. 144-149.

- Fischer, A. and McKee, A. (2017) A question of capacities? Community resilience and empowerment between assets, abilities and relationships. *Journal of Rural Studies*, 54, pp. 187-197.
- Fiske, D. (2022) Towards an Anthropocene narrative and a new philosophy of governance: evolution of global environmental discourse in the Man and the Biosphere Programme. *Journal of Environmental Policy & Planning*, 24 (1), pp. 109-122.
- Firth, R. (2013) Toward a critical utopian and pedagogical methodology. *Review of Education, Pedagogy, and Cultural Studies*, 35 (4), pp. 256-276.
- Flexner, J.L. (2014) The historical archaeology of states and non-states: anarchist perspectives from Hawai'i and Vanuatu. *Journal of Pacific Archaeology*, 5 (2), pp. 81-97.
- Flexner, J.L. (2018) Doing archaeology in non-state space. *Journal of Contemporary Archaeology*, 5 (2), pp. 254-259.
- Foley, D.E. (2002) Critical ethnography: the reflexive turn. *International Journal of Qualitative Studies in Education*, 15 (4), pp. 69-90.
- Foley, D.E. and Valenzuela, A. (2005) Critical ethnography: the politics of collaboration. In: N.K. Denzin and Y.S. Lincoln, eds. *Handbook of qualitative research*. Thousand Oaks: Sage., pp. 217-234.
- Folke, C., Biggs, R., Norström, A.V., Reyers, B. and Rockström, J. (2016) Social-ecological resilience and biosphere-based sustainability science. *Ecology and Society*, 21 (3), p. 41.
- Folke, C., Polasky, S., Rockström, J., Galaz, V., Westley, F., Lamon, M., Scheffer, M., Österblom, H., Carpenter, S., Chapin, S., Seto, K., Weber, E., Crona, B., Daily, G., Dasgupta, P., Gafney, O., Gordon, L., Hoff, H., Levin, S., Lubchenco, J., Steffen, W. and Walker, B. (2021) Our future in the Anthropocene biosphere. *Ambio*, 50 (4), pp. 834-869.
- Foucault, M. translated by Moore, G. (2007) The meshes of power. In: J. Crampton and S. Elden, eds. *Space, knowledge and power: Foucault and geography*. Hampshire: Ashgate., pp. 153-162.
- Franco, F.M. (2022) Ecocultural or biocultural? Towards appropriate terminologies in biocultural diversity. *Biology*, 11 (2), p. 207.
- Franks, B. (2018) Prefiguration. In: N. Jun, L. Williams and B. Franks, eds. *Anarchism: a conceptual approach*. London: Routledge., pp. 28-43.
- Freire, P. (2014) *Pedagogy of the oppressed*. 30th anniversary ed. Translated by M.B. Ramos. London: Bloomsbury.
- Fritz-Vietta, N.V., Röttger, C. and Stoll-Kleemann, S. (2009) Community-based management in two Biosphere Reserves in Madagascar—distinctions and similarities: what can be learned from different approaches? *Madagascar Conservation & Development*, 4 (2), pp. 86-97.
- Fuller D. and Jonas, A.E.G. (2003) Alternative financial spaces. In: A. Leyshon, R. Lee and C.C. Williams, eds. *Alternative economic spaces*. London: Sage., pp. 55-73.
- García-Amado, L.R., Pérez, M.R., Iniesta-Arandia, I., Dahringer, G., Reyes, F. and Barrasa, S. (2012) Building ties: social capital network analysis of a forest community in a Biosphere Reserve in Chiapas, Mexico. *Ecology and Society*, 17 (3), p. 3.
- Garner, R. and Hancock, B.H. eds. (2014) *Social theory: a reader: volume II from modern to contemporary theory*. 3rd ed. Toronto: University of Toronto Press.

- Gavin, M. C., McCarter, J., Mead, A., Berkes, F., Stepp, J. R., Peterson, D. and Tang, R. (2015) Defining biocultural approaches to conservation. *Trends in Ecology & Evolution*, 30 (3), pp. 140-145.
- Geertz, C. (1973) Thick description: toward an interpretative theory of culture. In: *The interpretation of cultures*. New York: Basic Books., pp. 310-323.
- George, C. and Reed, M.G. (2016) Building institutional capacity for environmental governance through social entrepreneurship: lessons from Canadian Biosphere Reserves. *Ecology and Society*, 21 (1), p. 18.
- George, E.W. and G. Reid, D. (2005) The power of tourism: a metamorphosis of community culture. *Journal of Tourism and Cultural Change*, 3 (2), pp. 88-107.
- Gerber, J-F. (2020) Degrowth and critical agrarian studies. *The Journal of Peasant Studies*, 47 (2), pp. 235-264.
- Gerrard, J., Rudolph, S. and Sriprakash, A. (2017) The politics of post-qualitative inquiry: history and power. *Qualitative Inquiry*, 23 (5), pp. 384-394.
- Gibb, R. and Iglesias, J.D. (2017) Breaking the silence (again): on language learning and levels of fluency in ethnographic research. *Sociological Review*, 65 (1), pp. 134-149.
- Gibson, M.R. (2019) The failure of the state and the rise of Anarchism in contemporary anti-systemic praxis. *New Proposals: Journal of Marxism and Interdisciplinary Inquiry*, 10 (1), pp. 45-59.
- Giliberto, F. and Labadi, S. (2021) Harnessing cultural heritage for sustainable development: an analysis of three internationally funded projects in MENA Countries. *International Journal of Heritage Studies*, 28 (2), pp. 133-146.
- Glaser, K. (2007) *Minority languages and cultural diversity in Europe: Gaelic and Sorbian perspectives*. Celedon: Multilingual Matters.
- Glass, J., Valero, D. and Price, M.F. (2018) The Centre for Mountain Studies: contributing to sustainable development in the mountains and beyond. *Mountain Research and Development*, 38 (4), pp. 404-406.
- Glass, J., Thomson, S. and Morran, R.M. (2020) Does size really matter? Sustainable development outcomes from different scales of land ownership. In: M. Combe, J. Glass, J. and A. Tindley, eds. *Land reform in Scotland: history, law and policy*. Edinburgh: Edinburgh University Press., pp. 368-387.
- Glenn, S., MacKessack-Leitch, J., Pollard, K., Glass, J., and McMorrnan, R. (2019) Investigation into the issues associated with large scale and concentrated landownership in Scotland, Scottish Land Commission. Available: https://www.landcommission.gov.scot/downloads/5dd7d6fd9128e_Investigation-Issues-Large-Scale-and-Concentrated-Landownership-20190320.pdf [Accessed 5 June 2022].
- Gobo, G. (2008) *Doing ethnography*. Los Angeles: Sage.
- Gold, R. (1958) Roles in sociological field observations. *Social Forces*, 36 (3), pp. 217-223.
- Gordon, U. (2009) Dark tidings: anarchist politics in the age of collapse. In: R. Amster, A. DeLeon, L. Fernandez, A. Nocella II, D. Shannon. eds. *Contemporary anarchist studies: an introductory anthology of anarchy in the academy*. London: Routledge., pp. 249-258.

- Gordon, U. (2010) Power and anarchy: in/equality + in/visibility in autonomous politics. In: N. Jun and S. Wahl, eds. *New perspectives on anarchism*. Lanham: Lexington Books., pp. 39-66.
- Gourievidis, L. (2016) *The dynamics of heritage: history, memory and the Highlands Clearances*. London: Routledge.
- Gonzalez-Tennant, E. (2018) Anarchism, decolonization, and collaborative archaeology. *Journal of Contemporary Archaeology*, 5 (2), pp. 238-244.
- Graddy, T.G. (2013) Regarding biocultural heritage: in situ political ecology of agricultural biodiversity in the Peruvian Andes. *Agriculture and Human Values*, 30 (4), pp. 587-604.
- Graham, B., Ashworth, A. and Tunbridge, J. (2000) *A geography of heritage: power, culture and economy*. New York: OUP.
- Graham, H. (2017a) Publics and commons: the problem of inclusion for participation. *ARKEN Bulletin*, 7, pp. 150-168.
- Graham H. (2017b) Horizontality: tactical politics for participation and museums. In: B. Onciul, M.L Stefano and S. Hawke, eds. *Engaging heritage: engaging communities. heritage matters*. Suffolk: Boydell and Brewer., pp. 73-90.
- Gramsci, A., (1971) *Selections from the prison notebooks of Antonio Gramsci*. Translated by Q. Hoare and G. Nowell Smith. London: Lawrence and Wishart.
- Grey, S. and Kuokkanen, R. (2019) Indigenous governance of cultural heritage: searching for alternatives to co-management. *International Journal of Heritage Studies*, 26 (10), pp. 919-941.
- Griffin, C.J. (2018) Memory and the work of forgetting: telling protest in the English countryside. In: C.J Griffin and B. McDonagh, eds. *Remembering protest in Britain since 1500: memory, materiality and the landscape*. Cham: Springer., pp. 215-237.
- Griffin, C.J., Jones, R. and Robertson, I.J.M. eds. (2019) *Moral ecologies: histories of conservation, dispossession and resistance*. Cham: Springer.
- Grigor, I, F. (2000) *Highland resistance: the radical tradition in the Scottish North*. Edinburgh: Mainstream Publishing.
- Guattari, F. (2001) *The three ecologies*. London: Athlone Press.
- Hains, B., Hustedde, R. and Ricketts, K. (2013) 21st century crofting: strengths and opportunities for community development. *Journal of Agriculture, Food Systems, and Community Development*, 3 (3), pp. 47-60.
- Hall, S. (1987) Gramsci and us. *Marxism Today*, June, pp. 16-21. Available: <https://banmarchive.org.uk/marxism-today/june-1987/gramsci-and-us/> [Accessed 6 June 2022].
- Hall, S. (1991) Old and new identities, old and new ethnicities. In: A. King, ed. *Culture, globalization and the world system: contemporary conditions for the representation of identity*. Minneapolis: University of Minnesota Press., pp. 41-68.
- Hall, S. and O'Shea, A. (2015) Common sense neoliberalism. In: S. Hall, D. Massey and M. Rustin, eds. *After Neoliberalism? The Kilburn Manifesto*. London: Soundings., pp. 52-68.
- Hammersley, M. and Atkinson, P. (2007) *Ethnography: principles in practice*. 3rd ed. London: Routledge.

- Hannerz, U. (1990) Cosmopolitans and locals in world culture. *Theory Culture & Society*, 7 (2-3), pp. 237-251.
- Harmon, D. (2007) A bridge over the chasm: finding ways to achieve integrated natural and cultural heritage conservation. *International Journal of Heritage Studies*, 13 (4–5), pp. 380-392.
- Harper, D. (2018) People and places. In: C. Jerolmack and S.R Kahn, eds. *Approaches to ethnography: analysis and representation in participant observation*. Oxford: OUP., pp. 95-128.
- Harrison, R. (2013) *Critical approaches to heritage*. London: Routledge.
- Harrison, R. (2015) Beyond ‘natural’ and ‘cultural’ heritage: toward and ontological politics of heritage in the age of Anthropocene. *Heritage and Society*, 8 (1), pp. 24-42.
- Harrison, R., Breithoff, E., and Penrose, S. (2020) Conserving diversity. In: R. Harrison, C. DeSilvey, C. Holtorf, S. Macdonald, N. Bartolini, E. Breithoff, H. Fredheim, A. Lyons, S. May, J. Morgan and S. Penrose, eds. *Heritage futures: comparative approaches to natural and cultural heritage practices*. London: UCL Press., pp. 53-73.
- Harrison, R., DeSilvey, C., Holtorf, C. and Macdonald, S. (2020) For ever, for everyone. In: R. Harrison, C. DeSilvey, C. Holtorf, S. Macdonald, N. Bartolini, E. Breithoff, H. Fredheim, A. Lyons, S. May, J. Morgan and S. Penrose, eds. *Heritage futures: comparative approaches to natural and cultural heritage practices*. London: UCL Press., pp. 20-50.
- Harrison, R. DeSilvey, C. Holtorf, C. Macdonald, S. Bartolini, N. Breithoff, E. Fredheim, H., Lyons, A., May, S., Morgan, J. and Penrose, S. eds. (2020) *Heritage futures: comparative approaches to natural and cultural heritage practices*. London: UCL Press.
- Harrison, R., and Rose, D. (2010) Intangible heritage. In: T. Benton, ed. *Understanding heritage and memory*. Manchester: Manchester University Press., pp. 238-276.
- Harrison, R. and Sterling, C. (eds) (2020) *Deterritorializing the future: heritage in, of and after the Anthropocene*. London: Open Humanities Press.
- Hartter, J. and Goldman, A. (2011) Local responses to a forest park in western Uganda: alternate narratives on fortress conservation, *Oryx*, 45 (1), pp. 60-68.
- Harvey, D. (2004) The “new” imperialism: accumulation by dispossession. *Actuel Marx*, 35 (1), pp. 71-90.
- Harvey, D.C. (2013) Emerging landscapes of heritage. In: P. Howard, I. Thompson and E. Waterton, eds. *The Routledge companion to landscape studies*. London: Routledge., pp. 152-165.
- Harvey, D.C. (2015) Heritage and scale: settings, boundaries and relations. *International Journal of Heritage Studies*, 21 (6), pp. 577-593.
- Harvey, D.C., Hawkins, H. and Thomas, N.J. (2011) Regional imaginaries of governance agencies: practising the region of South West Britain. *Environment and Planning A: Economy and Space*, 43 (2), pp. 470-486.
- Harvey, D.C and Mozaffari, A. (2019) Foreword. In: T. Lähdesmäki, S. Thomas and Y. Zhu, eds. *The politics of scale: new directions in critical heritage*. Oxford: Berghahn., pp. ix-1.
- Harvey, L. (1990) *Critical social research*. London: Unwin Hyman.
- Hassard, F. (2009) Intangible heritage in the United Kingdom: the dark side of enlightenment? In: L. Smith and N. Akagawa, eds. *Intangible Heritage*. Abingdon: Routledge., pp. 270-288.

- Hedden-Dunkhorst, B. and Schmitt, F. (2020) Exploring the potential and contribution of UNESCO Biosphere Reserves for landscape governance and management in Africa. *Land*, 9 (8), p. 237.
- Herman, R.D.K. (2017) Indigenous geography and place-based intangible cultural heritage. In: M. Stefano and P. Davis, eds. *The Routledge companion to intangible cultural heritage*. London: Routledge., pp. 314-330.
- Hernes, M.I. and Metzger, M.J. (2017) Understanding local community's values, worldviews and perceptions in the Galloway and Southern Ayrshire Biosphere Reserve, Scotland. *Journal of Environmental Management*, 186 (Part 1), pp. 12-23.
- Higgins, V. and Larner, W. (2017) Introduction: assembling neoliberalism. In: W. Larner and V. Higgins, eds. *Assembling neoliberalism: expertise, practices, subjects*. New York: Palgrave Macmillan., pp. 1-20.
- Hill, B. (2014) Searching for certainty in purity: indigenous fundamentalism. *Nationalism and Ethnic Politics*, 20 (1), pp. 10-25.
- Hill, R., Cullen-Unsworth, L. C., Talbot, L. D. and McIntyre-Tamwoy, S. (2011) Empowering Indigenous peoples' biocultural diversity through world heritage cultural landscapes: a case study from the Australian humid tropical forests. *International Journal of Heritage Studies*, 17 (6), pp. 571-591.
- Hinkel, J., Bots, P.W. and Schlüter, M. (2014) Enhancing the Ostrom social-ecological system framework through formalization. *Ecology and Society*, 19 (3), p. 51.
- Hinkel, J., Cox, M.E., Schlüter, M., Binder, C.R. and Falk, T. (2015) A diagnostic procedure for applying the social-ecological systems framework in diverse cases. *Ecology and Society*, 20 (1), p. 32.
- Hinrichs, C.C. (2008) Interdisciplinarity and boundary work: challenges and opportunities for agrifood studies. *Agriculture and Human Values*, 25 (2), pp. 209-213.
- Hobson, J., Lynch, K., Roberts, H., Payne, B. (2019) Community ownership of local assets: conditions for sustainable success. *Journal of Rural Studies*, 65, pp. 116-125.
- Hockings, M., Lilley, I., Matar, D., Dudley, N., Markham, R. (2020) Integrating science and local knowledge to strengthen Biosphere Reserve management. In: M. Reed and M. Price, eds. *UNESCO Biosphere Reserves: supporting biocultural diversity, sustainability and society*. London: Routledge., pp. 241-254.
- Hoffman, M. (2013) Why community ownership? Understanding land reform in Scotland. *Land Use Policy*, 31, pp. 289-297.
- Hoffman, M. (2018) Private property in the context of community: property and community. *American Journal of Economics and Sociology*, 77 (1), pp. 125-148.
- Hogberg, A. (2016) To renegotiate heritage and citizenship beyond essentialism. *Archaeological Dialogues*, 23 (1), pp. 39-48.
- Holy, L., (1984) Theory, methodology and the research process. In: R.F. Ellen, ed. *Ethnographic research: a guide to general conduct*. Bingley: Emerald., pp. 13-34.
- Holtorf, C. (2020) Heritage futures, prefiguration and world heritage. *Forum Kritische Archäologie*, 9, pp. 1-5.

- Holtorf, C. and May, S. (2020) Uncertainty, collaboration and emerging issues. In: R. Harrison, C. DeSilvey, C. Holtorf, S. Macdonald, N. Bartolini, E. Breithoff, H. Fredheim, A. Lyons, S. May, J. Morgan and S. Penrose, eds. *Heritage futures: comparative approaches to natural and cultural heritage practices*. London: UCL Press., pp. 336-344.
- Horowitz, L.S. (2016) Rhizomic resistance meets arborescent assemblage: UNESCO World Heritage and the disempowerment of indigenous activism in New Caledonia. *Annals of the American Association of Geographers*, 106 (1), pp. 167-185.
- Horton, S.B. (2021) On pandemic privilege: reflections on a “home-bound pandemic ethnography”. *Journal for the Anthropology of North America*, 24 (2), pp. 98-107.
- Howlett, M. (2021) Looking at the “field” through a Zoom lens: methodological reflections on conducting online research during a global pandemic. *Qualitative Research*, 22 (3), pp. 387-402.
- Hubbard, P. and Kitchin, R. eds. (2011) *Key thinkers on space and place*. 2nd ed. Los Angeles: Sage.
- Hunter, J. (1976) *The making of the crofting community*. Edinburgh: Hartnails.
- Hunter, J. (2014) *On the other side of sorrow: people and nature in the Highlands*. Edinburgh: Birlinn Ltd.
- Hviding, E. (2006) Knowing and managing biodiversity in the Pacific Islands: challenges of environmentalism in Marovo Lagoon. *International Social Science Journal*, 58 (187), pp. 69-85.
- ICCA (2021) Territories of Life. Available: <https://report.territoriesoflife.org/wp-content/uploads/2021/05/ICCA-Territories-of-Life-2021-Report-FULL-150dpi-ENG.pdf> [Accessed 4 June 2022].
- Igoe, J., Neves, K. and Brockington, D. (2010) A spectacular eco-tour around the historic bloc: theorising the convergence of biodiversity conservation and capitalist expansion. *Antipode*, 42 (3), pp. 486-512.
- Ince, A. (2012) In the shell of the old: anarchist geographies of territorialisation. *Antipode*, 44 (5), pp. 1645-1666.
- Ingold, T. (1993) Globes and spheres: the topology of environmentalism. In: K. Milton, ed. *Environmentalism*. London: Routledge., pp. 29-40.
- Innerarity, D. (2012) *The future and its enemies: in defense of political hope*. California: Stanford University Press.
- Jackson, A. and Mazzei, L. (2018) *Thinking with theory in qualitative research: viewing data across multiple perspectives*. London: Routledge.
- Janssen, M.A. and Ostrom, E. (2006) Governing social-ecological systems. In: L. Tesfatsion and K.L. Judd, eds. *Handbook of computational economics*, 2. Amsterdam: Elsevier., pp. 1465-1509.
- Jedrej, M.C. and M. Nuttall (1996) *White settlers: the impact of rural repopulation on Scotland*. Luxembourg: Harwood.
- Jenkins, R. (2008) *Social identity: key ideas*. 3rd ed. London: Routledge.
- Jenner, B.M. and Myers, K.C. (2019) Intimacy, rapport, and exceptional disclosure: a comparison of in-person and mediated interview contexts. *International Journal of Social Research Methodology*, 22 (2), pp. 165-177.

- Jones, R. (2019) Governing the future and the search for spatial justice: Wales' Wellbeing of Future Generations Act. *Fennia*, 197 (1), pp. 8-24.
- Jones, R., Goodwin-Hawkins, B. and Woods, M. (2020) From territorial cohesion to regional spatial justice: The Well-Being of Future Generations Act in Wales. *International Journal of Urban and Regional Research*, 44 (5), pp. 894-912.
- Jones, S. (2005) Making place, resisting displacement: conflicting national and local identities in Scotland. In: J. Littler and R. Naidoo, eds. *The politics of heritage: 'race', identity and national stories*. London: Routledge., pp. 94-114.
- Jones, S. (2012) "Thrown like chaff in the wind": excavation, memory and the negotiation of loss in the Scottish Highlands. *International Journal of Historical Archaeology*, 16 (2), pp. 346-366.
- Jones, S. (2017) Wrestling with the social value of heritage: problems, dilemmas and opportunities. *Journal of Community Archaeology & Heritage*, 4 (1), pp. 21-37.
- Jones, S. and Leech, S. (2015) Valuing the historic environment: a critical review of existing approaches to social value. *AHRC Cultural Value Report*. Available: <https://www.escholar.manchester.ac.uk/api/datastream?publicationPid=uk-ac-man-scw:281849&datastreamId=FULL-TEXT.PDF> [Accessed 4 June 2022].
- Jones, S. and Yarrow, T. (2022) *The object of conservation: an ethnography of conservation practice*. London: Routledge.
- Jordan, G. and Halpin, D. (2006) The political costs of policy coherence: constructing a rural policy for Scotland. *Journal of Public Policy*, 26 (1), pp. 21-41.
- Kähkönen, S. and Lähdesmäki, T. (2019) Broadening the scope of heritage: the concept of cultural environment and scalar relations in Finnish cultural environment policy. In: T. Lähdesmäki, S. Thomas and Y. Zhu, eds. *The politics of scale: new directions in critical heritage studies*. New York: Berghahn., pp. 95-112.
- Kallis, G. (2018) *Degrowth*. Newcastle Upon Tyne: Agenda Publishing.
- Kapelari, S., Alexopoulos, G., Moussouri, T., Sagmeister, K. and Stampfer, F. (2020) Food heritage makes a difference: the importance of cultural knowledge for improving education for sustainable food choices. *Sustainability*, 12 (4), pp. 1-23.
- Kehoe, S.K. and Dalgligh, C. (2018) History, heritage and sustainable development: a position statement on the Scottish Highlands. *Northern Scotland*, 9 (1), pp. 1-16.
- Kelly, A.B. (2011) Conservation practice as primitive accumulation. *Journal of Peasant Studies*, 38 (4), pp. 683-701.
- Kenrick, J. (2011) Scottish land reform and indigenous peoples' rights: self-determination and historical reversibility: Scottish land reform and indigenous peoples' rights. *Social Anthropology*, 19 (2), pp. 189-203.
- Kenterelidou, C. and Galatsopoulou, F. (2021) Sustainable biocultural heritage management and communication: the case of digital narrative for UNESCO marine world heritage of outstanding universal value. *Sustainability*, 13 (3), pp. 1-32.
- Kincheloe J.L. (2011) Critical ontology and indigenous ways of being. In: K. Hayes, S.R Steinberg and K. Tobin, eds. *Key works in critical pedagogy*. Leiden: Brill., pp. 333-349.

- Kincheloe, J.L., and McLaren, P. (2000) Rethinking critical theory and qualitative research. In: N. Denzin and Y. Lincoln, eds. *Handbook of qualitative research*. Los Angeles: Sage., pp. 279-314.
- Kirsop-Taylor, N. (2019) Surviving tough times: an investigation into environmental voluntary sector organisations under austerity. *Voluntary Sector Review*, 10 (1), pp. 19-37.
- Kirsop-Taylor, N., Russel, D. and Winter, M. (2020) The contours of state retreat from collaborative environmental governance under austerity. *Sustainability*, 12 (7), pp. 1-16.
- Konsa, K. (2013) Heritage as a socio-cultural construct: problems of definition. *Baltic Journal of Art History*, 6, pp. 123-149.
- Konsa, K. (2016) Natural and cultural heritage: framing meanings and practices. *The International Journal of Sustainability in Economic, Social, and Cultural Context*, 12 (4), pp. 9-18.
- Kopnina, H. (2016) Nobody likes dichotomies (but sometimes you need them). *Anthropological Forum*, 26 (4), pp. 415-429.
- Kosoy, N. and Corbera, E. (2010) Payments for ecosystem services as commodity fetishism. *Ecological Economics*, 69 (6), pp. 1228-1236.
- Kothari, A., Demaria F. and Acosta A. (2014) Buen Vivir, degrowth and ecological swaraj: alternatives to sustainable development and the green economy. *Development*, 57 (3-4), pp. 362-375.
- Krzyżanowski, M. (2011) Ethnography and critical discourse analysis: towards a problem-oriented research dialogue. *Critical Discourse Studies*, 8 (4), pp. 231-238.
- Kuutma, K. (2019) Afterword: the politics of scale for intangible cultural heritage: identification, ownership and representation. In: T. Lähdesmäki, S. Thomas and Y. Zhu, eds. *The politics of scale: new directions in critical heritage studies*. New York: Berghahn., pp. 156-176.
- Labadi, S. (2011) Intangible heritage and sustainable development: realistic outcome or wishful thinking? *Heritage & Society*, 4 (1), pp. 115-118.
- Lähdesmäki, T., Zhu, Y. and Thomas, S. (2019) Introduction: heritage and scale. In: T. Lähdesmäki, S. Thomas and Y. Zhu, eds. *The politics of scale: new directions in critical heritage*. Oxford: Berghahn., pp. 1-18.
- Lang, L. (2017) Simulating fisherfolk and performing heritage through ritual, history, and nostalgia. *International Journal of Heritage Studies*, 23 (7), pp. 628-642.
- Lather, P. and St. Pierre, E.A. (2013) Post-qualitative inquiry. *International Journal of Qualitative Studies in Education*, 26, pp. 629-633.
- Lefebvre, H. (1991) *The production of space*. Oxford: Blackwell.
- Li, T. (2007) Practices of assemblage and community forest management. *Economy and Society*, 36 (2), pp. 263-293.
- Light, D. (2010) The final stage? Writing up ethnographic research. In: J.S. Jones and S. Watt, eds, *Ethnography in social science practice*. London: Routledge., pp. 173-186.

- Lillis, T. (2008) Ethnography as method, methodology, and “deep theorizing”: closing the gap between text and context in academic writing research. *Written Communication*, 25 (3), pp. 353-388.
- Lindholm, K.J. and Ekblom, A. (2019) A framework for exploring and managing biocultural heritage. *Anthropocene*, 25, pp. 1-9.
- Liu, P., Gilchrist, P., Taylor, B. and Ravenscroft, N. (2017) The spaces and times of community farming. *Agriculture and Human Values*, 34 (2), pp. 363-375.
- Loaiza, T., Nehren, U. and Gerold, G. (2016) REDD+ implementation in the Ecuadorian Amazon: why land configuration and common-pool resources management matter. *Forest Policy and Economics*, 70, pp. 67-79.
- Local Voices CIC (2021) *Mapping intangible cultural heritage assets and collections in Scotland*. Commissioned by Museums Galleries Scotland, Historic Environment Scotland, Traditional Arts and Culture Scotland, and Creative Scotland. Available: <https://heritagecrafts.org.uk/wp-content/uploads/2021/08/Mapping-ICH-in-Scotland-Local-Voices-Aug-2021-w-Logos.pdf> [Accessed 17 June 2022].
- Loulanski, V. and Loulanski, T. (2015) *Cultural heritage and sustainable development-interdisciplinary synthesis*. Saarbrücken: Lambert Academic Publishing.
- Lowenthal, D. (2005) Natural and cultural heritage. *International Journal of Heritage Studies*, 11 (1), pp. 81-92.
- Lyon, A. and Hunter-Jones, P. (2019) Critical discourse analysis and the questioning of dominant, hegemonic discourses of sustainable tourism in the Waterberg Biosphere Reserve, South Africa. *Journal of Sustainable Tourism*, 27 (7), pp. 974-991.
- Macdonald, F. (1998) Viewing Highland Scotland: ideology, representation and the ‘natural heritage’. *Area*, 30 (3), pp. 237-244.
- Macdonald, F. (2021) Wild beasts. *London Review of Books*, 43 (18), pp. 44-45.
- Macdonald, M. (2010) Seeing colour in the Gàidhealtachd: an ecology of mind? *Scottish Affairs*, 73 (1), pp. 1-10.
- Macdonald, S. (1997) *Reimagining culture: histories, identities and the Gaelic renaissance*. Oxford: OUP.
- Macdonald, S. (1999) The Gaelic renaissance and Scotland’s identities. *Scottish Affairs*, 26 (1), pp. 100-118.
- Macdonald, S. (2009) *Difficult heritage: negotiating the Nazi past in Nuremberg and beyond*. London: Routledge.
- Macdonald, S. (2013) *Memorylands: heritage and identity in Europe today*. London: Routledge.
- Macaskill, J. (2004) The crofting community right to buy in the Land Reform (Scotland) Act 2003. *Scottish Affairs*, 49 (1), pp. 104-133.
- Mackenzie, A.F.D. (2001) On the edge: ‘community’ and ‘sustainability’ on the Isle of Harris, Outer Hebrides. *Scottish Geographical Journal*, 117 (3), pp. 219-240.
- Mackenzie, A.F.D. (2006) “S leinn fhèin am fearann” (the land is ours): re-claiming land, re-creating community, North Harris, Outer Hebrides, Scotland. *Environment and Planning D: Society and Space*, 24 (4), pp. 577-598.

- Mackenzie, A.F.D. (2009) Working the wind: land-owning community trusts and the decolonisation of nature. *Scottish Affairs*, 66 (1), pp. 44-64.
- Mackenzie, A.F.D. (2010) A common claim: community land ownership in the Outer Hebrides, Scotland. *International Journal of the Commons*, 4 (1), pp. 319-344.
- Mackenzie, A.F.D. (2013) *Places of possibility: property, nature and community land ownership*. Chichester: John Wiley Sons.
- MacKinnon, D. (2001) Regulating regional spaces: state agencies and the production of governance in the Scottish Highlands. *Environment and Planning A: Economy and Space*. 33 (5), pp. 823-844.
- MacKinnon, D. (2002) Rural governance and local involvement: assessing state–community relations in the Scottish Highlands. *Journal of Rural Studies*, 18 (3), pp. 304-327.
- MacKinnon, D. and Derickson, K. (2013) From resilience to resourcefulness: a critique of resilience policy and activism. *Progress in Human Geography*, 37 (2), pp. 253-270.
- MacKinnon, I. (2008) Crofters: indigenous people of the Highlands and Islands. *Scottish Crofting Federation*. Available at: <https://www.crofting.org/wp-content/uploads/2020/03/crofters-indigenous-peoples.pdf> [Accessed 6 June 2022].
- MacKinnon, I. (2014) The colonisation of the Gàidheal. *Research Seminar University of the Highlands and Islands*, 24 March 2014.
- MacKinnon, I. (2017) Colonialism and the Highland clearances. *Northern Scotland*, 8 (1), pp. 22-48.
- MacKinnon, I. (2019) The invention of the crofting community: Scottish history’s elision of indigenous identity, ideology and agency in accounts of land struggle in the modern Gàidhealtachd. *The Scottish Historical Review*, 98 (1), pp. 71-102.
- MacKinnon, I. (2018) “Decommonising the mind”: historical impacts of British imperialism on indigenous tenure systems and self-understanding in the Highlands and Islands of Scotland. *International Journal of the Commons*, 12 (1), pp. 278-300.
- MacKinnon, I. (2020) Crofting policy and legislation: an undemocratic and illegitimate structure of domination? In: J. Glass, M. Combe and A. Tindley, eds. *Land reform in Scotland: history, law and policy*. Edinburgh: Edinburgh University Press., pp. 351-367.
- MacKinnon, I. (2021) Recognising and reconstituting Gàidheil ethnicity. *Scottish Affairs*, 30 (2), pp. 212-230.
- MacKinnon, I. and Mackillop, A. (2020) *Plantation slavery and landownership in the west Highlands and Islands: legacies and lessons*. Community Land Scotland. Available: <https://www.communitylandscotland.org.uk/wp-content/uploads/2020/11/Plantation-slavery-and-landownership-in-the-west-Highlands-and-Islands-legacies-and-lessons.pdf> [Accessed 17 June 2022].
- MacKinnon, I., Williams, L. and Waller, A. (2018) The re-indigenization of humanity to Mother Earth: a learning platform for cultivating social-ecological resilience to challenge the Anthropocene. *Journal of Sustainability Education*, 16. Available: http://www.susted.com/wordpress/content/the-re-indigenization-of-humanity-to-mother-earth-a-learning-platform-to-cultivate-social-ecological-resilience-and-challenge-the-anthropocene_2018_01/

- Maclean, R. (2021) Gaelic and ecosystem services: a scoping exercise. *NatureScot Report 1230*. Available: <https://www.nature.scot/doc/naturescot-research-report-1230-ecosystem-services-and-gaelic-scoping-exercise> [Accessed 17 June 2022].
- Macleod, A. and Payne, G. (1994) Locals and incomers: social and cultural identity in late twentieth century Coigach. In: J.R Baldwin, ed. *Peoples and settlement in North-West Ross*, Edinburgh: University of Edinburgh Press., pp. 391-411.
- Macleod, C. and Todnem, R. (2007) Performance, conformance and change: towards a sustainable tourism strategy for Scotland. *Sustainable Development*, 15 (6), pp. 329-342.
- MacMillan, D.C., Leitch, K., Wightman, A. and Higgins, P. (2010) The management and role of Highland sporting estates in the early twenty-first century: the owner's view of a unique but contested form of land use. *Scottish Geographical Journal*, 126 (1), pp. 24-40.
- MacPhail, I.M.M. (1989) *The crofters' war*. Stornoway: Acair Ltd.
- MacPherson, J. (2020) History writing and agency in the Scottish Highlands: postcolonial thought, the work of James Macpherson (1736–1796) and researching the region's past with local communities. *Northern Scotland*, 11 (2), pp. 123-138.
- MacRae, G. (2017) Universal heritage meets local livelihoods: "awkward engagements" at the world cultural heritage listing in Bali. *International Journal of Heritage Studies*, 23 (9), pp. 846-859.
- Madison, S. (2005) *Critical ethnography: method, ethics, and performance*. California: Sage.
- Maeckelbergh, M. (2011) Doing is believing: prefiguration as strategic practice in the alterglobalization movement. *Social Movement Studies*, 10 (1), pp. 1-20.
- Maffi, L. (2018) Biocultural diversity. In: H. Callan, ed. *The international encyclopaedia of anthropology*. Hoboken: Wiley., pp. 1-14.
- Maffi, L. and Woodley, E. (2010) *Biocultural diversity conservation: a global sourcebook*. London: Earthscan.
- Malmqvist, J. et al. (2019) Conducting the pilot study: a neglected part of the research process? Methodological findings supporting the importance of piloting in qualitative research studies. *International Journal of Qualitative Methods*, 18, pp. 1-11.
- Manuel-Navarrete, D. and Redclift, M. (2010) The role of place in the margins of space. In: M. Redclift and G. Woodgate, eds. *The international handbook of environmental sociology*. 2nd ed. Edward Elgar: Cheltenham., pp. 334-348.
- Markantoni, M., Steiner, A.A. and Meador, J.E. (2019) Can community interventions change resilience? Fostering perceptions of individual and community resilience in rural places. *Community Development*, 50 (2), pp. 238-255.
- Martin, K.S. (2009) Toward a cartography of the commons: constituting the political and economic possibilities of place. *The Professional Geographer*, 61 (4), pp. 493-507.
- Massey, D. (2005a) *For space*. London: Sage.
- Massey, D. (2005b) Power-geometry and a progressive sense of place. In: J. Bird, B. Curtis, T. Putnam and L. Tickner. eds. *Mapping the futures: local cultures, global change*. London: Routledge., pp. 60-70.

- Matar, D. and Anthony, B. (2020) Sense and sustainability: the story of Biosphere Reserves in Lebanon. In: M. Reed and M. Price, eds. *UNESCO Biosphere Reserves: supporting biocultural diversity, sustainability and society*. London: Routledge., pp. 135-148.
- Mathevet, R. and Cibien, C. (2020) The French Biosphere Reserves: looking for ecological solidarity and stewardship. In: M. Reed and M. Price, eds. *UNESCO Biosphere Reserves: supporting biocultural diversity, sustainability and society*. London: Routledge., pp. 114-124.
- Mathevet, R. Peluso, N.L., Couespel, A. and Robbins, P. (2015) Using historical political ecology to understand the present: water, reeds, and biodiversity in the Camargue Biosphere Reserve, southern France. *Ecology and Society*, 20 (4), p. 17.
- Matose, F., Oyono, P.R. and Murombedzi, J. (2019) Customary authority and commons governance In: B. Hudson, J. Rosenbloom and D. Cole, eds. *Routledge handbook of the study of the commons*. London: Routledge., pp. 334-344.
- Mauro, S.E.-D. (2009) Seeing the local in the global: political ecologies, world-systems, and the question of scale. *Geoforum*, 40 (1), pp. 116-125.
- May, S. and Holtorf, C. (2020) Uncertain futures. In: R. Harrison, C. DeSilvey, C. Holtorf, S. Macdonald, N. Bartolini, E. Breithoff, H. Fredheim, A. Lyons, S. May, J. Morgan and S. Penrose, eds. *Heritage futures: comparative approaches to natural and cultural heritage practices*. London: UCL Press., pp. 263-275.
- Mayer, M., Brenner, L., Schauss, B., Stadler, C., Arnegger, J. and Job, H. (2018) The nexus between governance and the economic impact of whale-watching. The case of the coastal lagoons in the El Vizcaíno Biosphere Reserve, Baja California, Mexico. *Ocean & Coastal Management*, 162, pp. 46-59.
- Mbereko, A., Kupika, O.L. and Gandiwa, E. (2017) Linking social and ecological sustainability: an analysis of livelihoods and the changing natural resources in the Middle Zambezi Biosphere Reserve. *The Journal of Entrepreneurial and Organizational Diversity*, 6 (1), pp. 49-68.
- McAlpine, C., Seabrook, L.M., Morrison, T.H. and Rhodes, J.R. (2013) Strengthening landscape ecology's contribution to a sustainable environment. In: B. Fu and K.B Jones, eds. *Landscape ecology for sustainable environment and culture*. Dordrecht: Springer Netherlands., pp. 21-36.
- McCleery, A. and Bowers, J. (2017) Documenting and safeguarding intangible cultural heritage: the experience in Scotland. In: M. Stefano, M. and P. Davis, eds. *The Routledge companion to intangible cultural heritage*. London: Routledge., pp. 185-201.
- McCullough, K.L. (2018) Resolving the "Highland problem": the Highlands and Islands of Scotland and the European Union. *Local Economy*, 33 (4), pp. 421-437.
- McEwan-Fujita, E. (2013) Gaelic revitalization efforts in Nova Scotia: reversing language shift in the 21st century. In: M. Newton, ed. *Celts in the Americas*. Sydney: Cape Breton Press., pp. 159-185.
- McFadyen, M. and Sandilands, R. (2021) On "cultural darning and mending": creative responses to ceist an fhearainn / the land question in the Gàidhealtachd. *Scottish Affairs*, 30 (2), pp. 157-177.
- McGinnis, M.D. and Ostrom, E. (2014) Social-ecological system framework: initial changes and continuing challenges. *Ecology and Society*, 19 (2), p. 30.

- McKee, A.J. (2015) Legitimising the laird? communicative action and the role of private landowner and community engagement in rural sustainability. *Journal of Rural Studies*, 41, pp. 23-36.
- McKee, A., Vinge, H., Bjørkhaug, H., Almås, R. (2020) Agricultural models in Scotland and Norway: a comparison. In: M. Combe, J. Glass and A. Tindley, eds. *Land reform in Scotland: history, law and policy*. Edinburgh: Edinburgh University Press., pp. 387-409.
- McMorran, R., Scott, A.J. and Price, M.F. (2014) Reconstructing sustainability; participant experiences of community land tenure in northwest Scotland. *Journal of Rural Studies*, 33, pp. 20-31.
- Merçon, J. Vetter, S., Tengö, M., Cocks, M., Balvanera, P., Rosell, J.A and Ayala-Orozco, B. (2019) From local landscapes to international policy: contributions of the biocultural paradigm to global sustainability. *Global Sustainability*, 2 (e7), pp. 1-11.
- Méndez-Contreras, J., Dickinson, F. and Castillo-Burguete, T. (2008) Community member viewpoints on the Ría Celestún Biosphere Reserve, Yucatan, Mexico: suggestions for improving the community/natural protected area relationship. *Human Ecology*, 36 (1), pp. 111-123.
- Méndez-Medina, C., Schmook, B., Basurto, X., Fulton, S. and Espinoza-Tenorio, A. (2020) Achieving coordination of decentralized fisheries governance through collaborative arrangements: a case study of the Sian Ka'an Biosphere Reserve in Mexico. *Marine Policy*, 117, p. 103939.
- Mendoza-Carranza, M., Wendi, A.F. and Emilio, I.D. (2013) Common pool resources dilemmas in tropical inland small-scale fisheries. *Ocean & Coastal Management*, 82, pp. 119-126.
- Meskell, L. M. (2009) Cosmopolitan heritage ethics. In: L.M. Meskell, ed. *Cosmopolitan archaeologies*. Durham: Duke University Press, pp. 1-27.
- Meskell, L. (2012) *The nature of heritage: the new South Africa*. Oxford: Wiley-Blackwell.
- Meskell, L. M. (2016) Heritage and cosmopolitanism. In: W. Logan, M. Nic Craith and U. Kockel., eds. *A companion to heritage studies*. West Sussex: Wiley Sons., pp. 479-490.
- Milbourne, P., Kitchen, L., and Stanley, K. (2006) Social forestry: exploring the social contexts of forests and forestry in rural areas. In: P. Cloke, T. Marsden, and P. Mooney, eds. *The handbook of rural studies*. London: Sage., pp. 230-242.
- Miller, K.R. (1983) Biosphere Reserves in concept and in practice. In: R. Scace and C. Martinkia, eds. *Towards the Biosphere Reserve: exploring the relationships between parks and adjacent Lands*, Proceedings of an International Symposium, Kalispell, Montana, USA, June 22-24, 1982, National Park Service, Rocky Mountain, Denver.
- Miller, T. and Baird, T. (2008) Epistemological pluralism: reorganising interdisciplinary research. *Ecology and Society*, 13 (2), p. 46.
- Milne, S. and Ateljevic, I. (2001) Tourism, economic development and the global-local nexus: theory embracing complexity. *Tourism Geographies*, 3 (4), pp. 369-393.
- Mishkin, M. and Kiker, G. (2021) Managing with logic: a Bayesian causal network assessment using the critical list of variables for sustaining the commons in the Monarch Reserve. *Global Ecology and Conservation*, 32, p.e01931.
- Mnyaka, P. and Macleod, C.I. (2018) Introduction: blurring boundaries. In: C.I Macleod, J. Marx, P. Mnyaka, P. and G. Treharne. eds, *The Palgrave handbook of ethics in critical research*. Cham: Springer International Publishing., pp. 133-143.

- Mohedano Roldán, A., Duit, A. and Schultz, L. (2019) Does stakeholder participation increase the legitimacy of nature reserves in local communities? Evidence from 92 Biosphere Reserves in 36 countries. *Journal of Environmental Policy & Planning*, 21 (2), pp. 188-203.
- Moir, J. (1997) The designation of valued landscapes in Scotland. In: R. MacDonald and H. Thomas, eds. *Nationality and Planning in Scotland and Wales*. Cardiff: University of Wales Press., pp. 203-242.
- Mol, A. (2002) *The body multiple: ontology in medical practice*. London: Duke University Press.
- Mondino, E. and Beery, T. (2019) Ecotourism as a learning tool for sustainable development. The case of Monviso Transboundary Biosphere Reserve, Italy. *Journal of Ecotourism*, 18 (2), pp. 1-15.
- Monterroso, I., Cronkleton, P. and Larson, A.M. (2019) Commons, indigenous rights and governance. In: B. Hudson, J. Rosenbloom and D. Cole, eds. *Routledge handbook of the study of the commons*. London: Routledge., pp.376-391.
- Moran, E.F. and Brondízio, E.S. (2013) Introduction to human-environment interactions research. In: E.S Brondízio and E.F. Moran, eds. *Human-environment interactions*. Dordrecht: Springer Netherlands., pp. 1-24.
- Moreira-Muñoz, A., Carvajal, F., Elor Tegui, S. and Rozzi, R. (2020) The Chilean Biosphere Reserve network as a model for sustainability? Challenges towards regenerative development, education, biocultural ethics and eco-social peace. In: M. Reed and M. Price, eds. *UNESCO Biosphere Reserves: supporting biocultural diversity, sustainability and society*. London: Routledge., pp. 61-75.
- Moreno-Ramos, T. and Müller, E. (2020) Biosphere Reserves, ideal sites to implement holistic approaches in regenerative development. In: M. Reed and M. Price, eds. *UNESCO Biosphere Reserves: supporting biocultural diversity, sustainability and society*. London: Routledge., pp. 254-269.
- Morgan, C. (2021) Save the date for future mourning: prefiguration and heritage. *Forum Kritische Archäologie* 10, pp. 1-5.
- Müller, K. (2008) Assessing cooperative environmental governance systems: the cases of the Kogelberg Biosphere Reserve and the Olifants-Doorn Catchment Management Agency. *Politeia*, 27 (1), pp. 86-104.
- Munro, J. (1994) Ullapool and the British fisheries society. In: J.R. Baldwin, ed. *Peoples and settlement in North-West Ross*. Edinburgh: Scottish Society for Northern Studies., pp. 245-270.
- Munro, G. and Hart, K. (2000) "The Highland Problem": state and community in local development. Aberdeen: The Arkleton Centre for Rural Development Research., pp. 1-48.
- Murdoch, J. (2006) Networking rurality: emergent complexity in the countryside. In: P. Cloke, T. Marsden, and P. Mooney, eds. *The handbook of rural studies*. London: Sage., pp. 171-184.
- Murray, J.S. (2014) *Reading the Gaelic landscape: leughadh aghaidh na tire*. Dunbeath: Whittles Publishing.
- Murchison, J.M. (2010) *Ethnography essentials: designing, conducting, and presenting your research*. 1st ed. San Francisco: Jossey-Bass.
- Nabudere, D.W. (2008) Research, activism, and knowledge production. In: C. Hale, ed. *Engaging contradictions: theory, politics, and methods of activist scholarship*. Berkeley: University of California Press., pp. 62-87.

- Naidu, T. (2018) To be or not to be... revealing questions of anonymity and confidentiality. In: C.I. Macleod, J. Marx, P. Mnyaka and G. Treharne. eds. *The Palgrave handbook of ethics in critical research*. Cham: Springer International Publishing, pp. 241-256.
- Nash, K. (2010) Changing definitions of politics and power. In: *Contemporary political sociology: globalization, politics and power*. 2nd ed. Oxford: Wiley-Blackwell.
- NatureScot (2022) Our approach to community empowerment. Available: <https://www.nature.scot/about-naturescot/our-work/community-empowerment-and-scotlands-environment/our-approach-community-empowerment> [Accessed 7 June 2022].
- Negev, M., Sagie, H., Orenstein, D.E., Shamir, S.Z., Hassan, Y., Amasha, H., Raviv, O., Fares, N., Lotan, A., Peled, Y. and Wittenberg, L. (2019) Using the ecosystem services framework for defining diverse human-nature relationships in a multi-ethnic Biosphere Reserve. *Ecosystem Services*, 39, p. 100989.
- Neusiedl, C. (2019) The ontological politics of (in-)equality: a new research approach for post-development. *Third World Quarterly*, 40 (4), pp. 651-667.
- Newig, J., Voß, J.-P. and Monstadt, J. (2007) Editorial: governance for sustainable development in the face of ambivalence, uncertainty and distributed power: an introduction. *Journal of Environmental Policy & Planning*, 9 (3-4), pp. 185-192.
- Newman, J. and Clarke, J. (2015) States of imagination. In: S. Hall, D. Massey and M. Ruskin, eds. *After neoliberalism? The Kilburn Manifesto*. London: Soundings, pp. 99-115.
- Newton, M. (2009) *Warriors of the word*. Edinburgh: Birlinn Ltd.
- Newton, M. (2017) The Great Caledonian Forest of the mind: Highland woods and tree symbolism in Scottish Gaelic tradition. *Scottish Studies*, 37, pp. 164-173.
- Nicholls, R., Higgins-Desbiolles and Rigney, G. (2016) Ngarrindjeri authority: a sovereignty approach to tourism. In: M. Mostafanezhad, R. Norum, E. Shelton, A. Thompson-Carr, eds. *Political ecology of tourism: community, power and the environment*. London: Routledge., pp. 50-69.
- Nightingale, A. (2015) Challenging the romance with resilience: communities, scale and climate change. In: W. Harcourt and I. Nelson, I., eds. *Practising feminist political ecologies: moving beyond the green economy*. London: Zed Books., pp. 182-208.
- Ní Mhathúna, D. (2021) Traditional ecological knowledge and the relevance of Dùthchas in Gàidhealtachd environmental futures. *Scottish Affairs*, 30 (2), pp. 251-261.
- Nölting, B. and Mann, C. (2018) Governance strategy for sustainable land management and water reuse: challenges for transdisciplinary research. *Sustainable Development*, 26 (6), pp. 691-700.
- Ó Giollagáin, C., Camshron, G., Moireach, P., Ó Curnáin, B., Caimbeul, I., MacDonald, B. and Péterváry, T. (2020) *Gaelic crisis in the vernacular community: a comprehensive sociolinguistic survey of Scottish Gaelic (GVCV)*. Aberdeen: Aberdeen University Press.
- O'Hanlon, F. and Paterson, L. (2019) Seeing is believing? Public exposure to Gaelic and language attitudes. *Scottish Affairs*, 28 (1), pp. 74-101.
- Ojeda, D. (2012) Green pretexts: Ecotourism, neoliberal conservation and land grabbing in Tayrona National Natural Park, Colombia. *Journal of Peasant Studies*, 39 (2), pp. 357-375.

- Oldekop, J.A., Bebbington, A.J., Hennermann, K., McMorrow, J., Springate, D.A., Torres, B., Truelove, N.K., Tysklind, N., Villamarín, S. and Preziosi, R.F. (2013) Evaluating the effects of common-pool resource institutions and market forces on species richness and forest cover in Ecuadorian indigenous Kichwa communities. *Conservation Letters*, 6 (2), pp. 107-115.
- O' Lear, S. (2010) *Environmental politics: scale and power*. Cambridge: Cambridge University Press.
- Oliver, J. and MacKinnon, I. (2021) Scotland's Gàidhealtachd futures: an introduction. *Scottish Affairs*, 30 (2), pp. 147-156.
- Olson, E.A. (2012) Notions of rationality and value production in ecotourism: examples from a Mexican biosphere reserve. *Journal of Sustainable Tourism*, 20 (2), pp. 215-233.
- Olsson, P., Folke, C., Galaz, V., Hahn, T. and Schultz, L. (2007) Enhancing the fit through adaptive co-management: creating and maintaining bridging functions for matching scales in the Kristianstads Vattenrike Biosphere Reserve, Sweden. *Ecology and Society*, 12 (1), p. 28.
- Onaindia, M., Ballesteros, F., Alonso, G., Monge-Ganuzas, M. and Pena, L. (2013) Participatory process to prioritize actions for a sustainable management in a Biosphere Reserve. *Environmental Science and Policy*, 33, pp. 284-294.
- Onaindia, M., Herrero, C., Hernandez, A., De Lucio, V., Pou, A. (2020) Co-creation of sustainable development knowledge in Biosphere Reserves. In: M. Reed and M. Price, eds. *UNESCO Biosphere Reserves: supporting biocultural diversity, sustainability and society*. London: Routledge., pp. 269-281.
- O' Reilly, K. (2012) *Ethnographic methods*. London: Routledge.
- Orr, R. (2017) The nostalgic native? The politics and terms of heritage and remembrance in two communities. *International Journal of Heritage Studies*, 23 (7), pp. 643-653.
- Ostrom, E. (1999) Coping with tragedies of the commons. *Annual Review of Political Science*, 2, pp.493-535.
- Ostrom, E. (2009) A general framework for analyzing sustainability of social-ecological systems. *Science*, 325 (5939), pp. 419-422.
- Ostrom, E. (2012) Polycentric systems: multilevel governance involving a diversity of organisations. In: E. Brousseau, T. Dedeurwaerdere, P-A. Juvet and M. Willinger, eds. *Global environmental commons: analytical and political challenges in building governance mechanisms*. Oxford: OUP., pp. 105-125.
- Parra, C. and Moulaert, F. (2016) The governance of the nature-culture nexus: lessons learned from the San Pedro de Atacama case study. *Nature and Culture*, 11 (3), pp. 239-258.
- Payne, A. and Phillips, N. (2010) Alternative theories. In: *Development*. Cambridge: Polity Press., pp. 118-144.
- Pellizzoni, L. (2021) Prefiguration, subtraction and emancipation. *Social Movement Studies*, 20 (3), pp. 364-379.
- Pels, P., Boog, I., Henrike, F., Kripe, Z., Minter, T., Postma, M., Sleeboom-Faulkner, M., Simpson, B., Dilger, H., Schonhuth, M., von Poser, A., Castillo, R.C.A., Lederman, R., Richards-Rissetto, H. (2018) Data management in anthropology: the next phase in ethics governance? *Social Anthropology*, 26 (3), pp. 391-413.

- Peskett, L. (2021) Land use partnerships for addressing climate change: what are they, why use them, and how do they work? CSFL Briefing, Edinburgh: University of Edinburgh. Available: https://era.ed.ac.uk/bitstream/handle/1842/38139/Partnerships_brief_final.pdf?sequence=3&isAllowed=y [Accessed 1 June 2022].
- Peters, M. (2015) Culture, heritage and solidarity in the context of sustainable development. In: M.T. Albert, ed. *Perceptions of sustainability in heritage studies*. Berlin: DeGruyter., pp. 137-144.
- Pickerill, J.M. (2016) Building the commons in eco-communities. In: S. Kirwan, L. Dawney, and J. Brigstocke, eds. *Space, power and the commons*. London: Routledge, pp. 31-54.
- Pillay, D., Sharan, S. and Hendrikse, J. (2020) Reconceptualising fieldnotes: the materiality of making knowledge for embodied, dialogical, creative understanding of self-other. In: C. Burkholder, J. Thompson and J. Thompson, eds. *Fieldnotes in qualitative education and social science research: approaches, practices, and ethical considerations*. London: Routledge., pp. 264-276.
- Pink, S., Horst, H., Postill, J., Hjorth, L., Lewis, T. and Tacchi, J. eds. (2016) *Digital ethnography: principles and practice*. Los Angeles: Sage.
- Plummer, R., Baird, J., Dzyndzyak, A., Armitage, D., Bodin, O. and Schultz, L (2017) Is adaptive co-management delivering? Examining relationships between collaboration, learning and outcomes in UNESCO Biosphere Reserves. *Ecological Economics*, 140, pp. 79-88.
- Plummer, R., Baird, J., Farhad, S. and Witkowski, S. (2020) How do biosphere stewards actively shape trajectories of social-ecological change? *Journal of Environmental Management*, 261, p. 110139.
- Poli, D. (2020) The representation process of local heritage for territorial projects. In: D. Fanfani and R.A. Matarán, eds. *Bioregional planning and design: Volume II*. Cham: Springer International Publishing, pp. 51-79.
- Pollock, R.M. (2004) Identifying principles for place-based governance in Biosphere Reserves. *Environments*, 32 (3), pp. 27-41.
- Pollock, R.M., Reed, M.G. and Whitelaw, G.S. (2007) Steering governance through regime formation at the landscape scale: evaluating experiences in Canadian Biosphere Reserves. In: K. Hanna, D.A. Clark and D.S. Slocombe, eds. *Transforming parks and protected areas: policy and governance in a changing world*. London: Routledge., pp. 122-146.
- Ponta, N. Steiner, E., Metzger, M. and Toteva, G. (2020) *Towards regional land use partnerships: lessons from existing collaborative partnerships in Scotland*. Available: https://www.landcommission.gov.scot/downloads/5fa124a246d82_Appendix%201.%20ETH-ECCI%20Lessons%20From%20Collaborative%20Partnerships.pdf [Accessed 2 June 2022].
- Poole, A. K. (2018) Where is goal 18? The need for biocultural heritage in the sustainable development goals. *Environmental Values*, 27 (1), pp. 55-80.
- Portwood-Stacer, L. (2018) Micropolitics. In: B. Franks, N. Jun and L. Williams, eds. *Anarchism: a conceptual approach*, London: Routledge., pp. 129-141.
- Posocco, S. (2008) Zoning: environmental cosmopolitics in and around the Maya Biosphere Reserve, Petén, Guatemala. *Nature and Culture*, 3 (2), pp. 206-224.
- Price, M.F. (2017) The re-territorialisation of Biosphere Reserves: the case of Wester Ross, Northwest Scotland. *Environmental Science & Policy*, 72, pp. 30-40.

- Price, M.F. (2020) The evolution of the Biosphere Reserve network in the United Kingdom. In: M. Reed and M. Price, eds. *UNESCO Biosphere Reserves: supporting biocultural diversity, sustainability and society*, London: Routledge., pp. 89-101.
- Punch, S. (2012) Hidden struggles of fieldwork: exploring the role and use of field diaries. *Emotion, Space and Society*, 5 (2), pp. 86-93.
- Punch, S. (2015) Possibilities for learning between childhoods and youth in the minority and majority worlds: youth transitions as an example of cross-world dialogue. In: H. Cahill and J. Wyn, eds. *Handbook of children and young adulthood*. Singapore: Springer., pp. 689-701.
- Punch, S. (2016) Cross-world and cross-disciplinary dialogue: a more integrated, global approach to childhood studies. *Global Studies of Childhood*, 6 (3), pp. 352-364.
- Purcell, M. (2012) Gramsci is not dead: for a “both/and” approach to radical geography. *ACME: An International E-Journal for Critical Geographies*, 11 (3), pp. 512-24.
- Purvis, B., Mao, Y. and Robinson, D. (2019) Three pillars of sustainability: in search of conceptual origins. *Sustainability Science*, 14 (3), pp. 681-695.
- Qomar, N., Basuni, S., Soekmadi, R. and Soedjito, H. (2016) Local institution in utilization of the water resources of the Giam Siak Kecil-Bukit Batu Biosphere Reserve, in Riau, Indonesia. *MIMBAR: Jurnal Sosial dan Pembangunan*, 32 (2), pp. 421-434.
- Quintana, A. and Campbell, L.M. (2019) Critical commons scholarship: a typology. *International Journal of the Commons*, 13 (2), pp. 1112-1127.
- Randhir, T.O. (2019) Globalization, Local commons and the multiscale ecosystem framework (MEF) In: B. Hudson, J. Rosenbloom and D. Cole, eds. *Routledge handbook of the study of the commons*. London: Routledge., pp. 392-398.
- Rashkow, E.D. (2014) Idealizing inhabited wilderness: a revision to the history of indigenous peoples and national parks. *History Compass*, 12 (10), pp. 818-832.
- Ravenscroft, N., Moore, N., Welch, E. and Hanney, R. (2013) Beyond agriculture: the counter-hegemony of community farming. *Agriculture and Human Values*, 30 (4), pp. 629-639.
- Reed, A. (2015) Of routes and roots: paths for understanding diasporic heritage. In: E. Waterton and S. Watson, eds. *The Palgrave handbook of contemporary heritage research*. Hampshire: Palgrave Macmillan., pp. 382-396.
- Reed, M. (2020) Conceptual origins and first-generation Biosphere Reserves. In: M. Reed and M. Price, eds. *UNESCO Biosphere Reserves: supporting biocultural diversity, sustainability and society*, London: Routledge., pp. 13-28.
- Reed, M.G., Godmaire, H., Abernethy, P. and Guertin, M-A. (2014) Building a community of practice for sustainability: strengthening learning and collective action of Canadian biosphere reserves through a national partnership. *Journal of Environmental Management*, 145, pp. 230-239.
- Reed, M. and Price, M. (2020a) Introducing UNESCO Biosphere Reserves. In: M. Reed and M. Price, eds. *UNESCO Biosphere Reserves: supporting biocultural diversity, sustainability and society*, London: Routledge., pp. 1-10.
- Reed, M. and Price, M. (2020b) Unfinished business: the present and future contributions of Biosphere Reserves to sustainability science. In: M. Reed and M. Price, eds. *UNESCO Biosphere Reserves: supporting biocultural diversity, sustainability and society*, London: Routledge., pp. 321-332.

- Rees, S.E., Rodwell, L.D., Searle, S. and Bell, A. (2013) Identifying the issues and options for managing the social impacts of Marine Protected Areas on a small fishing community. *Fisheries Research*, 146, pp. 51-58.
- Rennie, F. (2007) Human ecology and concepts of sustainable development in a crofting township. *Folk Life*, 46 (1), pp. 39-57.
- Rennie, F. and Billing, S.-L. (2015) Changing community perceptions of sustainable rural development in Scotland. *The Journal of Rural and Community Development*, 10 (2), pp. 35-46.
- Revell, P. and Dinnie, E. (2020) Community resilience and narratives of community empowerment in Scotland. *Community Development Journal*, 55 (2), pp. 218-236.
- Richards, E. (2000) *The Highland clearances*. Edinburgh: Birlinn.
- Riddoch, L. (2013) *Blossom*. Edinburgh: Luath Press.
- Riddoch, L. (2015) Access, nature, culture and the great outdoors – Norway and Scotland. In: J. Bryden, O. Brox and L. Riddoch, eds. *Northern neighbours: Scotland and Norway since 1800*. Edinburgh: Edinburgh University Press., pp. 230-149.
- Righettini, M.S. and Lizzi, R. (2022) How scholars break down “policy coherence”: the impact of sustainable development global agendas on academic literature. *Environmental Policy and Governance*, 32 (2), pp. 98-109.
- Robertson, I. (2015) Hardscrabble heritage: the ruined blackhouse and crofting landscape as heritage from below. *Landscape Research*, 40 (8), pp. 993-1009.
- Robertson, I.J.M (2016) *Heritage from below*. London: Routledge.
- Robertson, I.J.M. (2018) Afterword. In: H. Muzzaini and C. Minca, eds. *After heritage: critical perspectives from below*. Cheltenham: Elgar., pp. 169-180.
- Robertson, I. And Webster, D. (2017) People of the croft: visualising land, heritage and identity. *Cultural Geographies in Practice*, 24 (2), pp. 311-318.
- Robertson, M. (2009) Aite Dachaidh: re-connecting people with place-island landscapes and intangible heritage. *International Journal of Heritage Studies*, 15 (2-3), pp. 153-162.
- Robinson, G.M. (2019) Sustainable and resilient ruralities. In: M. Scott, N. Gallent and M. Gkartziou, eds. *The Routledge companion to rural planning*. London: Routledge., pp. 56-68.
- Rodgers, C. and Mackay, D. (2018) Creating “new” commons for the twenty-first century: innovative legal models for “green space”. *Journal of Environmental Planning and Management*, 61 (5–6), pp. 1051-1069.
- Ross, A. (2015) The future Scotland wants – is it really all about sustainable economic growth? *Edinburgh Law Review*, 19 (1), pp. 66-100.
- Ross, A. (2019) The evolution of sustainable development in Scotland—a case study of community right-to-buy law and policy 2003–2018. *Sustainability*, 11 (1), pp. 1-18.
- Ruhleder, K. (2000) The virtual ethnographer: fieldwork in distributed electronic environments. *Field Methods*, 12 (1), pp. 3-17.
- Russell, Z. (2021a) Common sense discourses of nature: a Gramscian analysis of conservation designations in the Scottish Highlands. In: *Heritage and Environment*, 5th Central European Heritage Forum, Krakow, ICC, pp. 47-66.

- Russell, Z. (2021b) *Biocultural heritage in the UK*. Inherit Institute. Available at: https://www.inherit-institute.org/files/ugd/49a044_ed36891c1e94ee88b3141e6e85c8f9f.pdf?index=true [Accessed 7 June 2022].
- Russell, Z. (2022) The Isle of Man Biosphere Reserve: an entire nation approach to sustainable development. *Environmental Policy and Planning*, online: <https://doi.org/10.1080/1523908X.2022.2099366>.
- Russell, Z., Beattie, L. and Heaney, D. (2021) Spaces of well-being: social crofting in rural Scotland. *Journal of Rural Studies*, 86, pp. 145-154.
- Russell, Z. (forthcoming) An anarchist imagination for critical heritage studies: prefiguring crofting futures. In: L.J. Smith, G. Campbell and C. Whitehead, eds. *Routledge handbook of heritage and politics*. London: Routledge.
- Sadler, B. (1989) National parks, wilderness preservation, and native peoples in Northern Canada. *Natural Resources Journal*, 29 (1), pp. 185-204.
- Savransky, M. (2022) Ecological uncivilisation: precarious world-making after progress. *The Sociological Review*, 70 (2), pp. 367-384.
- Sayre, M., Stenner, T. and Argumedo, A. (2017) You can't grow potatoes in the sky: building resilience in the face of climate change in the Potato Park of Cuzco, Peru. *Culture, Agriculture, Food and Environment*, 39 (2), pp. 100-108.
- Schliep, R. and Stoll-Kleemann, S. (2010) Assessing governance of Biosphere Reserves in Central Europe. *Land Use Policy*, 27 (3), pp. 917-927.
- Schmid, B., Smith, T.S.J. and Taylor Aiken, G. (2021) Governing through community: transformative geographies from the bottom up. *Environmental Policy and Governance*, 31 (3), pp. 155-158.
- Schultz, L., Duit, A. and Folke, C. (2011) Participation, adaptive co-management, and management performance in the World Network of Biosphere Reserves. *World Development*, 39 (4), pp. 662-671.
- Schultz, L., West, S., Bourke, A.J., d'Armengol, L., Torrents, P., Hardardottir, H., Jansson, A. and Roldán, A.M. (2018) Learning to live with social-ecological complexity: an interpretive analysis of learning in 11 UNESCO Biosphere Reserves. *Global Environmental Change*, 50, pp. 75-87.
- Schultz, L., West, S. and Florencio, C. (2020) Nurturing adaptive governance through environmental monitoring: people, practices and politics in the Kruger to Canyons Biosphere Region, South Africa. In: J. Glückler, G. Herrigel and M. Handke, eds. *Knowledge for governance*. Cham: Springer., pp. 293-318.
- Scottish Creel Fishermen's Federation (2017) *Correcting the misallocation of Nephrops stocks in Scottish inshore waters: untapping a vast economic (and environmental) potential*. Available: <http://www.scottishcreelfishermensfederation.co.uk/report/CORRECTING%20THE%20MISALLOCATION%20OF%20%20NEPHROPS%20STOCKS%20-%20SH2.pdf> [Accessed 5 June 2022].
- Scottish Crofting Federation. (2022) *Frequently asked questions*. Available: <https://www.crofting.org/about-scf/frequently-asked-questions/>
- Scottish Government (n.d) *Community empowerment*. Available: <https://www.gov.scot/policies/community-empowerment/> [Accessed 17 June 2022].

Scottish Government (n.d.) *Scotland's wellbeing: the impact of COVID-19 – Summary*. Available: <https://nationalperformance.gov.scot/scotlands-wellbeing-impact-covid-19-summary#:~:text=The%20COVID%2D19%20pandemic%20has%20resulted%20in%20the%20deepest%20and,in%20quarterly%20GDP%20on%20record>. [Accessed 17 June 2022].

Scottish Government (2021a) *Crofting: National Development Plan*. Available: <https://www.gov.scot/publications/national-development-plan-crofting/> [Accessed 4 June 2022].

Scottish Government (2021) *Working together to maximise the potential of our land. Rural and Environment*. Available: <https://blogs.gov.scot/rural-environment/2021/02/05/working-together-to-maximise-the-potential-of-our-land/> [Accessed 16 June 2022].

Scottish Land Commission (2020) *Advice to Scottish Government: Regional Land Use Partnerships*. Available: https://www.landcommission.gov.scot/downloads/5fa129aedca82_20201103%20Advice%20to%20Scottish%20Government%20Regional%20Land%20Use%20Partnerships.pdf [Accessed 19 June 2022].

Scottish Land Commission (2022) *Community ownership*. Available: <https://www.landcommission.gov.scot/our-work/ownership/community-ownership> [Accessed 14 June 2022].

Sellar, W.D.H. (2006) The great land debate and the Land Reform (Scotland) Act 2003. *Norsk Geografisk Tidsskrift - Norwegian Journal of Geography*, 60 (1), pp. 100-109.

Shah, A. (2017) Ethnography? Participant observation, a potentially revolutionary praxis. *HAU: Journal of Ethnographic Theory*, 7 (1), pp. 45-59.

Shantz, J. (2013) *Commonist tendencies: mutual aid beyond communism*. New York: Punctum Books.

Sharpley, R. (2009) *Tourism development and the environment: beyond sustainability?* London: Earthscan.

Shucksmith, M. (2010) Disintegrated rural development? Neo-endogenous rural development, planning and place-shaping in diffused power contexts. *Sociologia Ruralis*, 50 (1), pp. 1-14.

Shucksmith, M. (2012) Class, power and inequality in rural areas: beyond social exclusion? *Sociologia Ruralis*, 52 (4), pp. 377-397.

Shucksmith, M. and Rønningen, K. (2011) The uplands after neoliberalism? – The role of the small farm in rural sustainability. *Journal of Rural Studies*, 27 (3), pp. 275-287.

Silva, L. and Santos, P.M. (2012) Ethnographies of heritage and power. *International Journal of Heritage Studies*, 18 (5), pp. 437-443.

Simmons, R., Sevarlic, M.M. and Nikolic, M.M. (2010) The role and potential of co-operatives in poverty reduction and local economic development in Serbia. In: Agriculture in late transition - experience of Serbia. Belgrade: Serbian Association of Agricultural Economists.

Simmons, R. (2018) Using cultural theory to navigate the policy process. *Policy & Politics*, 46 (2), pp. 235-253.

Simmons, R., Yuill, B. and Booth, J. (2015) Governing resilient co-operatives: agricultural co-operatives in Scotland. In: S. Novkovic and K. Miner, eds. *Co-operative governance fit to build resilience in the face of complexity*. Brussels: International Co-operative Alliance, pp. 35-48.

- Singh, R., Mal, S. and Kala, C. (2009) Community responses to mountain tourism: a case in Bhyundar Valley, Indian Himalaya. *Journal of Mountain Science*, 6, pp. 394-404.
- Siurua, H. (2006) Nature above people: Rolston and “fortress” conservation in the South. *Ethics and the Environment*, 11 (1), pp. 71-96.
- Skerratt, S. (2013) Enhancing the analysis of rural community resilience: evidence from community land ownership. *Journal of Rural Studies*, 31, pp. 36-46.
- Smith, L. (2006) *Uses of heritage*. London: Routledge.
- Smith, L. and Akagawa, N., eds. (2009) *Intangible heritage: key issues in cultural heritage*. London: Routledge.
- Smith, L. and Campbell, G. (2017) “Nostalgia for the future”: memory, nostalgia and the politics of class. *International Journal of Heritage Studies*, 23 (7), pp. 612-627.
- Smith, L. and Campbell, G. (2017) The tautology of “intangible values” and the misrecognition of intangible cultural heritage. *Heritage & Society*, 10 (1), pp. 26-44.
- Smith, L. and Waterton, E. (2009) The envy of the world? intangible heritage in England. In: L. Smith, and N. Akagawa, eds. *Intangible heritage: key issues in cultural heritage*. London: Routledge., pp. 289-302.
- Smout, T.C. (2009) *Exploring environmental history: selected essays*. Edinburgh: Edinburgh University Press.
- Snir, I. (2016) “Not just one common sense”: Gramsci’s common sense and Laclau and Mouffe’s radical democratic politics. *Constellations*, 23 (2), pp. 269-280.
- Sommerville, P. (2016) *Understanding community: policy, politics and practice*. Bristol: Policy Press.
- Spivak, G. (1987) *In other worlds: essays in cultural politics*. New York: Routledge.
- Springer, S. (2014a) Human geography without hierarchy. *Progress in Human Geography*, 38 (3), pp. 402-419.
- Springer, S. (2014b) Why a radical geography must be anarchist. *Dialogues in Human Geography*, 4 (3), pp. 249-270.
- Springer, S. (2020) Caring geographies: the COVID-19 interregnum and a return to mutual aid. *Dialogues in Human Geography*, 10 (2), pp. 112-115.
- Sterling, C. and Harrison, R. (2020) Introduction: of territories and temporalities. In: R. Harrison and C. Sterling, eds. *Deterritorializing the future: heritage in, of and after the Anthropocene*. London: Open Humanities Press., pp. 19-55.
- Stettner, L. (1980) Community co-operatives in the British Isles. *Journal of Rural Co-operation*, VIII, pp. 39-64.
- Stevens, S.M (2004) Debating ecology: ethnographic writing that makes a difference. In: S.G Brown and S.I Dobrin, eds. *Ethnography unbound: from theory shock to critical praxis*. Albany: State University of New York Press., pp. 157-182.
- Stoll-Kleemann, S., De la Vega-Leinert, A. and Schultz, L. (2010) The role of community participation in the effectiveness of UNESCO Biosphere Reserve management: evidence and reflections from two parallel global surveys. *Environmental Conservation*, 37 (3), pp. 227-238.

- Stoll-Kleeman, S., O' Riordan, T. (2017) The challenges of the Anthropocene for Biosphere Reserves. *PARKS*, 23 (1), pp. 89-100.
- Storey, D. (2012) Land, territory, and identity. In: I. Convery, G. Corsane and P. Davis, eds. *Making sense of place: multi-disciplinary perspectives*. Suffolk: Boydell Press., pp. 11-22.
- St Pierre, E., Jackson, A. and Mazzei, A. (2016) New empiricisms and new materialisms: conditions for new inquiry. *Cultural Studies*, 16 (2) pp. 99-110.
- Sugden, F. and Punch, S. (2014) Capitalist expansion and the decline of common property ecosystems in China, Vietnam and India. *Development and Change*, 45 (4), pp. 656-684.
- Sutherland, L.A. (2019) Beyond hobby farming: towards a typology of non-commercial farming. *Agriculture and Human Values*, 36, pp. 475-493.
- Swiderska, K. (2006) Protecting traditional knowledge: a framework based on customary laws and Bio-Cultural Heritage. *Paper for the International Conference on Endogenous Development and BioCultural Diversity*, 3-5 October 2006, Geneva. Available: <https://pubs.iied.org/sites/default/files/pdfs/migrate/G01069.pdf> [Accessed 17 June 2022].
- Swiderska, K. (2009) Protecting traditional knowledge: a holistic approach based on customary laws and bio-cultural heritage. In: K.N. Ninan, ed. *Conserving and valuing ecosystem services and biodiversity: economic, institutional and social challenges*, London: Earthscan, pp. 331-345.
- Swiderska, K. and Argumedo, A. (2017) What is biocultural heritage? *International Institute for Environment and Development*. Available: <https://pubs.iied.org/g04151> [Accessed 17 June 2022].
- Swiderska, K., Argumedo, A. and Pimbert, M. (2020) Biocultural heritage territories: key to halting biodiversity loss. *International Institute for Environment and Development*. Available at <https://www.jstor.org/stable/resrep29050> [Accessed 17 June 2022].
- Swiderska, K., Argumedo, A., Wekesa, C., Ndalilo, L., Song, Y., Rastogi, A. and Ryan, P. (2022) Indigenous peoples' food systems and biocultural heritage: addressing indigenous priorities using decolonial and interdisciplinary research approaches. *Sustainability*, 14 (18), p. 11311.
- Taggart-Hodge, T.D. and Schoon, M. (2016) The challenges and opportunities of transboundary cooperation through the lens of the East Carpathians Biosphere Reserve. *Ecology and Society*, 21 (4), p. 29.
- Taye, B.M. (2019) Forest land use and management plan implementation of PFM sites established within Kafa Biosphere Reserve, SW Ethiopia. *Forest*, 55, pp. 28-51.
- Taylor, P.L. (2010) Conservation, community, and culture? New organizational challenges of community forest concessions in the Maya Biosphere Reserve of Guatemala. *Journal of Rural Studies*, 26 (2), pp. 173-184.
- Teneggi, G. and Zandonai, F. (2017) The community enterprises of the Appennino Tosco-Emiliano UNESCO Biosphere Reserve, Italy: biodiversity guardians and sustainable development innovators. *Journal of Entrepreneurial and Organizational Diversity*, 6 (1), pp. 33-48.
- Teo, P. and Yeoh, B.S.A. (1997) Remaking local heritage for tourism. *Annals of Tourism Research*, 24 (1), pp. 192-213.
- Tessier, S. (2012) From field notes, to transcripts, to tape recordings: evolution or combination? *International Journal of Qualitative Methods*, 11 (4), pp. 446-460.

- Těšitel, J. and Kušová, D. (2010) Biosphere Reserves – suggested model of the institution of commons (case study of the Šumava Biosphere Reserve). *Journal of Landscape Ecology*, 3 (2), pp. 73-89.
- Thomas, B. (2015) Cultures of empire in the Scottish Highlands, c. 1876-1902. *Unpublished PhD Thesis*. University of Aberdeen.
- Thomas, J. (1993) *Doing critical ethnography*. California: Sage Publications.
- Thomas, S. and Banks, I. (2018) Asset, burden, Cultybraggan: community site ownership in a Scottish village. *Journal of Community Archaeology Heritage*, 6 (1), pp. 1-18.
- Thompson, J.A. and Burkholder, C. (2020) What about fieldnotes? An introduction. In: C. Burkholder and J.A. Thompson, eds. *Fieldnotes in qualitative education and social science research: approaches, practices and ethical considerations*. 1st ed. London: Routledge., pp. 1-12.
- Thompson, I., Howard, P. and Waterton, E. (2013) Introduction. In: P. Howard, I. Thompson and E. Waterton, eds. *The Routledge companion to landscape studies*. London: Routledge., pp. 1-7.
- Tilley, L. and Woodthorpe, K. (2011) Is it the end for anonymity as we know it? A critical examination of the ethical principle of anonymity in the context of 21st century demands on the qualitative researcher. *Qualitative Research*, 11 (2), pp. 197-212.
- Tindley, A. (2021) “This will always be a problem in Highland history”: a review of the historiography of the Highland clearances. *Journal of Scottish Historical Studies*, 41 (2), pp. 181-194.
- Tolia-Kelly, D.P., Waterton, E. and Watson, S. eds. (2017) *Heritage, affect and emotion: politics, practices and infrastructures*. London: Routledge.
- Toogood, M. (1995) Representing ecology and Highland tradition. *Area*, 27 (2), pp. 102-109.
- Toogood, M. (2003) Decolonizing Highland conservation. In: W.M Adams and M. Mulligan, eds. *Decolonizing nature: strategies for conservation in a post-colonial era*. London: Earthscan Publications., pp. 152-171.
- Torralba, M., Garcia-Martin, M., Quintas-Soriano, C., Wolpert, F. and Plieninger, T. (2020) Implementation of social-ecological management approaches in Biosphere Reserves in the Mediterranean Basin. In: M. Reed and M. Price, eds. *UNESCO Biosphere Reserves: supporting biocultural diversity, sustainability and society*, London: Routledge., pp. 281-296.
- Tourism and Leisure Solutions (2015) *Wester Ross tourism development strategy, November 2015*. Visit Wester Ross. [online]. Available at: <https://static1.squarespace.com/static/52d524abe4b09ed2cf1e41fb/t/56f3eef2ecb928a10d921242/1458826997579/Tourism+Development+Strategy+-+Final+Version.pdf> [Accessed 4 June 2022].
- UK National Commission for UNESCO (2020) *The national value of UNESCO designations to the United Kingdom*. London: UK National Commission for UNESCO. Available: <https://unesco.org.uk/national-value/#:~:text=CONCLUSION,contribution%20to%20the%20UK%20economy>. [Accessed 5 June 2022].

- Ullapool Community Trust (2017) *Community Growth Plan 2017 – 2027, 2nd edition*. Available: https://ullapoolcommunity.org/wp-content/uploads/2019/12/CGP-2017_Executive-Summary.pdf [Accessed 15 June 2022].
- UNESCO (2017) *A new roadmap for the Man and the Biosphere (MAB) programme and its World Network of Biosphere Reserves*. Paris: United Nations Educational, Scientific and Cultural Organization. Available: <https://unesdoc.unesco.org/ark:/48223/pf0000247418> [Accessed 16 June 2022].
- UNESCO (2021a) *What are Biosphere Reserves?* Available: <https://en.unesco.org/biosphere/about> [Accessed 16 June 2022].
- UNESCO (2021b) *World Network of Biosphere Reserves*. Available: <https://en.unesco.org/biosphere/wnbr> [Accessed 16 June 2022].
- Urry, J. (1995) How societies remember the past. *The Sociological Review*, 43 (1), pp. 45-65.
- Vaccaro, I., Beltran, O. and Paquet, P. (2013) Political ecology and conservation policies: some theoretical genealogies. *Journal of Political Ecology*, 20 (1), pp. 255-272.
- Van Cuong, C., Dart, P., Hockings, M. (2017) Biosphere Reserves: attributes for success. *Journal of Environmental Management*, 188, pp. 9-17.
- Van Laerhoven, F. and Barnes, C. (2019) Facilitated self-governance of the commons: on the roles of civil society organizations in the governance of shared resource systems. In: B. Hudson, J. Rosenbloom and D. Cole, eds. *Routledge handbook of the study of the commons*. London: Routledge., pp. 360-375.
- Vasseur, L. (2020) Embracing cultures in ecosystem governance in Biosphere Reserves: slowing down the pace. In: M. Reed and M. Price, eds. *UNESCO Biosphere Reserves: supporting biocultural diversity, sustainability and society*, London: Routledge., pp. 309-320.
- Vidal, F. and Dias, N. eds. (2014) *Endangerment, biodiversity and culture*. New York: Routledge.
- Voyer, A. and Trondman, M. (2017) Between theory and social reality: ethnography and interpretation and social knowledge : Introduction to the special issue. *Ethnography*, 18 (1), pp. 3-9.
- Wainwright, J. (2013) On the nature of Gramsci's "conceptions of the world". In: M. Ekers, G. Hart, S. Kipfer and A. Loftus. *Gramsci: space, nature, politics*. West Sussex: Wiley-Blackwell., pp. 161-177.
- Wald, N. and Hill, D. (2016) Anarchist geographies in the rural Global South. In: R. White, S. Springer, and L. De Sousa, eds. *The practice of freedom: anarchism, geography and the spirit of revolt*. Lanham: Rowman & Littlefield, pp. 23-41.
- Walford, G. (2018) The impossibility of anonymity in ethnographic research. *Qualitative Research*, 18 (5), pp. 516-525.
- Walk, H., Luthhardt, V and Nölting, B. (2020) Participatory learning for transdisciplinary science in Biosphere Reserves: a modified role for universities. In: M. Reed and M. Price, eds. *UNESCO Biosphere Reserves: supporting biocultural diversity, sustainability and society*, London: Routledge., pp. 297-309.
- Walsh, C. (2020) Landscape imaginaries and the protection of dynamic nature at the Wadden Sea. *Rural Landscapes: Society, Environment, History*, 7 (1), pp. 1-20.

- Warburton, T. (2020) What looks like a grave: native and anarchist place-making in New England. *Studies in American Indian Literatures*, 32 (1–2), pp. 75-110.
- Warren, C. (2009) *Managing Scotland's environment*. 2nd ed. Edinburgh: Edinburgh University Press.
- Warren, C. and McKee, A. (2011) The Scottish revolution? Evaluation the impacts of post-devolution land reform. *Scottish Geographical Journal*, 127 (1), pp. 17-39
- Waterton, E. (2010) *Politics, policy and the discourses of heritage in Britain*. Basingstoke: Palgrave Macmillan.
- Waterton, E. And Smith, L. (2010) The recognition and misrecognition of community heritage. *International Journal of Heritage Studies*, 12 (1-2), pp. 4-15.
- Wengraf, T. (2001) *Qualitative research interviewing: biographic narrative and semi-structured methods*. Thousand Oaks: Sage.
- Whitaker, E.M. and Atkinson, P. (2017) Surrender, catch, and the imp of fieldwork. *Qualitative Inquiry*, 25 (9-10), pp. 936-944.
- Wichterich, C. (2015) Contesting green growth: connecting care, commons and enough. In: W. Harcourt and I. Nelson, eds. *Practising feminist political ecologies: moving beyond the green economy*. London: Zed Books., pp. 67-100.
- Wigger, A. (2016) Anarchism as emancipatory theory and praxis: implications for critical Marxist research. *Capital & Class*, 40 (1), pp. 129-145.
- Wightman, A. (2014) Sheik Mohammed bin Rashid Al Maktoum, the farmer. *Land Matters*, Available: <http://www.andywightman.com/archives/3571> [Accessed 1 June 2022].
- Wilkes, J. (2022) Reconnecting with nature through good governance: inclusive policy across scales. *Agriculture*, 12 (3), p. 382. <https://doi.org/10.3390/agriculture12030382>.
- Wilkinson, T. (2019) *Biocultural heritage tourism – a review of literature and experiences*. Available: https://www.bcht.eu/uploads/1/5/4/4/15448192/bcht_literature_review_appendixes.pdf [Accessed 12 June 2022].
- Williams, R. (1958) Culture is ordinary. In: R. Williams, ed. (1989) *Resources of hope: culture, democracy, socialism*. London: Verso., pp. 3-18.
- Williams, D.R. (2018) Spacing conservation practice: place-making, social learning, and adaptive landscape governance in natural resource management. In: T. Marsden, ed. *The Sage handbook of nature*. London: Sage., pp. 285-303.
- Williams, B. and Brydon-Miller, M. (2004) Changing directions: participatory-action research, agency and representation. In: S.G Brown and S.I. Dobrin, eds. *Ethnography unbound: from theory shock to critical praxis*. Albany: State University of New York Press., pp. 241-258.
- Willis, D. (1994) Man and the land: physical environment and settlement in the North-West Highlands. In: J. Baldwin, ed. *People and settlement in North-West Ross*, Edinburgh: Scottish Society for Northern Studies., pp. 1-14.
- Winkel, T., Núñez-Carrasco, L., Cruz, P.J., Egan, N., Sáez-Tonacca, L., Cubillos-Celis, P, Poblete-Olivera, C., Zavalla-Nanco, N., Miño-Baes, B., Viedma-Araya, M.P. (2020) Mobilising common biocultural heritage for the socioeconomic inclusion of small farmers: panarchy of two case studies on quinoa in Chile and Bolivia. *Agriculture and Human Values*, 37 (2), pp. 433-447.

- Winkler, K.J. (2019) The implementation of the conceptual shift in conservation: pathways of three German UNESCO Biosphere Reserves. *Ecosystems and People*, 15 (1), pp. 173-180.
- Winkler, K.J. and Hauck, J. (2019) Landscape stewardship for a German UNESCO Biosphere Reserve: a network approach to establishing stewardship governance. *Ecology and Society*, 24 (3), pp. 1-8.
- Winter, T. (2013) Clarifying the critical in critical heritage studies. *International Journal of Heritage Studies*, 19 (6), pp. 532-545.
- Winter, T. (2014) Beyond Eurocentrism? Heritage conservation and the politics of difference. *International Journal of Heritage Studies*, 20 (2), pp. 123-137.
- Winther, A.M. (2017) Community sustainability: a holistic approach to measuring the sustainability of rural communities in Scotland. *International Journal of Sustainable Development & World Ecology*, 24 (4), pp. 338-351.
- Womack, P. (1989) *Improvement and romance: constructing the myth of the Highlands*. Hampshire: Macmillan.
- Wynne-Jones, S., Strouts, G. and Holmes, G. (2018) Abandoning or reimagining a cultural heartland? Understanding and responding to rewilding conflicts in Wales - the case of the Cambrian wildwood. *Environmental Values*, 27 (4), pp. 377-403.
- Yang, A.L., Rounsevell, M.D.A. and Haggett, C. (2015) Multilevel governance, decentralization and environmental prioritization: how is it working in rural development policy in Scotland? *Environmental Policy and Governance*, 25 (6), pp. 399-411.
- Yates, L. (2015) Rethinking prefiguration: alternatives, micropolitics and goals in social movements. *Social Movement Studies*, 14 (1), pp. 1-21.
- Young, E. (1999) Local people and conservation in Mexico's El Vizcaino Biosphere Reserve. *Geographical Review*, 89 (3), pp. 364-390.
- Young, O. (2012) Navigating the sustainability transition: governing complex and dynamics socio-ecological systems. In: E. Brousseau, T. Dedeurwaerdere, P-A. Jouvet and M. Willinger, eds. *Global environmental commons: analytical and political challenges in building governance mechanisms*. Oxford: OUP., pp. 80-103.
- Young, M. and Markham, F. (2020) Tourism, capital, and the commodification of place. *Progress in Human Geography*, 44 (2), pp. 276-296.
- Yuan, J., L. Dai, and Q. Wang. (2008) State-led ecotourism development and nature conservation: a case study of the Changbai Mountain Biosphere Reserve, China. *Ecology and Society* 13 (2), 55. Available: <http://www.ecologyandsociety.org/vol13/iss2/art55/>.
- Zebrowski, C. and Sage, D. (2016) Organising community resilience: an examination of the forms of sociality promoted in community resilience programmes. *Resilience*, 5 (1), pp. 44-60.
- Zimmerer, K.S. (2000) The reworking of conservation geographies: nonequilibrium landscapes and nature-society hybrids. *Annals of the Association of American Geographers* 90 (2), pp. 356-69.
- Zhu, Y. (2019) Politics of scale: cultural heritage in China. In: T. Lähdesmäki, S. Thomas, Y. Zhu, eds. *The politics of scale: new directions in critical heritage*. Oxford: Berghahn., pp. 21-35.

Appendix 1: Interview Guide Examples

Interview Questions for Residents - 3/6/20

- 1. Can you tell me a bit about yourself, and the area you live in?**
 - a. What brought you to live in this area?
 - b. What is the nature of your work/life in this area?
 - c. Do you have a family history in the area?

- 2. What do you enjoy most about living in x?**
 - a. Do relate to the idea of your identity being linked to Wester Ross?

- 3. Do you have a view on land ownership and land use in your area?**
 - a. More generally in Wester Ross or the Highlands?
 - b. Crofting activity? Private landowners?

- 4. What do you see as important features of cultural heritage where you live?**
 - a. Do you have any interest in Gaelic language and culture?

- 5. What is your view of the Wester Ross biosphere?**
 - a. Have you had much engagement with it?
 - b. Do you support the aims?
 - c. What does it mean to you to live sustainably?

- 6. Do you have a view on the local politics and community relationships in your area?**
 - a. Are you involved in any local or regional groups (formal or informal)?
 - b. Do you have any involvement in the community council for example?
 - c. Are there any prominent conflicts that occur in your community?

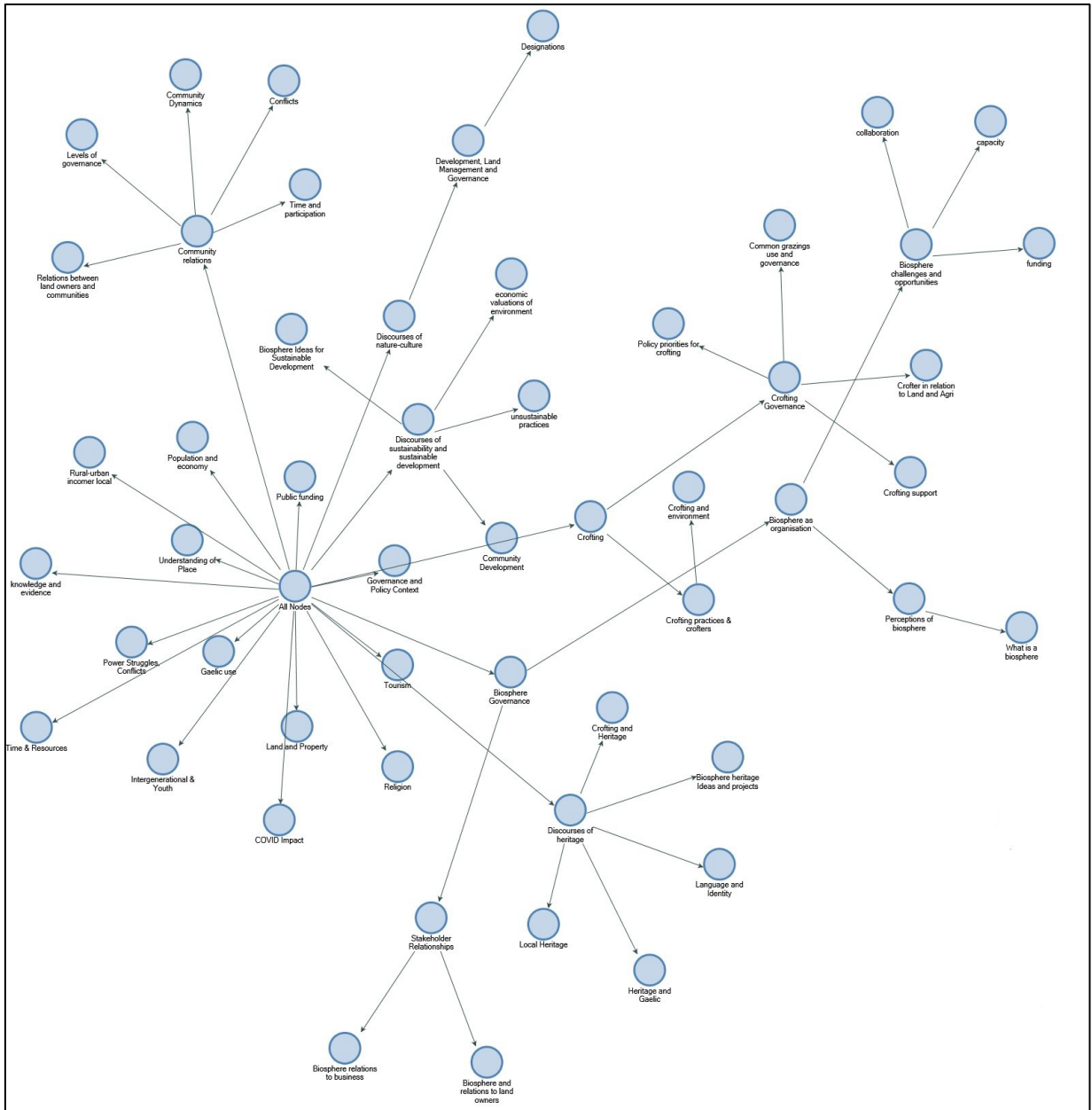
- 7. Do you have an opinion about the highland council and how it serves your area?**
 - a. What about the Scottish Government?

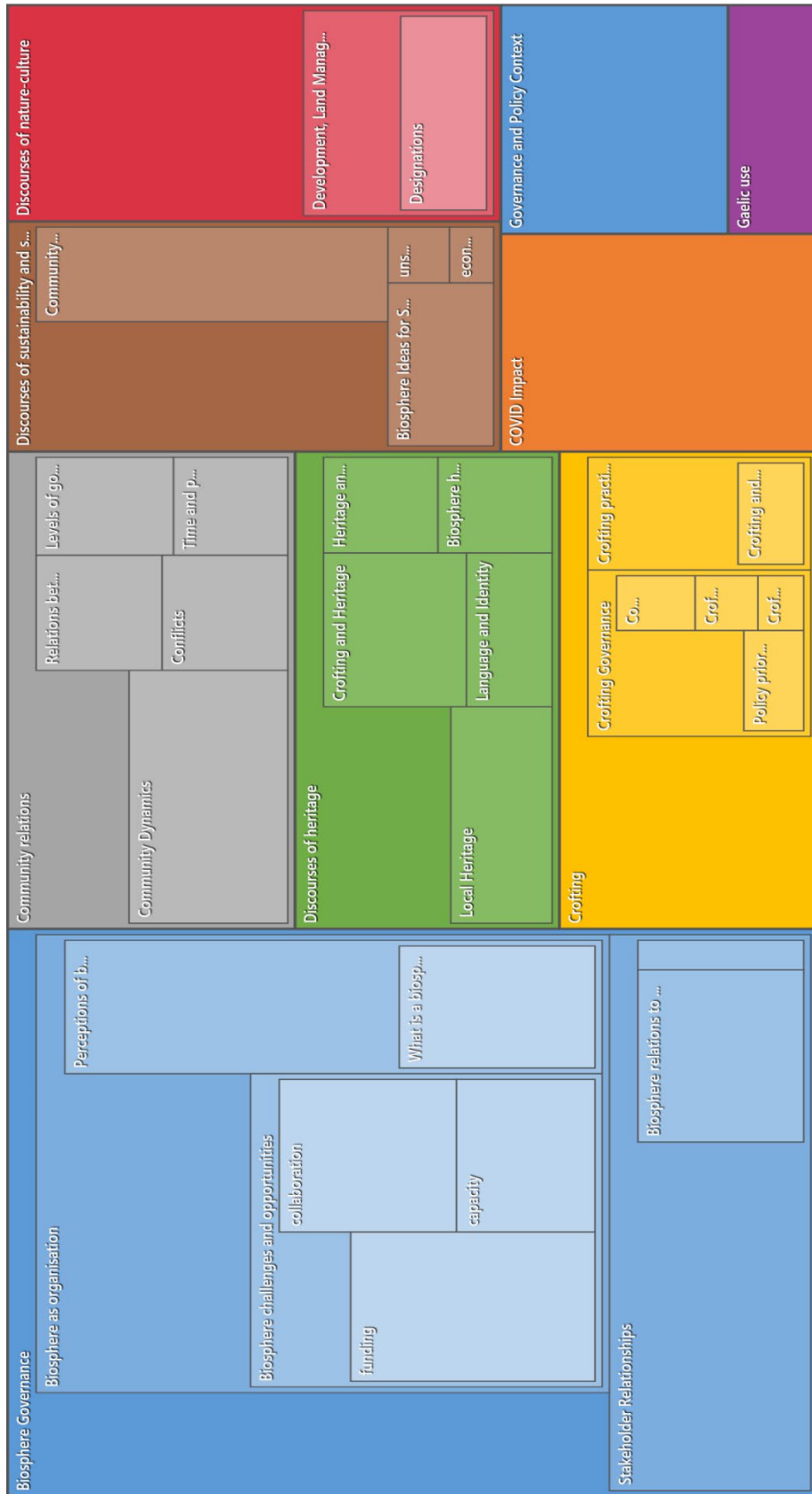
- 8. Do you support the ideas of the SG around community empowerment, community land ownership and land reforms?**
 - a. e.g., increase community ownership of land for example

Interview Questions for Biosphere Directors – 12.03.20

- 1. When did you first become a director of the biosphere? / When did you first hear about/get involved in the biosphere?**
- 2. How did you come to live in the biosphere?**
- 3. What is your vision for the biosphere for the next five to ten years?**
 - a. Top priorities for the shorter term?**
- 4. What is your view on the working of the board as it is currently, or has been in the past?**
- 5. Which of the working groups have you been involved with? (what are the discussions being had)**
 - a. What is your view of how the working groups are functioning?**
- 6. Do you have any thoughts about how WRB compares with other biospheres?**
- 7. Do you see the biosphere as a way to connect nature and culture?**
- 8. What's your view of the natural/cultural heritage of Wester Ross?**
- 9. What's your view of governance in Wester Ross, and relations with the Highland council/other public bodies and agencies?**
- 10. How do you think the people of Wester Ross see the biosphere?**
- 11. What's your view of the current funding situation in relation to the biosphere?**
- 12. Do you think the biosphere is a forum for dialogue and negotiating conflict?**
- 13. What are some of the ways you think the biosphere can change things? Does the biosphere promote social change?**
- 14. What does sustainable development or sustainability mean to you?**
- 15. What is your view of participatory governance?**
- 16. What is your understanding/view of the zones of the biosphere and their functions?**
- 17. What's your view on land use/land ownership in Wester Ross?**
- 18. What's your view of community empowerment in Wester Ross?**

Appendix 2: Visualisations of Nodes in NVivo





Appendix 3: Ethical Approval Confirmation



Zoe Russell
Faculty of Applied Social Science
University of Stirling
FK9 4LA

z.o.russell@stir.ac.uk

5th March 2019

Dear Zoe,

Re: Ethics Application: *Landscape and Culture in Wester Ross: Socio-Natural Relationships in a Scottish Biosphere Reserve* – GUEP 618

Thank you for your submission of the above to the General University Ethics Panel.

General University Ethics Panel (GUEP)
University of Stirling
Stirling
FK9 4LA
Scotland UK

E: GUEP@stir.ac.uk

Appendix 4: Participant List

Name	Relevant roles	Organisation
Alan	Director	Wester Ross Biosphere
Anna	Staff / Director	Wester Ross Biosphere
Anndra	Director	Wester Ross Biosphere
Carla	Staff / Board Advisor	NatureScot/Wester Ross Biosphere
Callum	Forest Planner	Forestry Land Scotland
Catherine	Owner	Attadale Estate
Chris	Local Resident	N/A
Coinneach	Director	Wester Ross Biosphere
Elisabeth	Chair of the Board / Director	Wester Ross Biosphere
Friseal	Local Resident	N/A
Graham	Owner	Dundonnell Estate
Hayley	Staff	Scottish Land Commission
Jane	Curator / Former Director	Gairloch Museum / Wester Ross Biosphere
Keith	Chair of the Board	Applecross Trust
Lisa	Owner	Leckmelm Estate
Mairi	Director	Wester Ross Biosphere
Matthew	Staff	John Muir Trust
Morag	Advisor to the Board	NatureScot / Wester Ross Biosphere
Norman	Chair of the Board / Director	Wester Ross Biosphere / National Trust for Scotland
Peggy	Manager / Former Director	GALE / Wester Ross Biosphere
Patricia	Local Resident	N/A
Patrick	Director	Wester Ross Biosphere
Phoebe	Staff	Wester Ross Biosphere
Pierre	Staff	Canadian Biosphere Reserve
Robert	Councillor / Board Advisor	Highland Council / Wester Ross Biosphere
Rory	Director	Wester Ross Biosphere
Seumas	Director	Wester Ross Biosphere
Stuart	Local Resident / Staff	Wester Ross / Crofting Commission
Thomas	Director	Wester Ross Biosphere
Uilleam	Director	Wester Ross Biosphere