

Working together on ecological thinking: relationality and difference.

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Working together on Ecological Thinking: Relationality and Difference

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Robert Gordon University

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Abstract

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PhD by Public Output

Working Together on Ecological Thinking: Relationality and Difference

This PhD by Public Output contributes to the wider understanding of 'ecological thinking' in the arts through the portfolio of peer reviewed research publications of a producer of public art projects in the healthcare and environment settings. A timeline/visual map is included to draw attention to the interrelations between elements in the environmental domain and elements in the health and wellbeing domain. The researcher draws on both ecological understandings of relationality (Bateson, Biesta, Jacobs) and of difference (Morton) to frame the contribution made by the portfolio to ecological thinking in arts practice. The approach is based in practice-led research (Biggs, Coessens et al, Douglas, Nyrces). Biggs provides an understanding of ensemble practices to inform the student's role as Producer and Researcher. Coessens et al. Douglas, and Nyrces provide an articulation of the intra-relations between theory, material/context and the individual practitioner's voice. The works and reflective writings of Helen Mayer Harrison and Newton Harrison are drawn on in various publications to exemplify ecological thinking in arts practice. Their conception of 'joining a conversation' complements the wider focus on shared agency that forms one of the aspects of 'common theme'. Specific papers and chapters address key aspects of ecological thinking including participation, collaboration and interdisciplinarity (which are framed as key to relationality in the arts) together with complexity and failure which are key to the framing of difference in the context of practice in the arts.

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2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

PEER-REVIEWED PUBLICATIONS

SUPPLEMENTARY MATERIALS

PROJECTS AND NETWORKS

PRO1
An ecology of practice in the everyday

SO1
Making poetry to invent policy

SO2
Working Well

SO3
Reflections on Collaboration

SO4
Dignified Space

SO5
Working Together

SO7
Nil by Mouth

SO8
Immersing the artist and designer in the needs of the clinician

SO10
What poetry does best

SO12
Impact by design

SO9
Land Art Generator Initiative

SO11
Work as if you live in the early days of a better nation

SO13
Greenhouse Britain

SO14
Disciplinary and Peripheries

SO15
Reclaiming Wetland Values

SO16
Demystifying Interdisciplinary Working

SO17
In the Time of Art With Policy and Harrison's and Global Policy Timeline

SO18
Foregrounding Ecosystems

SO19
Ecoart in Action

PRO2
Practising equality?

PRO3
Owning failure

PRO4
Inconsistency and contradiction

PRO5
Ecolibrary as Bing

PRO6
No maintenance

PRO7
The art of life adapting

PRO8
The Hope of Something Different

On the Edge

Suzanne Lacy Working in Public Seminars

The Artist as Leader

Greenhouse Britain: Losing Ground, Gaining Wisdom

NHSGGC New Victorial and Stobhill Hospitals

NHSGGC Queen Elizabeth University Hospital and Royal Hospital for Children

Points of View: Ayrshire Health and Arts, NHS Ayrshire & Arran

Nil by Mouth

Land Art Generator Glasgow

Creative Carbon Scotland Library of Creative Sustainability

Creative Carbon Scotland Cultural Adaptations

On The Deep Wealth of this Nation, Scotland

NHS Lothian RHC DCN CAHMS

NSAIS NHS Ayrshire & Arran



ecoartscotland <http://ecoartscotland.net>

1. Introduction

The aim of this essay is to provide a framing for a body of work from 2005 to the present, which demonstrates an engagement with ecological thinking.

Ecology is defined as the branch of biology dealing with the relations and interactions between organisms and their environment, including other organisms.¹ 'Ecological thinking' is articulated in my portfolio as involving several aspects: systems thinking-based approaches (discussed in Section 2); relationality (Section 2.1), including subsections on 'participation' and 'collaboration and interdisciplinarity'; and difference (discussed in Section 3) focusing on inconsistency and contradiction as well as failure. An appendix highlights pieces which take more oblique approaches to the issue of ecological thinking in terms of maintenance, anger, and materiality (Appendix 1).

The challenge of developing an 'ecological thinking', even defining what that might mean, continues to preoccupy artists, activists, and academics. Any attempt to identify key literature will inevitably be partial and open to challenge, but equally is important in terms of grasping what informs this exercise and potentially others who might build on it. The challenge of 'ecological thinking' is not new, and in a Scottish context Patrick Geddes (1854-1932), known for his urbanism, is a key figure whose concepts and approaches continue to resonate. Gregory Bateson, the anthropologist, is a critical contributor to this project and his text *Mind and Nature: A Necessary Unity* (1979) is vital for understanding his conception of thinking, which he seeks to reconfigure as an embodied activity, and difference which is key to his conception of ecology as information. His text *Steps to an Ecology of Mind* (1972) has informed

¹ Dictionary.com. The Cary Institute of Ecosystems Studies provides a more complex definition "The scientific study of the processes influencing the distribution and abundance of organisms, the interactions among organisms, and the interactions between organisms and the transformation and flux of energy and matter." and unpacks the various different emphases from key thinkers. <https://www.caryinstitute.org/news-insights/definition-ecology> accessed 10/01/2021.

recent writing on the Harrisons (SO18). Peter Harries-Jones' *A Recursive Vision: Ecological Understanding and Gregory Bateson* (1995) is a vital companion to reading Bateson. The urbanist Jane Jacobs' articulation of ecosystems in *The Nature of Economies* (2000) is a valuable introduction to 'ecological thinking' and its uses and significantly informs the first piece in the portfolio, 'An Ecology of Practice in the Everyday: leaving the (social) ground of (artistic) intervention more fertile' (PRO1). Tim Morton's approach to what 'ecological thinking' might mean (2010, 2013, 2018, 2021) has been particularly influential, and will be discussed in Chapter 3, providing a different understanding of difference as well as challenging human 'mastery' and exceptionalism. More recent writing including Donna Haraway (2015, 2016), Puig de la Bellacasa (2017, 2020), Isabelle Stengers (2020), and Anna Tsing (2016, 2020) all provide rich avenues opening up aspects of 'ecological thinking' in terms of relationality in the context of difference, the ways we shape and are shaped by our interactions with the more-than-human, and the importance of understanding knowledge as situated. Tim Ingold provides an important dimension in his approach to ontology foregrounding the improvisational (2011, 2018), a theme also developed from the perspective of artists' practices by Anne Douglas (2016, 2018b). Sacha Kagan's *Art and Sustainability: Connecting Patterns for a Culture of Complexity* (2013) has been influential within the ecoart community because it draws together issues including interdisciplinarity, emergence and communication connecting theory with the practices of key artists.

Some artists' and curators' writings inform what 'ecological thinking' might be. These include poets such as Gary Snyder (1995) as well as more recent contributors including Diana Chisholm (2011) whose approach positions Rachel Carson within this challenge. Tim Collins and Reiko Goto have had a significant influence through their writings and durational projects (Collins 2001, 2017; Goto-Collins 2012; Collins, Goto-Collins and Edwards 2015; Edwards, Collins and Goto 2016; Collins and Goto-Collins

2017; Collins, Goto and Edwards 2018; Collins, Goto-Collins and McLean 2019).

Another key artist researcher who has explored what 'ecological thinking' might mean in the context of art (and teaching) practice is David Haley. (2008, 2016, 2020).

Cathy Fitzgerald's approach in her PhD, drawing on Deleuze and Guattari (2018), frames the ecosocial dynamic in the context of a situated and durational practice.

Relationality is a key aspect of thinking ecologically (see definition in footnote 1) as well as of approaches in the arts. I address relationality both in terms of three related concepts (participation, collaboration and interdisciplinarity) and in terms of what it means to be "...in the world without occupying the centre of the world" (Biesta 2017 p. 3) (discussed in Section 2.1). Biesta's statement can be reimagined as a question which highlights the ontological dimension of my understanding of 'thinking' as both a positioned or located and also a co-constructed process. I address difference through concepts of inconsistency, contradiction and failure in the work of artists and educators.

My body of work focuses on the artist's role in public life, particularly in the context of health and environment. My work has taken the form of being a producer for projects as well as researching practices, processes, and precedents.² I will argue that sharing agency, as exemplified in various ways (including co-authorship), is a significant aspect of what I am describing as 'ecological thinking'.

My portfolio of peer reviewed and supplementary materials makes contributions to both social and ecological arts literatures, and my concern in this framing essay is to articulate those contributions and to clarify the contribution to ecological thinking in the arts (see Section 4 'Conclusions' for a summary of the contributions and Section 5

² 'Producer' in public art is the person who works with artists to realise works particularly in the context of public sites with multiple stakeholders. The work of the producer can include project management, fundraising, communications, strategy, tactics. It involves finding solutions, negotiating with others and being a constant force pushing the work forwards. I argue that it is a fundamentally relational practice because the places where producers work are always 'inhabited', even if technically derelict, or inhabited by other than human living things.

for a breakdown of the Portfolio and Supporting materials). Before addressing my portfolio in detail, I will discuss my understanding of the 'territory' of my practice (Section 1.1) and the approach I work within (Section 1.2).

My portfolio has developed through long term engagement with colleagues, contexts and issues and is part of a wider 'ecological turn' in the arts and humanities (Brookner 1992; Araeen 2009; Demos 2013; Kagan 2013, 2014; Ghosh 2016; Patrizio 2019).

This 'turn' is increasingly influencing larger cultural organisations and organisational leaders such as the Serpentine Gallery in London and its artistic director (Obrist 2020) and the development of 'Climate House' in the original Scottish National Gallery of Modern Art building at the Royal Botanic Gardens Edinburgh (Nicolson 2020).

The 'ecological turn' is usually framed in terms of increasing awareness of human impacts on other living systems, the consequence of activities such as extraction, production and waste, particularly experienced in the Global South as environmental and political. In the 1960s and into the 1970s, there was increasing attention to large scale pollution events, as particularly articulated by *Silent Spring* (Carson 1962).³ It is widely recognised the 21st Century represents a new phase of world-changing impacts of fossil fuel use, including extreme weather, resulting wildfires, sea level rise, drought and flood, as well as biodiversity loss and extinction (*Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change 2014; Global Warming of 1.5°C. An IPCC Special Report on the Impacts of Global Warming of 1.5°C above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty 2018; Global Assessment Report on Biodiversity and Ecosystem Services 2019; Latour 2018; Otto-Portner, Hans et al.*

³ It is possible to track environmental concerns back to earlier generations including Morris and Ruskin in the 19th Century.

2021). Part of this essay was written under the lockdown response to the Covid-19 pandemic, itself the result of zoonosis occurring because of human disruption of ecosystems (Intergovernmental Science-Policy Platform On Biodiversity And Ecosystem Services (IPBES) 2020).

These world changing impacts are increasingly framed as 'wicked problems' and are characterised by contradictory, incomplete and/or changing definitions, no single solution, and the tendency for new aspects to reveal themselves in the process (Lönngren and van Poeck 2020). Some, including the climate crisis, are further defined as 'super wicked problems' when those trying to solve the problems are contributors to them, the long-term consequences are not fully engaged with, and there is no authority operating at the scale of the problem (Levin et al. 2012). I will return to this subject in the discussion of Complexity and Difference (Section 3) and in Appendix 1 where I highlight three publications which I characterise as Small Experiments with Radical Intent.

I am fortunate to have been able to stand on the shoulders of giants – in particular Helen Mayer Harrison (1927-2018) and Newton Harrison (b. 1932), known as 'the Harrisons'.⁴ The Harrisons taught themselves to think ecologically following a decision taken in 1969 or 1970 to do no work that did not benefit the ecosystem (Harrison and Harrison 2001 n.p.). They had to teach themselves what that meant (Harrison and Harrison 2016 p. 16). Their decision needs to be contextualised by their understanding of improvisation and the agency of all things (which I do in Peer Reviewed Output (PRO) 4 and Supplementary Output (SO) 2). It is useful to understand their decision in terms of a creative constraint against which to improvise (rather than defining an ontological position in relation to other living things). The commitment to do no work that does not attend to the wellbeing of the ecosystem is

4 <http://theharrisonstudio.net/> and <http://www.centerforforcemajeure.org/>

both a statement of values and also a question to which they do not know the answer. It might also be a way of addressing Biesta's imperative. This is significant to my work, as my specific concern is to explore the ways ecological thinking impacts on arts practice and the ways that arts practices can be remade.

I have undertaken this 'ecological turn' working with Anne Douglas who is co-author on several key publications. I have benefitted from membership, since 2006, of the Ecoart Network.⁵ A significant contribution to my process of understanding and conceptualising the distinctiveness of ecoart practices has been working, since 2017, as part of an editorial team within the Ecoart Network on the forthcoming book, *Ecoart in Action: Activities, Case Studies and Provocations for Classroom and Community* (Geffen et al. 2022).⁶ I proposed using the book *Draw It With Your Eyes Closed* (Paper Monument 2012) as a model. *Draw It With Your Eyes Closed* comprises nearly 100 examples of artists' assignments and exercises. Whilst primarily relevant to Art Schools, this book suggested to me a way to open up the distinctiveness of ecoart practice by focusing on exercises, activities and scores, for use with groups or as part of individual practices. *Ecoart in Action* incorporates more than 60 contributions from ecoartists, curators, and scientists. For me this has highlighted particular aspects of the practice which can be characterised as 'thinking ecologically', including the ways that ecoart practices are driven by pedagogical intent as well as the forms of attention used and shared (e.g. deep listening and walking).

The importance of this aspect of ecoart practices crystallised for me whilst reading an article on ecocentric thinking in organisational contexts. This article firmly positions the importance of first-hand experience of ecological systems saying,

⁵ The Ecoart Network, formed in 1999, is an invited group of artists, curators, art historians and scientists engaged in ongoing dialogue facilitated by a listserve.
<http://www.ecoartnetwork.org>

⁶ *Ecoart in Action* will not be published in time to form part of my portfolio and is, not in any case, Peer Reviewed. In any case I am a co-editor as well as a contributor.

Thus, instead of making organisational decisions based on mere technical knowledge, 'which removes the knower from the process of knowing', embeddedness is related to situational knowledge that comprises first-hand experience of local ecosystems (Heikkurinen et al. 2016 p. 708).

Given that we all have everyday experience of ecosystems where we live and work, the question is *how* we engage with them to have *meaningful* experience leading to understanding? Artists and other creative practitioners have approaches—including a range of ways to focus attention, explore and experiment—that are relevant, through first-hand experiences, to begin to understand what it might take to 'think ecologically' in practice. Three examples of approaches are specifically manifest in the portfolio: the approach Simon Read and I took to curating the *Reclaiming Wetland Values: Marsh, Mud and Wonder* exhibition (see curatorial statement SO15); the approach demonstrated in the project *Nil by Mouth* (see poster SO7) with artists undertaking residencies moving between research establishments and communities; and the approach undertaken by the artist Alex Hamilton in the *Dignified Spaces* project documented in the conference paper (SO4). In *Reclaiming Wetland Values* I was co-curator, and in the other two cases (*Nil by Mouth* and *Dignified Spaces*) I was the producer working with a team.

Heikkurinen's article, addressing questions of organisational theory, defines ecocentricity in terms of "...embedding social actors in the ecosystem, recognising the interconnectedness of all actors in the ecosystem, and advancing ethical considerations for the non-human world" (Heikkurinen et al. 2016 p. 706). The article highlights the lack of attention to the ecological and the material, noting the human and the immaterial are given far more attention (Heikkurinen et al. 2016 p. 705). The materiality of situated knowledges is juxtaposed with concepts of freedom, shed of interconnections. Heikkurinen's article combines a concern for embeddedness with interconnection (relationality) to provide one formulation of ecocentricity.

When I turn to the discussion of complexity (Section 3), I will highlight challenges to constructions of 'ecological thinking', contrasting the understanding of ecological thinking based on embeddedness and relationality with one provided by Timothy Morton. Morton's construction of ecological thinking questions 'organic' metaphors and 'holistic' conceptions (Morton 2010 p. 275). Morton positions human understanding in terms of "...*hypocrisy, weakness, and lameness...*" (Morton 2013 p. 3 italics in original). This will open up the framing essay to issues of inconsistency, contradiction, and failure (section 3) and to issues of maintenance, anger and waste (Appendix 1). The issue of human failings is framed differently, but with the same essential point, when the Harrisons say in their text 'A Manifesto for the Twenty First Century',

Where the discourse in general

Concerns time, money, power, justice, sex, politics

Personal well-being and survival

In many combinations and recombinations

Attending somewhat to social injustice

And much, much less to ecological injustice

(Harrison and Harrison 2016 p. 378).

The Harrisons, in their 50 years of practice, have used art to imagine how ecologies in specific places could be brought to the fore in decision-making to the advantage of all living things. The Harrisons' comments on forms of anthropocentrism and priorities (perhaps a more provocative articulation of Biesta's "...in the world without occupying the centre of the world.") begin to reframe the ongoing question of what ecological thinking needs to encompass. My concern in articulating 'ecological thinking' is not to define it but to offer an understanding of ways of working in the arts, as a producer, adapted to a time of ecological crises. Morton's call for us to acknowledge "...*hypocrisy, weakness, and lameness...*" (Morton 2013 p. 3 italics in original) is one which I embrace, and my articulation of ecological thinking must be understood in

that context: probably insufficient and certainly not in any way complete.





Fig. 1: *Greenhouse Britain: Losing Ground, Gaining Wisdom*, Helen Mayer Harrison and Newton Harrison, 2007

1.1. Territories of the submission

The research in this portfolio has been undertaken in the context of a career working as a producer in the field of public art and involvement in a practice-led research culture.⁷ My portfolio manifests the reflective and reflexive characteristics of practice-led research (see following section 1.2 'approach') as well as the use of 'live' project work (Douglas 2016 p. 5) and understanding of exemplary practices (Douglas 2016 p. 15).

My portfolio comprises publications resulting from two interwoven strands of research and practice, one in art, health & wellbeing, and one in art & ecology. Both contexts are characterised by debates and contested terminologies. In the health & wellbeing discourse one aspect of tension is between medical and social determinants of health.⁸ Within the environment discourse issues of terminology such as 'nature', 'landscape', 'environment' and 'ecology' are contested by practitioners and theorists (cf. Adams 2013). Approaches are also contested, including the role of the arts in restoration and remediation (cf. Collins 2007).

In my submission I demonstrate points of intersection and translation of learning from the art & environment research and practice into the art, health & wellbeing research and practice. There are explicit translations demonstrated in publications (Peer Reviewed Journal Articles 'No Maintenance' (PRO6) and 'The Art of a Life Adapting' (PRO7), and 'Working Well: People and Spaces', a public art strategy (SO3)). My work in the context of health & wellbeing is primarily focused on commissioning art and therapeutic design for new healthcare buildings. My approach to this has contributed to the wider focus of bringing 'nature' (primarily nature-based imagery and patterns,

⁷ In particular at Gray's School of Art, Robert Gordon University.

⁸ For a discussion of the social determinants of health see *Creative Health: The Arts for Health and Wellbeing* (2017) pp. 26-31 and in the same publication a discussion of the hierarchies of evidence pp. 34 ff.

natural materials) into healthcare which has characterised many projects over the past 15 years. I documented aspects of the Scottish context in a conference presentation at the Global Alliance on Arts and Health (SO6). My interest is to go beyond the concern with nature-based content to explore what ecological ways of thinking might contribute to working with, and in, healthcare contexts. This is manifest in using thinking from environmental arts discourses to raise questions around conventional approaches to art in healthcare contexts, but there are also intersections and translations from health and well-being into environment, probably most clearly evidenced in 'The Art of Life Adapting' (PRO7) where issues of adaptation in health are related to those in environment. This is more fully discussed in Appendix 1.

Another key characteristic of the portfolio is co-authoring and a wider concern with collaboration, participation and interdisciplinarity that might be more simply understood as 'working together'. 'Working together' in my understanding is more than 'sharing the workload', or even 'bringing other expertise to bear on a problem'. It is a form of practice which affects our understanding of how knowledge is produced (and even what constitutes knowledge) (cf. Kester 2013). I understand 'working together' to be a version of 'shared agency'. The ecological dimension of shared agency is raised through the phrase, "...in the world without occupying the centre of the world." (Biesta 2017 p. 3) discussed in my paper in 'The Hope of Something Different' (PRO8) (see section 2.1). 'Working together' therefore goes beyond the obvious human frame, which is conventional for discourses and practices of participation, collaboration and even interdisciplinarity, and assumes that ecological thinking must be rooted in an understanding of shared agency.

I have developed a timeline and a visual map with help from researcher and designer/illustrator Dr Cara Broadley. This articulates and explore 'intersections' and 'translations', as well as shared agency, across my portfolio (fig. 1). This highlight

both the interactions of research and practice in each domain, and the intersections between domains. They also highlight interactions in terms of individuals, institutions, and systems. The use of interactions to create the timeline draws on critical theorist Bruno Latour's statement, "Time is not a general framework but a provisional result of the connection among entities" (Latour 1993 p. 74).

A key characteristic of the relationship between research and 'live' project work is the feedback loops between research and practice. This non-linear relationship is manifest throughout my portfolio and will be further discussed below. The timeline and visual mapping (pp.11-12) provide a visual representation of the iterative pattern.

As noted above, I have worked with the Harrisons both on 'live' projects and critically reflecting on their practice in publications. I was the producer for their work *Greenhouse Britain: Losing Ground, Gaining Wisdom* (2008) (see SO13 for Case Study), as Associate producer for *On The Deep Wealth of This Nation, Scotland* (2018). In both cases Anne Douglas was also involved. We have explored and reflected on the Harrisons' practice through critical writing: 'Inconsistency and Contradiction' (PRO4); 'In the Time of Art with Policy' SO17) and 'What Poetry does Best' (SO10). I have also analysed their work in 'Using Poetry to make Policy' (SO1), developed a 'Case Study' on *Greenhouse Britain: Losing Ground Gaining Wisdom* (SO13) and used some of their key ideas in *Working Well: People and Places*, the Therapeutic Design and Art strategy for the new NHS Greater Glasgow & Clyde Queen Elizabeth University Hospital and Royal Hospital for Children (SO3). In this case 'live' project work led to research. In other cases research led to 'live' project work, particularly with Land Art Generator Glasgow (Project 3) which started with the essay 'Working Together' (SO5) and in due course resulted in the conference presentation 'Work as if you Lived in the Early Days of a Better Nation' (SO11). The iterative relationship between research and practice is one critical aspect of the process of 'thinking ecologically'.

In the next section on my approach, I will draw on the Harrisons' articulation 'joining a conversation' (cf. Harrison et al. 1989; Harrison and Harrison 1993, 2001). 'Joining a conversation' also captures something important in relation to the territories of arts & health and art & environment I have just been discussing. I have highlighted the iterative relationship between research and practice. Some projects are self-initiated and in some I was commissioned. However, both situations involve 'joining a conversation', whether that is to produce an art and design strategy for a building which has been in development for more than 10 years, or speculatively inviting artists to bring their approach to address particular circumstances such as with the Land Art Generator Initiative where I did exactly that resulting in *LAGI Glasgow*, or with *Greenhouse* Britain where David Haley asked the question and I joined as Producer for the project.

“How big is here?” and “How long is now?”

Helen Mayer Harrison and Newton Harrison, eminent American artists, start work from two fundamental questions “How big is here?” and “How long is now?” These questions have been used throughout the development of this strategy.

The strategy draws on understanding of context and duration, recognising that the new campus will be developed building on an understanding of Scotland’s proud heritage of health care development and its pioneering initiatives both in medicine and art.

Another creative influence is Patrick Geddes, an internationally renowned Scot, who was Professor of Botany at Dundee as well as one of the founders of modern urban planning and regional development. Geddes developed an integrated analysis using

three key ideas: place - work - folk. His approach to regionalism and locality is still relevant today, framing thinking about sustainability, environmental quality and community regeneration.

The Artist Placement Group pioneered the idea of artists working within industry and public service. They emphasised the importance of context as an important part of the creative process. Their approach to the placement of artists in public service and industry, focusing on understanding strategic challenges and building trusting relationships.

The strategy is an overview at the point of starting work and these creative influences will continue to inform the process of implementation.

1637 - First Professor
of Medicine, Glasgow
University

1700

1791 - Glasgow
Royal Infirmary

1874 -
Western
Infirmary

1850

56

1783 - William
Hunter bequeaths
collection to
Glasgow University

1872 -
Southern
General
Hospital

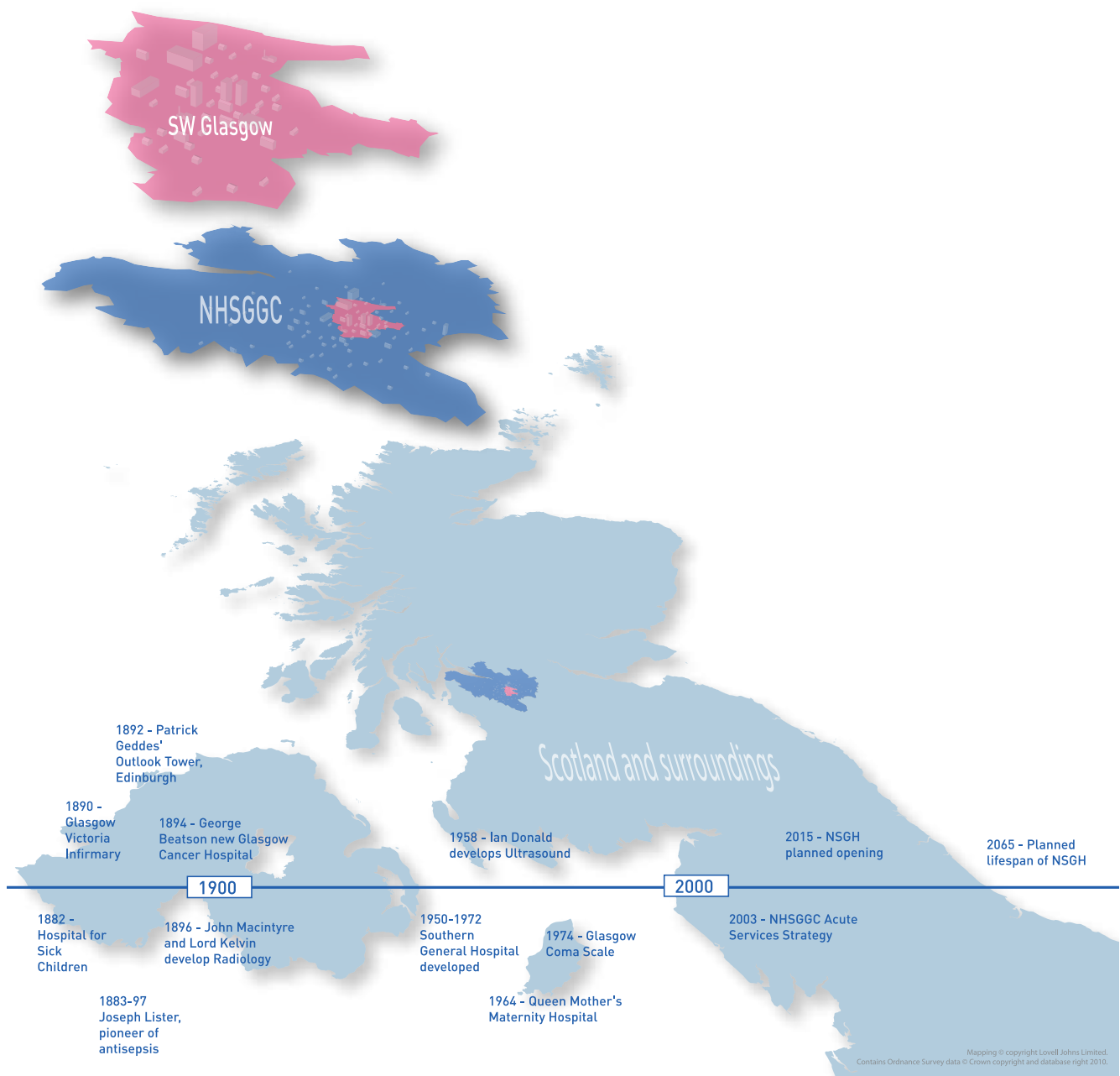


Fig. 3: pages from *Working Well: People and Spaces - Therapeutic Design and Arts Strategy for the New South Glasgow Hospitals, Ginkgo Projects 2011*

1.2. Approach

The Harrisons talk about 'joining a conversation', evoking the idea that life is ongoing and they are contributors (Harrison et al. 1989; Harrison and Harrison 1993, 2001). They also talk retrospectively in terms of having 'set in place' or 'established' a conversation (Harrison and Harrison 2001 n.p. 2003 n.p.). By this I understand them to mean they have joined a conversation and shaped it to include critical ecological perspectives (as well as in aesthetic terms). This is fundamentally different from the assumption that artists start with 'a blank sheet of paper' and make something new. The Harrisons assume they are in the world and in dialogue with the world. This conceptualisation of practice is useful, as I have indicated in the conclusion of the previous section, and I intend to use it to unpack several aspects of my approach. 'Joining a conversation' is a useful way of understanding the essential specificity of practice-led research. It complements the useful conception of 'ensemble practice' (Biggs 2020 p. 269) (and of "...in the world without occupying the centre of the world" (Biesta 2017 p. 3) to which I will return in Section 3). Conversation as a concept values different voices and draws attention to the sensitivity of the individual's search.⁹

As a practitioner researcher there is value in focusing on the pair of questions 'Why?' and 'How?', and in focusing on what constitutes quality in practice. For the practitioner researcher the question 'How?' has both a pragmatic dimension and a critical theoretical dimension. My various publications and this essay do not represent an answer to the question 'What is thinking ecologically?' Rather they are driven by a fascination that the questions, 'Why is thinking ecologically important here and now?', and 'How do we try to think ecologically?', are perhaps more useful.

⁹ Kester's articulation of subjectivity being formed through dialogic aesthetic experience, and his highlighting of feminist 'connected knowing' are critical here (Kester 2004 pp. 111–115).

The essential specificity of working as a producer, addressing specific contexts *and* involving other creative practitioners in addressing those contexts, resists certain forms of generalisation. My concern fits with the description given in *The Artistic Turn: A Manifesto*,

Artistic research resides in the recording, expression and transmission of the artist's research trajectory: his or her knowledge, wanderings, and doubts concerning exploration and experimentation (Coessens, Crispin and Douglas 2009 p. 88).

The importance of the situatedness of arts research is further emphasised,

...we would claim that recognition of the integrity of the real situation and respect for both subject and object are necessary preconditions for reaching reliable results (Coessens, Crispin and Douglas 2009 p. 64).

The point is that in arts research "reliable results" are not achieved in isolation, but precisely in situatedness in relation to subjects and objects that comprise the context. Coessens *et al* discuss the issue of territorialisation and deterritorialisation highlighting the importance of the encounters enabled by these processes, even whilst also recognising the situatedness of artists (Coessens, Crispin and Douglas 2009 pp. 84–87). Coessens *et al* emphasise the importance of the process of moving between different aspects of artistic research, as does Aslaug Nyrnes in *Lighting from the Side* saying,

...artistic research is about *moving around* in this topological landscape. In other words, the process is about exploring the *relationship, balance, movements* and *progression* between our research sites (Nyrnes 2006 p. 18 emphasis in original).

I have framed this portfolio in terms of practice-led research, highlighting my contributions to the advancement of knowledge in and about the practice of producing. 'Practice-led' is a useful term because it encompasses the work of

producers and curators as well as artists. Practice-led modes of inquiry further have the advantage of being open to an understanding of 'ensemble practices', a particularly appropriate terminology in relation to the multi-faceted work of a producer. It is also relevant to my practice where research is a key element interacting with producing, drawing and other art making, writing, and editing, as well as teaching. Iain Biggs sets up the challenge as,

...to foreground an alternative view of creative activity in which art acts to animate ensembles of heterogeneous skills and concerns, facilitating in turn process of 'mutual accompaniment' necessary to enact a geopolitics of the terrestrial (Biggs 2020 p. 269).

'Mutual accompaniment' surely requires 'joining' with others and engaging in 'conversation'? Ensemble is both an ensemble of dimensions (social, environmental, economic institutions and systems) as well as an ensemble of relations. Biggs goes on to say,

Here 'ensemble practice' is used to consolidate this understanding, to stress individuals' mycelial entanglement in multiple, interconnected tasks, connectivities, and interdependences. It posits individuals as compound, multi-relational ensembles, supporting a view of the artist that does not presuppose an exclusive hyper-individualism (Biggs 2020 p. 270).

This latter aspect of entanglement provides a framework with which to understand this portfolio comprising, as it does, many co-authored papers and chapters, developed from projects, some self-initiated and others commissioned, involving multiple collaborators, linked over time and space. The language of interconnection and heterogeneity is also constructive in understanding Biesta's "...in the world without occupying the centre of the world". The concept of 'world', as well as 'centre', needs to be questioned and some non-totalising understanding of place-basedness is

critical.¹⁰ The development of creative contributions to both healthcare and environments can only be in relation to the specifics of 'here'. These are place-based issues. However, part of understanding 'here' is to raise the question, "How big is here?" as the Harrisons do (Harrison and Harrison 2001 n.p.). Another artist researcher involved in critical place-based collaborative practice, Claire Pentecost, suggests interrogating contemporary existence and its entanglements in terms of, "the intimate, the local, the national, the continental and the global." Pentecost articulates the necessity of this approach saying, "Within the mesh of scales, we want to understand the extent of our interdependence, how any action we may take has effects on and is shaped by all of these scales at once" (Pentecost 2012 p. 17).¹¹ Biggs and Pentecost offer multiple forms of entanglement which position the practitioner. Doris Lessing frames another aspect of the challenge for the practitioner in terms of the relationship of the individual to the general saying,

...the problem of 'subjectivity', that shocking business of being preoccupied with the tiny individual who is at the same time caught up in such an explosion of terrible and marvellous possibilities, is to see him [her, or them] as a microcosm and in this way to break through the personal, the subjective, making the personal general (1989, cited in Coessens, Crispin and Douglas 2009 p. 135).

Practice-led research can be understood both as a dialogue between the subjectivity of the practitioner, their (ensemble) practice and the (situated) contexts in which they

¹⁰ Biggs uses the term 'terrestrial' for this, referencing Latour; and it is also worth noting that the Harrisons talk about 'a world' in different works, starting with *San Diego as the Center of a World* (1973).

¹¹ These approaches can be traced back to the approach of Patrick Geddes, whose Outlook Tower was a physical manifestation of inquiry into place at different scales (Macdonald 2020), but they also need to take account of the inherent anthropos scale implicit. I tend to reinterpret Pentecost's "local" as watershed or bioregional and recognise that the "national" is important as the dominant scale for legislation and policy. Charles and Ray Eames' film *Powers of Ten* (1968/1977) provides another less anthropocentric approach to this question.

find themselves (Ingold 2018), and a critical reflection including philosophy and critical theory (Nyrnes 2006 p. 14). Philosophy and critical theory are both concerned with the systematic (Nyrnes 2006 p. 16). Nyrnes' sense of theory encompasses more than specific theories, defining it first and foremost in terms of 'systematic language' (Nyrnes 2006 p. 17). Ingold argues there is specific value in the sensitivity of the researcher as a human individual.¹² This places value on presence and recognises the human body as a sensitive instrument in itself, both critical factors in understanding entangled relations. Theory in this case provides a foil to the subjectivity of the practitioner (rather than a hypothesis to be tested), requiring assumptions to be questioned and (hopefully) revealing blind spots (Macdonald n.d. n.p.). Each of my pieces demonstrates, in various configurations, the dialogue between dimensions of practice and theory.

The exercise of developing this framing essay and reviewing 15 years of publications draws attention to the recurrent themes and concerns that form my language and everyday practice. Whilst the concern with relationality and its associated theories has been an obvious *fil rouge*, the underlying concern with what ecological thinking might mean in terms of practice has been clarified in this process. The categories of relevant theory provide some structure to the order of publications presented in the next sections (2-3).

Nyrnes also draws attention to the materiality of the practice saying, "The artistic material is in command of the situation. The material has its own laws with which the artist has to become familiar. For instance, wood challenges the carver.." (Nyrnes 2006 p. 17). Biesta takes up this theme in his theorising of education, discussing the resistance of the world. He argues that how the practitioner deals with 'resistance' is critical,

¹² Ingold is drawing on a conception of research that can be traced back to Goethe and his 'delicate empiricism' (Bywater 2005; Shotter 2005; Coessens, Crispin and Douglas 2009 pp. 46-47).

Encountering the reality of paint, stone, wood, metal, sound, bodies, including one's own body, encountering resistance, in order to explore possibilities, meet limits and limitations, and out of this create forms, establish forms, and find forms that make existing-in-dialogue possible, that is what I see in the doing of art (Biesta 2017 p. 66).

The characterisation of the practitioner 'in dialogue' is central to my interests. My version of this, in the context of my practice as a producer for art in public contexts, is always working in contexts that are inhabited by others, often owned literally and metaphorically by others. I am troubled calling this my 'material' because this would be an objectification of others, human and more-than-human (Abram 2012 pp. 63–85), who have their own agency. Whether the focus of my project is health & wellbeing or environment, I am always learning someone else's languages and priorities, as well as their ways of working and knowing. To make work of quality I need to develop dialogues and find possibilities for synthetic approaches. Picking up on Biggs' articulation, the ensemble practice is in a continuous state of entangled co-development, a term which I'll return to in Section 2.1 in discussing relationality.¹³ Finally, I want to reflect on 'resistance', a term Biesta draws attention to as a vital aspect of his construction of situatedness. Resistance can be assumed to be something to be overcome, but a key part of 'ecological thinking' joining a conversation and valuing shared agency asks for a different consideration. This is well articulated by Ernesto Pujol in his short essay, 'Walking Rejections' (Pujol 2018 pp. 124–125). Pujol's book *Walking Art Practice* explores many dimensions of walking, including, in this essay, the experience of proposing walks to curators.¹⁴ Biesta's and

¹³ Anna L. Tsing's discussion in her essay 'When the Things We Study Respond to Each Other' on whether 'relation' is the relation between, "...the analyst and the material..." or "A relation grounded on a landscape is suddenly crowded by other relations, which demand to be told." (Tsing 2020 p. 21) is indicative here of the form of relationality I am concerned with.

¹⁴ Walking is one of the ways of working which features significantly in *Ecoart in Action*, as noted in the Introduction.

Nyrnes' examples of resistance are material (wood and stone), but Pujol offers a different example of resistance (rejection), as well as more significantly proposing a response to this resistance. Pujol recognises that the rejection of a creative proposal is an expression of the resistance of the world – the world not conforming to the desires of the practitioner. His response to rejection is to pause and to explore stillness. He says,

When someone rejects my walk, I do not cease to walk but I slow down to a pause. I see it as an invitation to pause reflectively. It may not be the invitation I wanted, but it is the one received. Therefore, by slowing my steps and reflecting, I begin to engage in a meditative stillness (Pujol 2018 p. 124).

Pujol's articulation recognises that he is in a co-constituted world, that his desires need to be negotiated and that reflection is critical. His stillness is another way of dealing with research as movement, as articulated by Coessens *et al*, Nyrnes, and Ingold.

In articulating my approach I have highlighted key aspects, including the forms of questions that are relevant and the specificity of the contribution I can make. I have framed my practice in terms of an 'ensemble practice' involving 'mutual accompaniment' and 'joining a conversation'. I have framed the relationship between subjectivity, theory, and 'materials'. Considering Morton's "*hypocrisy, weakness, and lameness...*" (Morton 2013 p. 3 italics in original), I have reflected on how I understand responding to resistance as an aspect of ecological thinking.

I will now turn to discussing specific publications in relation to key concepts relevant to ecological thinking. I will return to Morton in section 3, but first I will discuss articulations of ecological thinking which use systems approaches and explore various aspects of relationality including participation, collaboration and interdisciplinarity.



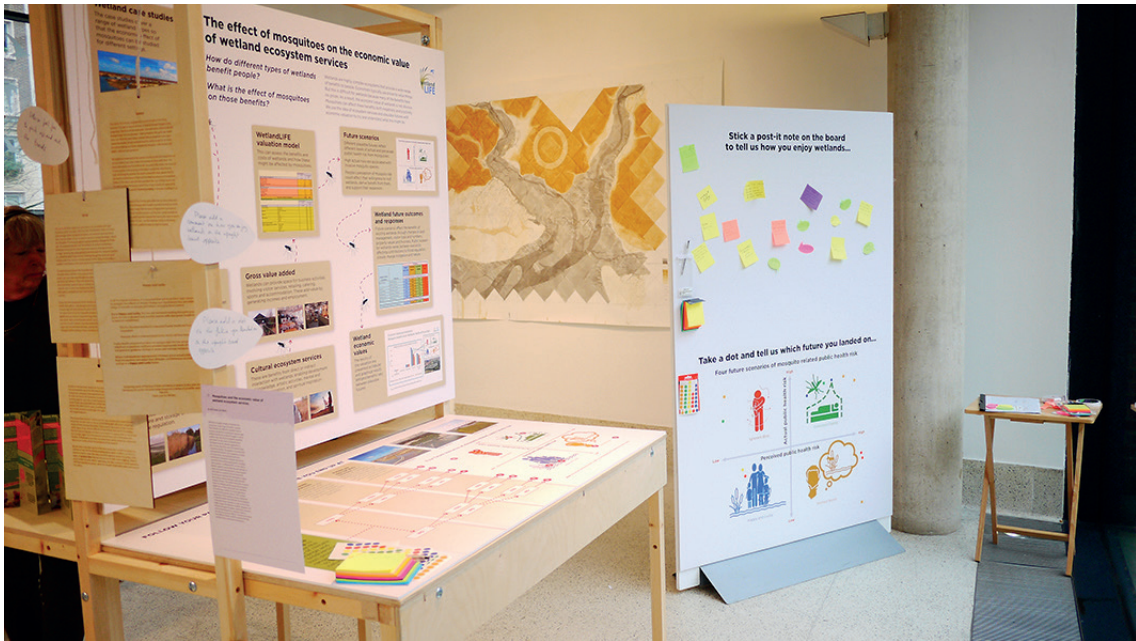
Entomology - samples from WetlandLIFE research sites. The reverse side of this unit had a display of historical entomology materials.



Community Voice Method. Three videos presented the results of CVM research at WetlandLIFE sites.



Wetlands on Wheels: Kerry Morrison and Helmut Lemke were in residence at Alkborough Flats and 'skyped-in' to speak with visitors to the exhibition in Kensington.



Economic valuation of wetlands with narratives produced by Victoria Leslie, one of the artists.

Fig. 4: *Reclaiming Wetland Values: Marsh, Mud and Wonder*

2. Groundings in Systems and Ecological Theory

In this section I will discuss the earliest and most recent pieces in my portfolio. Both seek to explore how ecological thinking can challenge and provoke new understandings of arts practices. 'An Ecology of Practice in the Everyday: leaving the (social) ground of (artistic) intervention more fertile' (PRO1) is a co-authored (with Anne Douglas) paper that reflects on aspects of a four-year research project, *On The Edge* (2001-2005)¹⁵. *On The Edge* was focused by issues of social practice, rather than ecological arts practice. However, the paper explores how an ecological frame might reveal understandings at more than one level: in relation to research culture in general, in a research project, and in the individual 'live' activities of the project.¹⁶

In developing this paper, Douglas and I were concerned to understand how to think of 'energy' as a metaphor through which to understand the dynamics of arts projects. Retrospectively it was an early step in a process towards ecological thinking. Our argument used Jane Jacobs' *The Nature of Economies* (Jacobs 2000) in which she argues that economic systems conform to the rules of energy in ecological systems. Douglas and I argued that processes of differentiation and co-development, key to Jacobs' articulation, are relevant to understanding arts and research practices.

¹⁵ <https://ontheedgeresearch.org/about-phase-1/>

¹⁶ *On The Edge* was focused by the question, "How do you develop visual arts practice of quality in remote and rural areas i.e., in contexts in which there is little conventional infrastructure?" We were seeking to test the assumption that visual arts of quality happened in urban contexts. From a remote rural perspective, urban contexts seemed to be the focus of attention in terms of the development of social practice, as well as funding and critical writing. Moreover, in the North East of Scotland there was a very strong culture of storytelling and music, but no significant tradition or contemporary culture of visual arts. My involvement in *On The Edge* was as Director of one of the partner organisations, Scottish Sculpture Workshop (SSW), located in the heart of rural Aberdeenshire. I was involved in the discussions that preceded *On The Edge*, concerned with the role of art in remote rural contexts, and within the programme the question we developed for the 'live' project focused on the development of the village, Lumsden, in which SSW was located. Each 'live' project involved an artist, and SSW's involved Gavin Renwick <https://www.gavinrenwick.org/>. He focused on the changing forms of inhabitation in the landscape. This project is documented in Renwick's 'Report' and the *On The Edge* publication *Inthrow* (Renwick 2003; Douglas 2005).

'An Ecology of Practice in the Everyday' (PRO1) is significant in exploring Jacobs' articulation as a way to understand several distinct aspects of arts research manifest in *On the Edge*. Our reflections followed Jacobs, using the principle that differentiation (an ecological concept she applied to economies) emerges from generality. In our analysis visual arts practices and, in particular, socially engaged arts practices were being developed in response to de-industrialisation (Matarasso 1997), and that our rural context required new thinking and testing emergent ways of working.

The paper is also significant in form as well as content. Douglas and I adopted an approach to writing which sought to juxtapose the analytic elements based on Jane Jacobs with the discursive elements drawing on the expressed views and motivations of the participants in *On The Edge*. The paper moves between two voices, one unpacking Jane Jacobs' discussion of energy, development and adaptations. The other using a technique emulating the Harrisons' form of, "He said...", "She said..." (Harrison and Harrison 2003 n.p.). This enabled the different, sometimes contradictory, voices of individuals to be present within the text.

If 'An Ecology of Practice in the Everyday' (PRO1) opens up the possibility of ecological thinking, then 'The Hope of Something Different' (PRO8) addresses a conceptual issue in ecological thinking, the need to de-centre the human.

In 'The Hope of Something Different' (PRO8) several key issues are explored, including the hybrid character of art practices that embrace ecological approaches. The paper highlights the work of artists including Jackie Brookner, the Collins and Goto Studio, and Cathy Fitzgerald. One of the underlying purposes is to draw out the distinctive ecological thinking and working, in relation and juxtaposition to socially engaged arts practices. There is considerable overlap between the two genres, not least because of the shared concern with relationality (I will return to further discussion of issues associated with relationality including participation, collaboration and interdisciplinarity in Section 2.1). The argument is that de-centering, as framed in

Biesta's phrase, is key. It is further appropriate to use Biesta because his focus is pedagogical, and the essay suggests there is an underlying common intention of public pedagogy in the cited practices.

'The Hope of Something Different' (PRO8) connects two aspects of theory. On the one hand arguments for the paradigm shift in knowledge production (towards co-creativity), and on the other in ecoart theory focused on emergence (autopoiesis and autoecopoiesis¹⁷). These directly relate to the fundamental conceptualisation of development and differentiation articulated in 'The Ecology of Practice in the Everyday' (PRO1). However, 'The Hope of Something Different' (PRO8) argues that in various ways the art practices exemplified put the more-than-human at the heart of the work, often by imagining that the aesthetic could address the more-than-human. This is achieved, for example, by attending to timescales of the more-than-human such as life spans or even respiration patterns of other living things.¹⁸ The ways of working, recognising the value of autoecopoiesis and Commons based approaches (for instance as articulated in *The Deep Wealth of this Nation, Scotland* (Harrison 2018)), seek to open up shared agency with the more-than-human.

My aim in clarifying the difference(s) between socially engaged arts practice and practices organised through ecological thinking is not to separate them, but to open up greater dialogue and to inform pedagogy for artists, producers, curators and, potentially, funders and commissioners.

¹⁷ Sacha Kagan uses the term 'autoecopoiesis' to acknowledge the complexity of emergence recognising both 'self-making' and symbiosis, each insufficient in their own right (Kagan 2013 pp. 212–216).

¹⁸ cf. Collins and Goto Eden3 project <https://eden3.net/>

2.1. Relationality

In the next sections I will focus on relationality.¹⁹ Relationality is a key theme in contemporary art practice and, as noted elsewhere, it is often articulated by terms such as participation, collaboration and interdisciplinarity. I will address each of these in turn. However, I have not infrequently argued for the phrase 'working together' because each of the terms (participation, collaboration and interdisciplinarity) is loaded with assumptions, used to claim value in particular ways. Projects can be described as participatory, collaborative, or interdisciplinary because these words are associated with policy priorities – interdisciplinarity most obviously in a research context, but participatory and collaborative too. Any search for participatory policy will generate a wide range of examples and toolkits across civil society organisations²⁰, as well as global and national governmental bodies²¹. In fact, as I note in 'The Hope of Something Different', Francois Matarasso subtitled his book *A Restless Art*, 'How participation won and why it matters' (Matarasso 2019). This assertion in some respects sums up the situation, but also needs to be problematised (as Matarasso does).

From an ecological point of view, relationality in all its aspects (understanding the embeddedness of the social within the ecosystemic, recognising interdependencies, valuing the actors and relations) is foundational, and it can also be foundational in arts practice. Anne Douglas, my frequent collaborator, argues John Cage's work 4'33",

¹⁹ Whilst Nicolas Bourriaud's *Relational Aesthetics* (2002) uses this terminology, my focus is not the specifics of gallery-based approaches and I have not drawn on Bourriaud specifically in the publications included in the Portfolio.

²⁰ cf. Scottish Co-Production Network <https://www.coproductionscotland.org.uk/what-is-copro> accessed 28 June 2021

²¹ cf. UN policy in the form of the 1998 Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters <https://www.unece.org/env/pp/welcome.html>, and Scottish Government Policies e.g. Community Empowerment (Community Empowerment (Scotland) Act 2015 and Islands (Scotland) Act 2018) <https://www.gov.scot/policies/community-empowerment/> accessed 14 September 2020

by putting the onus on the audience to 'create the work', exemplifies this relationality (Douglas 2018a p. 18). Douglas argues this is the fundamental condition of all arts, and that the various forms of priority placed on participation in the current time obscure its centrality to understanding the arts. For her, Cage's work is one amongst many which draw attention to shared agency and relationality,

These question who creates the work: the artist or the audience, or both working together? (Douglas 2018a p. 19).

In the next Section I will focus on my contributions related to participation specifically, and highlight my contribution in terms of aligning approaches across art, design, architecture and networked digital environments (what is now called social media).

Participation

'Practising Equality?' (PRO2), co-authored with Paul Harris, is focused on co-creative practice exploring commonalities and differences across art, design, architecture and co-constituted digital environments such as Wikipedia, but extending to a wide range of social media. It brings the Web 2.0 literature on networked digital environments²², in particular *We-Think* (Leadbeater 2009) and *Here Comes Everybody* (Shirky 2009) into relation with co-design and socially engaged art theorising. The fundamental question addressed is what 'equality' means in these practices, particularly as it relates to shared agency and my articulation of 'joining a conversation'.²³

The article positions the question in relation to politically oriented practices, commercial activities, and policy priorities. The article draws on the work of Sophie Hope (Hope 2011) and the Cultural Policy Collective (Cultural Policy Collective 2004) for a framing of cultural democracy; highlights the relationship between the principles of co-design (Greenbaum and Loi 2012) and their alignment with articulations in the Web 2.0 literature noted above; and introduces some articulations of place-based collaboration (Kester 2004, 2011) and the tensions in the discourse of participation in the arts (Bishop 2012).

Focusing on the social justice practice of the Center for Urban Pedagogy and the art practice of Suzanne Lacy, forms of participation are explored and the tensions of authority and authorship are unpacked, drawing on the voices of artists (in particular

²² The particular emphasis on co-creativity using various digital tools and platforms has somewhat receded as a focus to be replaced with concerns about truth and the role of these same platforms in amplifying partisan perspectives and conspiracies.

²³ 'Practising Equality?' (PRO2) was written in 2013 and was influenced by parallel work on collaboration 'Reflections on Collaboration' (SO3), and directly informed papers specifically addressing aspects of sharing agency including 'Dignified Spaces: participatory work de-institutionalises rooms in the heart of the clinical environment' (SO4) and 'Immersing the artist and designer in the needs of the clinician: evolving the brief for distraction and stress reduction in a new Child Protection Unit' (SO8). These papers analysed specific instances of participatory practice in the implementation of the Therapeutic Design and Art Strategy for the new NHS Greater Glasgow & Clyde Queen Elizabeth University Hospital and Royal Hospital for Children (Project 7).

Lacy), designers and participants as well as the literature mentioned above (Leadbeater, Shirky, Hope, Cultural Policy Collective, Greenbaum and Loi, Kester, Bishop) which provides a theoretical frame. The discussion is underpinned by the question 'What does equality mean?'²⁴

The important contribution 'Practising Equality?' (PRO2) makes is to explore the potential for a dialogue across co-creative practices (art, design, architecture and web 2.0) in order to better understand approaches to sharing of authorship and agency. The importance of exploring work that straddles art and design and involves shared authorship and agency will be returned to below (Section 3). Whilst this paper is wholly focused on the social dimension, it raises key issue for relationality, a key aspect of ecological thinking. This paper informs 'The Hope of Something Different' (PRO8) in terms of thinking 'whose' aesthetic judgement matters (or even 'what's' aesthetic matters?).

In 'Practising Equality?' (PRO2) I am attentive to issues of naturalisation and the dangers of ecological metaphors 'justifying' a wide range of biases and injustices by making flows of power appear 'natural'. This is a vital dimension for developing an approach to ecological thinking, particularly for a producer working across health and environment, both contexts where multiple injustices have complex social and ecological impacts affecting groups already marginalised in society.

²⁴ See in particular Suzanne Lacy's PhD 'Imperfect art: working in public: a case study of the Oakland Projects (1991-2001)' (2013).

Collaboration and Interdisciplinarity

Collaboration and Interdisciplinarity form the second of the key concepts that shape my understanding of relationality particularly within socially engaged arts practices. This section primarily deals with relationality in its social forms, and this informs my understanding of ecological thinking, in part, by what is absent, as well as what is present.

I understand participation to generally describe artists and designers working with audiences or communities (whether defined by context or by shared interests).²⁵

Collaboration is sometimes used in the same way.²⁶ Collaboration can also describe artists working with other experts²⁷, with interdisciplinarity being a more specific form of this where the focus is the interactions between different ways of knowing. This broad categorisation with its overlaps is articulated across several of my publications including 'Practising Equality?' (PRO2), 'Working Together' (SO5), *Reflections on Collaboration* (SO2), 'Disciplinarity and peripheries' (SO14), and *Demystifying Interdisciplinary Working* (SO16).

Reflections on Collaboration (SO2) is an important piece because it draws on a significant body of practitioner reflection focused by the work 'collaboration'. The piece is an essay commissioned by a-n The Artists Information Company and published as a supplement to the a-n magazine. I was asked to review the 32 pieces published under 'Collaborative Relationships', an archive of collaboratively written articles (2008-2012). *Reflections on Collaboration* complements the enquiry in 'Practising Equality?' (PRO2) by unpacking how collaboration is framed, all co- or multi-authored. The essay draws

²⁵ cf Tate definition of 'participatory art' <https://www.tate.org.uk/art/art-terms/p/participatory-art>

²⁶ cf Creative Ireland's definition of 'collaborative arts' <https://www.createireland.ie/aboutus/collaborative-arts/>

²⁷ cf 'Collaboration, creativity, conflict and chaos: doing interdisciplinary sustainability research' (Cairns, Hielscher and Light 2020)

out learning and also aims to unsettle assumptions about collaboration. Whilst participatory and socially engaged ways of working are important and there are some examples of 'interdisciplinary' working (i.e. artists with scientists), many of the examples focus on the process of artists working with producers, curators and project managers, some in freelance roles but many in institutional roles such as Local Authority Arts Development Officers, and a significant number involving organisations specialising in working in the public realm.

Reflections on Collaboration draws on Kester's writing (Kester 2011), but also uses publications from the think tank 'Missions, Models, Money' (MMM) including their booklet on competencies, qualities and attributes needed for collaborative working (Missions, Models, Money 2010). MMM's competencies, qualities and attributes can be boiled down to shared vision, willingness to learn, and communication. But in reflecting on the a-n archive of pieces on collaboration what was also clear was that there was a real danger that the concept could become a 'funding buzz-word' leading to perverse incentives for collaborations.

The second key piece on collaboration is 'Working Together' (SO5), an essay commissioned by the Land Art Generator Initiative for the *New Energies* (Ferry and Monoian 2014) publication. This draws together some key threads in the context of addressing environment issues, particularly focused by renewable energy. As noted above (Section 1.1) it is an example of the iteration between research and practice, in this case research preceding the project. Following the publication of this piece, I put together a consortium with Glasgow City Council, Scottish Canals and BIGG Regeneration in order to 'bring LAGI to Scotland' resulting in the *LAGI Glasgow* project.²⁸

'Working Together' (SO5) highlights the justice issues already mentioned in relation to

²⁸ <https://landartgenerator.org/glasgow/>

participatory practice and relates them to environmental justice issues in particular drawing on the example of the way distributive justice is embedded in the renewable energy infrastructure on the Isle of Eigg. This is particularly relevant to the LAGI project which seeks to promote the use of renewable energy infrastructure as part of place-making initiatives.

'Working Together' also references the Harrisons to exemplify some of the key characteristics of collaborations between artists and scientists. The Harrisons talked about their work as 'post-disciplinary', focused by the issues 'on the ground' (Ingram Allen 2008 p. 30). "Working Together' (SO5) draws on a key finding from the independent evaluation (Heim 2008) of *Greenhouse Britain: Losing Ground, Gaining Wisdom* which highlights the importance of 'asking the right questions'. (which is of course related to 'willingness to learn', one of MMM's characteristic of collaboration). An important idea developed in 'Working Together' (SO5) addresses the blurring between art and design seen in much ecological art (also highlighted in 'The Hope of Something Different' (PRO8) previously discussed). Drawing on a quote from Joachim Sauter which proposes a difference between art and design in terms of legibility (design must be more legible and art requires more deciphering, according to Sauter), I argue that ecological arts often layer aspects that make ecosystems and ecological processes more legible, with aspects that invite more personal, subjective engagement to fully understand the work. The piece further draws out the complexity of these works existing in places where their relationship with context makes them highly legible, and also in galleries and museums where they require more deciphering with other layers coming to the fore.²⁹

'Working Together' (SO5) draws together several themes relevant to understanding

²⁹ The Harrisons are quoted in the catalogue of *The Serpentine Lattice* saying, "In the context of the art world, our works do, in fact, behave like works of art. When they're exhibited at City Hall, however, they read as workable proposals in poetic form" (Fillin-Yeh 1993 p. 17).

what I mean by ecological thinking in the arts (and design), addressing the problem from the perspective of a key priority (energy transition) as well as art and design practices. The essay also foregrounds interdisciplinarity which is central to projects such as *Nil by Mouth*³⁰, and is characteristic of the work of the Harrisons' *Greenhouse Britain* (Project 1) and Newton Harrison's *On The Deep Wealth of this Nation, Scotland* (Project 2).

Interdisciplinarity has been the focus of two further pieces 'Disciplinarity and its Peripheries' (SO14) and *Demystifying Interdisciplinary Working (in Valuing Nature)* (SO16). These draw on both my project work as well as theory to articulate a nuanced understanding, frequently drawing on the various writings of Basarab Nicolescu (Nicolescu 1999, 2002, 2008, 2010, 2014a, 2014b), but also influenced by Murdo Macdonald and his attention to the generalist tradition in Scotland (Macdonald 2020) and by Gavin Little's articulation of the challenges for the arts and humanities engaging in a greater degree of interdisciplinarity (Little 2017).

My aim in this section has been to draw out the focus on systems and ecological thinking and the core concern with relationality central to this through the specific publications. 'An Ecology of Practice in the Everyday' (PRO1) provided a lens at an early stage for understanding how underlying principles of energy are critical to understanding both ecologies and economies. The key contribution in that paper was the opening up of the patterns of development and co-development in practice-led research in the arts as demonstrated in *On The Edge* and its 'live' projects. In terms of my concern here it provides an initial framework for ecological thinking. The second paper 'The Hope of Something Different' (PRO8) addresses ecological artists' practices

³⁰ I worked on the Crichton Carbon Centre's *Nil by Mouth: an Art Science Collaboration on Sustainability Focused by Food and Farming* (2013-14) as a producer subcontracted by Wide Open who had tendered for the role. The project brought together artists with scientists from The James Hutton Institute, The Rowett Institute for Nutrition and Health, and SRUC (Scotland's Rural College) under the leadership of Mike Bonaventura, then CEO of Crichton Carbon Centre.

and draws out the important distinctive focus on "...in the world without occupying the centre of the world." (Biesta 2017 p. 3). Other publications address relationality, particularly in terms of co-creative practices across art, design, architecture and networked digital environments (at the time framed as Web 2.0). Collaboration, participation and interdisciplinarity are all aspects of the broader concern with 'working together'.





Fig. 5: *ecoartscotland library
as bing No. 2*
collage, Fremantle, 2018

Like a strange new lifeform the
ecoartscotland library mutates in
order to be able to converse with
other arti cial beings. How does
life take root on you

3. Complexity and Difference

I will now focus on the converse aspect of ecological thinking: complexity and, in particular, difference. In the form of 'wicked problems', it is characterised by contradictory, incomplete and/or changing definitions, no single solution, and the tendency for new aspects to reveal themselves in the process (Lönngren and van Poeck 2020). The contexts in which I work as a producer, both in healthcare and with environmental issues, are characterised by these sorts of complexities. However, my concern in the next section is to highlight an approach to evaluating knowledge exchange which offers ways of working with complexity and an approach to curating which sought to reveal complexity.

Complexity is a key aspect of ecological thinking, underpinning the focus on the positioning of the social within the ecosystemic, characterising interactions as well as values. Making connections, synthesizing, responsivity, feedback loop[s] and pattern recognition are all processes associated with systems at a theoretical level (Meadows 2008) and 'knowledge exchange' at a practical one (Edwards and Meagher 2020). These characteristics are also highlighted by some artists as key aspects of creative practices (Whitehead 2006). My key contributions to thinking about complexity take two forms. The first is 'Impact by Design' (SO12), a paper which addresses evaluating knowledge exchange impacts. The second is an approach to curating an exhibition *Reclaiming Wetland Values: Marsh, Mud and Wonder* (SO15) bringing together multiple approaches to understanding the values associated with wetlands.

Turning to 'Impact by Design' (SO12), the Arts and Humanities Knowledge Exchange Hub project *Design in Action* provided an opportunity to develop the framework for evaluating knowledge exchange impact articulated in this paper.³¹ The five key

³¹ I had encountered the approach during *Nil by Mouth* through working with researchers on the Scottish Government's Strategic Research Programme 'Environmental Change; Food, Land, and People' (2011-2016).

dimensions (Conceptual Shifts, Capacity Building, Instrumental, Attitudinal/Cultural and Enduring Connectivity) characterising effective knowledge exchange identified in the approach (Nutley, Walter and Davies 2007; Meagher, Lyall and Nutley 2008; Meagher 2013; Meagher and Lyall 2013) are a valuable 'prism' through which to visualise ways of practising with complexity. The conceptualisation of the five dimensions has proved to be very useful, particularly in shifting the focus from disciplines to disciplines plus practices (which in turn links with Biggs' concept of ensemble practices).³² Whilst knowledge exchange is sometimes constructed as relations between researchers and others, there are good reasons in art and design to understand knowledge exchange as part of a creative process, a way of 'working together' (as articulated in Section 2 'Relationality').

The paper 'Impact by Design' (SO12) makes a specific contribution in exploring the linkages between different aspects of impact, particularly between conceptual shifts and capacity building. Conceptual shifts and capacity building are required to achieve instrumental impacts (whether in terms of practices or policies). The visualisation of these relations used within the paper draws out the linkages.³³

Approaches to working with complexity are further explored in the curating of the Valuing Nature Programme *Reclaiming Wetland Values: Marsh, Mud and Wonder* exhibition which I undertook collaboratively with Simon Read. Our curatorial statement (SO15) articulates how Read and I approached bringing together academics from more than ten disciplines³⁴ and two different projects³⁵ to open up the ways of

³² I have used this approach more recently in the evaluation of the Creative Carbon Scotland 'Cultural Adaptations' project (2019-21).

³³ I am currently using the approach developed in Impact by Design (SO12) in the evaluation of Creative Carbon Scotland's *Cultural Adaptations* project, and I have also used it in planning impact pathways in research grant writing.

³⁴ Disciplines included entomology, medical entomology, geomorphology, human and physical geography, economics, psychology, other social sciences, history, creative writing, sound, performance and visual art.

³⁵ WetlandLIFE (<http://www.wetlandlife.org/>) and CoastWEB

knowing and working.

Read and I conceived the exhibition as a means to highlight a different understanding of the two research projects from more conventional academic forms such as conferences, papers and publications. Exhibition-making provided an approach to revealing ways of knowing and working through juxtaposition (in many ways it was a collage).

Read and I aimed to draw attention to the multiple distinctive ways of knowing generated by the different disciplines involved in the research projects through the materiality of their ways of working. We used a display system that provided a consistent structure in which diversity could be presented (spreadsheets, 3D models, microscopes, maps, photography, video, soundscapes, infographics, historical artefacts). Read and I were clear we did not want to reframe the work of researchers across the natural and social sciences as well as the humanities into 'art'. Rather, we proposed that an exhibition could enable new understandings of the complexity of multidisciplinary research and the multiple values of wetlands, highlighting instances of interdisciplinarity.

Read and I intentionally emphasised a non-linear layout to provide a distinct way of engaging with the two projects and reveal connections between practices (e.g. between entomology and history) that had not yet been evidenced in publications. I built on the principle of equivalence which particularly characterised the WetlandLIFE project to ensure that forms of valuing (e.g. economic modelling and inhabitant experience) were treated as equivalent in the exhibition curation. Read and my curation of the exhibition drew out the role of the artists/practices (Simon Read³⁶,

(<https://www.pml.ac.uk/CoastWeb/Home>), the two projects within Valuing Nature (<https://valuing-nature.net/>) which focused on wetlands.

³⁶ <https://www.simonread.info/>

Kerry Morrison³⁷ & Helmut Lemke³⁸, and Victoria Leslie) in variously articulating the value of wetlands; the value of specific aspects of research; and the value of interdisciplinarity.

These approaches to difference and complexity both offer ways of understanding and working with complexity without reducing it, but they are still theoretical structures.

I now want to turn to problems that are embedded in systems and relational approaches to ecological thinking. The complexity of the lifeweb and of social systems can be framed temporarily but it is vital to recognise that the complexity always exceeds any theoretical framing. The Harrisons articulate this in the following way,

As a result, any central images that appeared seemed to exist for only a moment and thereafter to fade back into a pattern of moments grouped within moments (Harrison and Harrison 2001 n.p.).

Tim Morton, a key theorist addressing understanding ecology from a critical and philosophical perspective says,

All life-forms, along with the environments they compose and inhabit, defy boundaries between inside and outside at every level (Morton 2010 p. 274).

Morton is also critical of organicist metaphors, arguing, for instance, that 'mesh' is more appropriate than 'web', and suggesting that organic language is adopted by "authoritarian masculinism." (Morton 2010 p. 276). This is a deeper articulation of the concern expressed in the papers on social practice that naturalising language can undermine criticality. Morton's 'queer ecology' profoundly challenges any form of naturalism, extending the definition of ecology provided earlier, saying,

I propose that life-forms constitute a mesh, a nontotalizable, open-ended concatenation of interrelations that blur and confound boundaries at practically

³⁷ <https://kmerkerrymorrison.wordpress.com/>

³⁸ <http://www.sound-art.de/>

any level: between species, between the living and the nonliving, between organism and environment (Morton 2010 pp. 275–276)

Queer ecology as articulated by Morton challenges a number of aspects of ecological thinking, specifically terminologies such as 'systems' and concepts such as 'world' and 'community' which have been key to publications discussed to date. His challenge is driven by an articulation of 'difference' and strangeness that humbles human capacity for comprehension, in particular of any approach that claims to any holism, or completeness. He usefully juxtaposes the organic, where we seem to experience 'wholeness', with his understanding of interdependence, which is at once relational and also more than what is comprehensible through the concept of relationality. He articulates this as follows,

In organic form the whole is greater than the sum of its parts. Many environmentalisms—even systems theories—are organicist: world fits mind, and mind fits world. The teleology implicit in this chiasmus is hostile to inassimilable difference. Interdependence implies differences that cannot be totalized. The mesh of interconnected life-forms does not constitute a world (Morton 2010 p. 278).

There are several articulations of the importance of difference – Gregory Bateson in developing a cybernetic understanding of ecological thinking argues that information is a more useful 'flow' to attend to in ecosystems than energy. His oft quoted phrase, 'the difference that makes a difference' (1979 pp. 68–69), is key to his understanding of the generation of information. Difference is generative, and in Bateson's view key to understanding ecological systems as informational (Bateson 1979 pp. 78–79; Harries-Jones 1995 p. 169). Information isn't restricted to what humans share through channels but is pervasive according to Bateson. Information in Bateson's conception when in relation with different information, generates novelty. One example Bateson

uses is Moiré patterns which when two interact generate a third pattern (1979 pp. 79–80).

Morton uses difference as a key tool with which to challenge assumptions of comprehensibility and the binaries such as 'nature' and 'culture' that shape thinking. His essay 'Queer Ecology' (2010) argues that the queer theory focus on difference is, in Bateson's terms a pattern which when set in relation to ecological theory, generates a novel understanding. Morton's concern is in to explore what it means for humans to be enmeshed in the world. In *Hyperobjects: Philosophy and Ecology after the End of the World* (2013) he calls out our *hypocrisy, weakness, and lameness...*" (Morton 2013 p. 2 italics in original). and in *Dark Ecology: For a Logic of Future Coexistence* (2018) he uses the trope of noir literature and film to highlight the ways in which humans, whether philosophers, artists or ecologists, are actors within the unfolding Anthropocene, both investigators and also perpetrators.

Anna Tsing frames the challenge of difference in another configuration asking, "But must all relations, I ask, begin and end with humans?" (2020 p. 17). Where Bateson is concerned with information and Morton with the need not merely to put the human back into the world but also to challenge the 'perfectibility of man', human exceptionalism, that is such an important part of the enlightenment project, Tsing is concerned with de-centering the human in another way by paying attention to the liveliness of everything else.

Jan Jagodzinski following Claire Colebrook reminds us that 'indifferent' is also an important concept, that 'life' is indifferent, that Bateson's 'information' does not have 'intent' but rather needs to be understood as "...striving of life in its rogue or anarchic ways where distinctions, identifications, boundaries are done away with, in a destructive manner as well as a symbiotic one" (2018 p. 11).

The intersection of queer theory, and the conception of difference that it foregrounds, problematises easy place-based and relational thinking. Queer theory's construction of difference is aligned with de-colonial troubling of ideas of purity, indigeneity, and conceptions of place that are based on origins (Yusoff 2018 pp. 65–85).

This challenges everything I proposed as 'grounding' in Section 2 and I am going to firstly turn to one of my publications which addresses inconsistency and contradiction. This will open up how practices can engage in ecological thinking in ways that might recognise Morton's challenge. 'Inconsistency and Contradiction' (PRO4), co-authored with Anne Douglas, takes up the statement by the Harrisons,

We have come to believe that inconsistency and contradiction are generated by the processes of cognition, thinking and doing, and have the important role to play of stimulating and evoking creativity and improvisation, which are inherent in the processes of the mind that have led us to do this work (Harrison and Harrison 2007 n.p.).

'Inconsistency and Contradiction' (PRO4) addresses the poetics in selected works of the Harrisons – the ways that they construct the work, how they understand the work to work. Anne Douglas' and my intention in this chapter was specifically to juxtapose holistic and totalising concerns normally associated with strategic planning, with the forms used by the Harrisons. The Harrisons' works address issues of fragmentation, particularly ecological fragmentation resulting from human management 'strategies'. In our articulation, the Harrisons' improvisation works *with* inconsistency and contradiction, i.e. difference, rather than seeking a "spurious harmony" (Peters 2009 p. 7).

Boundaries and patterns are a key concern for the Harrisons, and significant in their poetics because of their articulation in relation to visual art practice, but ultimately by their ecological understanding. Douglas and I highlight their description of this in terms of a "field of play" (Harrison and Harrison 2007 n.p.). The Harrisons do use

language including web of life or lifeweb, which for Morton forms part of the 'problem' but, as quoted above, they also recognise the limits of any "central image", i.e. human composition, in relation to "...a pattern of moments grouped within moments" (Harrison and Harrison 2001 n.p.).

Another key aspect of the poetics we discuss is the 'voices' in the work. Douglas and I use the Harrisons' seminal work, *The Lagoon Cycle* (1985), which is structured around a dialogue between two characters – the Lagoon Maker and the Witness. Across all their works multiple voices contribute to the story of place.

They reflect on this approach saying,

By using the conversational form, with diverse proposals embedded in it, we have been able to, in the main, avoid much of the sense of the authoritarian or the coercive that can be present in public projects or planning operations. This is the basic strategy underlying our use of the "He said, She said, You said, I said" format when working with conversation as well as citing people's commentary, without personal attribution, in the work. When we actually make a proposal, we often use the "If this, Then that" form, which typically includes both a viable vision and its potential consequences, and the undesirable consequences of its converse or absence (Harrison and Harrison 2003 n.p.).

The trope they describe enacts and re-presents the improvisation of conversation in the process of making the work, the movement between experiences of aspects of ecosystems and human understandings. This is another dimension of the concept of 'joining a conversation' which I have used in my articulation of my approach and which Anne Douglas and I used in 'An Ecology of Practice in the Everyday' (PRO1).

'Inconsistency and Contradiction' (PRO4) was written for policy makers as the primary audience precisely because strategic planning is focused on coherence and uses systems approaches assuming that this will encompass the 'issues'. The chapter makes a specific contribution in drawing out the ways artists can work with

inconsistency and contradiction in the context of strategic planning issues. Key themes are further developed and explored in 'What Poetry does Best' (SO10) and 'In the Time of Art with Policy' (SO17).³⁹

Morton's organicist critique is directed at certain sorts of systems and ecological thinking, but it goes further. In *Hyperobjects* we find a characterisation of "... new human phase of *hypocrisy, weakness, and lameness...*" (Morton 2013 p. 2 italics in original). I will now turn to a piece which addresses the complexity of failure. 'Owning Failure' (PRO3), co-authored with Gemma Kearney, is focused on the challenges of failure, primarily in visual arts education contexts.⁴⁰ It draws on interviews with teaching staff at Gray's School of Art. Failure is a problematic subject to address for multiple reasons – often it is only spoken about from the perspective of success. It is the subject of aphorisms (e.g. "Ever tried. Ever failed. No matter. Try again. Fail again. Fail better." (Beckett 1983 n.p.)). It is subject to slippages, from failing in an activity to being 'a failure'. This is a particular challenge in learning where fear of failing an element of a course slips into fear of failing the entire course and this can become 'being a failure'. Such fear of failure has mental health impacts and consequences for creative practices. Where experimentation, and particularly open-ended and improvisatory approaches are concerned, failure needs to be accepted as a vital part of the process and always a potential outcome. The key contribution made in this paper is the articulation of failure from the interviews and their contextualisation in relation to creative practices and the very humanness of failure.

Although this dimension isn't explored in the paper, failure constitutes a necessary aspect of (human) ecological thinking because its implicit uncertainty is the necessary

³⁹ 'Foregrounding Ecosystems' (SO18), another chapter on the work of the Harrisons, is scheduled to be published in 2022. *Foregrounding Ecosystems* draws on Bateson to explore what we might understand as the Harrisons' epistemology and in particular their use of data, both financial and environmental, in key works.

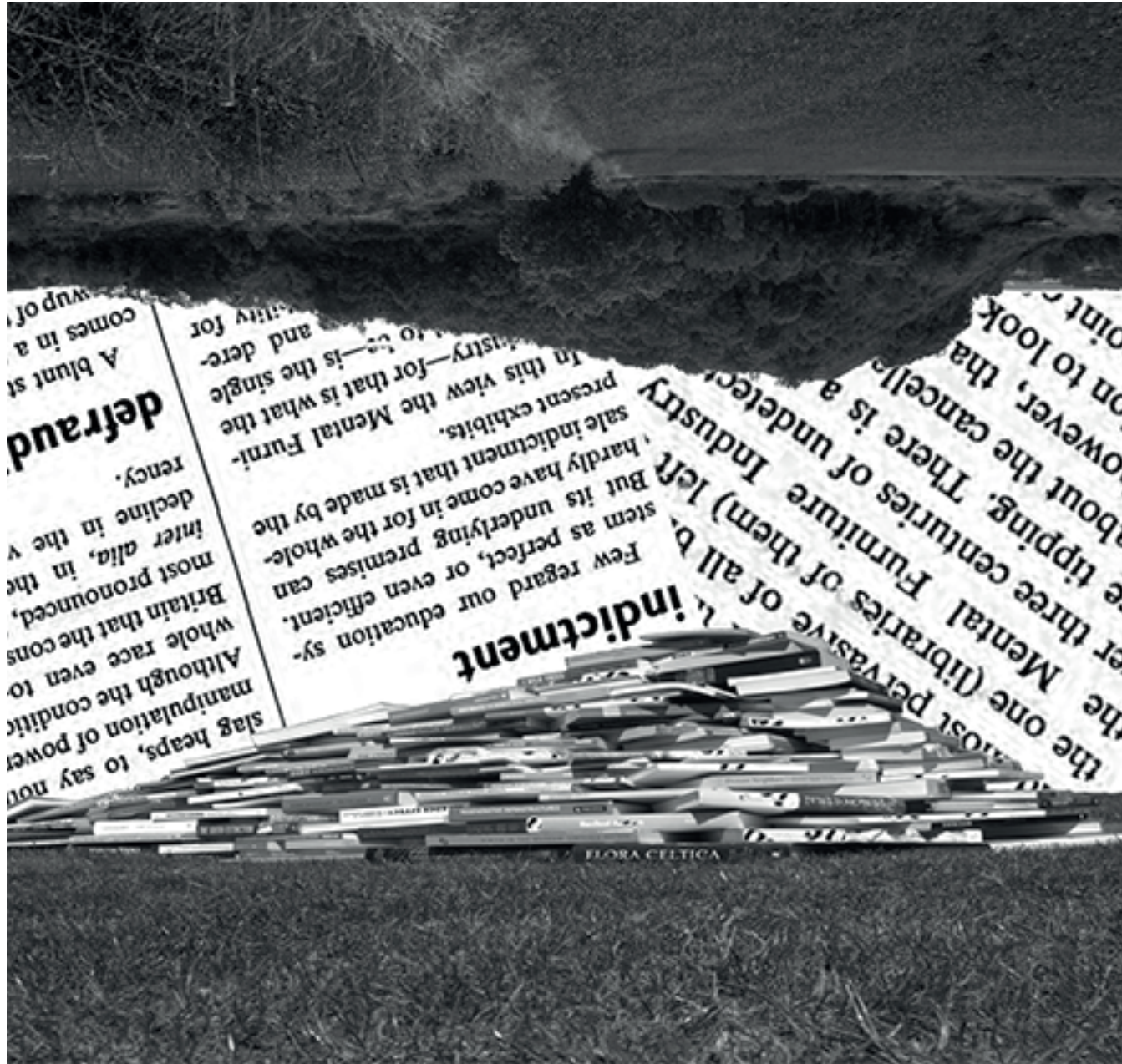
⁴⁰ It has been drawn to my attention that there is a parallel discourse on failure in Performance Studies. This isn't addressed in the paper.

condition for emergence, but also because in Morton's terms accepting being wrong (as key to understanding "...*hypocrisy, weakness, and lameness...*" (Morton 2013 p. 2)) is vital. Morton says,

...'Inside the hyperobject we are always in the wrong.' ... Every position is 'wrong': every position, including and especially know-it-all cynicism that thinks it knows better than anything else (Morton 2013 p. 136).

Living with failure is, as is evidenced by the interviews cited in the paper, an everyday aspect of creative practice, and the reflective and reflexive process of the practitioner researcher is necessary to this understanding.

This section has addressed a series of issues that complicate the developing understanding of ecological thinking, particularly in the arts, speaking in various ways to Morton's challenge to a systems-based, organicist or holistic conception. Morton emphasises the importance of difference and I have highlighted aspects of the portfolio that engage with difference from the perspective of practice seeking to problematise issues in public art. The contributions (on conceptualising impact, curating multidisciplinary and on failure) in this section focus on aspects of practice which, it is my contention, are important to include within a conceptualisation of ecological thinking. Further aspects of my portfolio, which I characterise as 'Small Experiments with Radical Intent', speaking to maintenance (PRO6), adaptation (PRO7) and waste (PRO5), can be found in Appendix 1. This further explores "...*hypocrisy, weakness, and lameness...*" (Morton 2013 p. 2) as elements of an ensemble practice of ecological thinking in the arts.



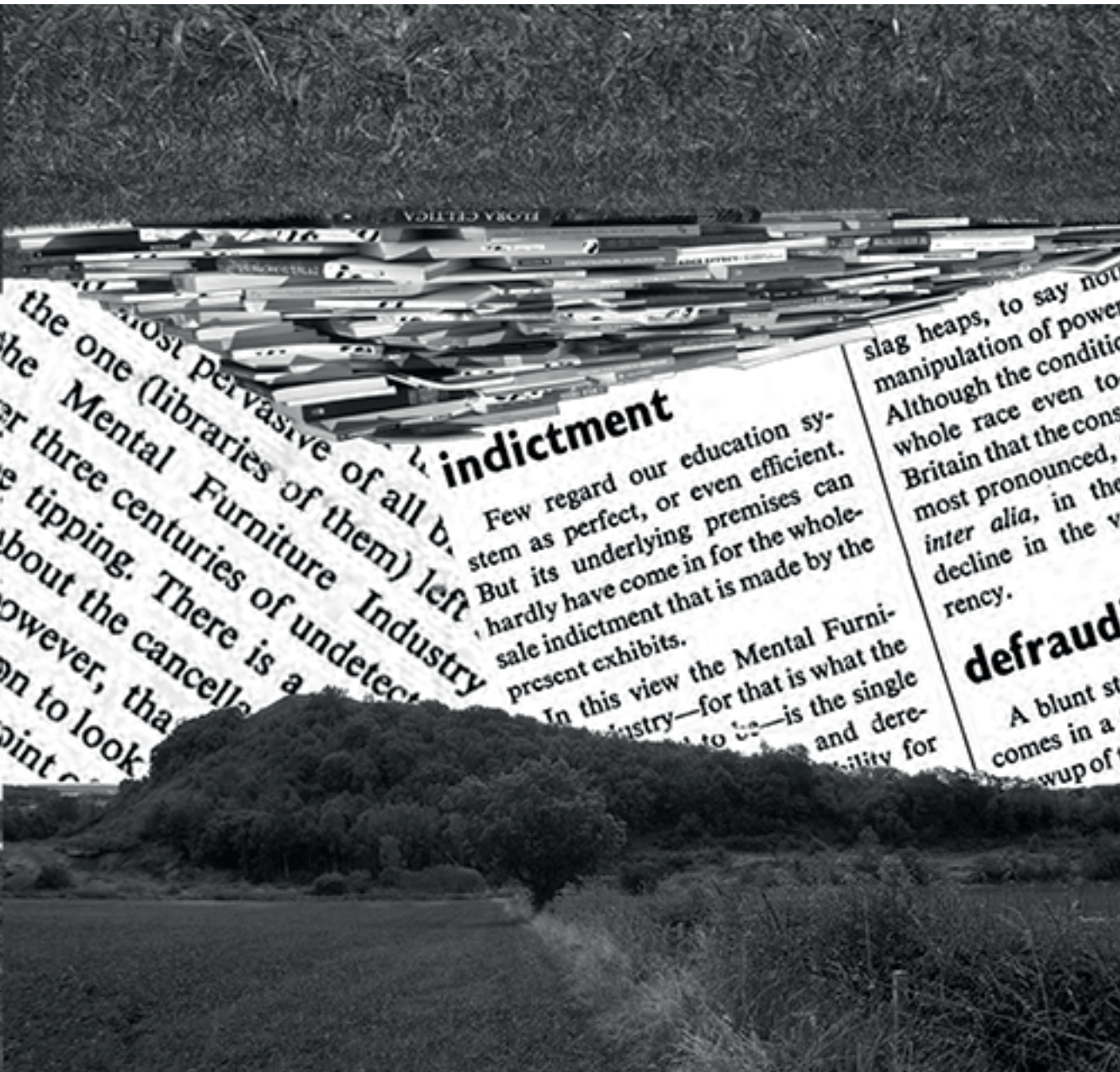


Fig. 5: *ecoartscotland library as bing No. 3*
collage, Fremantle, 2020

4. Conclusion

It's about reading things, learning things, knowing things, and then trying to absorb them and forget them, so that they just become part of the understanding.

(Steventon n.d.)

Undertaking a PhD by Public Output requires revisiting and drawing out things that are part of an understanding developed (and perhaps forgotten) over years. I have explored the 'common theme' of thinking ecologically across the portfolio through selection, grouping and framing the contributions—this exercise has been analogous to collage.⁴¹ I have used projects, and writing about projects, as well as the approaches of artists to projects and writing about projects, to help me. The Harrisons play a key role in this. Each part of the portfolio is grounded in the practice of producing arts projects, working together with various people (artists, commissioners, environment and health managers and policymakers as well as inhabitants); institutions (NHS Boards, City Councils, Public Private Partnerships, Universities, Cultural organisations and networks); and systems (peer review, public funding of the arts, construction management). I have emphasised 'joining a conversation' and 'shared agency' as key aspects of my understanding of thinking ecologically. My aim has been to highlight the ways in which the practice of producing in the arts can be informed by ecological thinking through attention to relationality (participation, collaboration and interdisciplinarity) as well as to difference. I have explored some of the challenges that problematise systems and relationality as forms of ecological thinking, drawing on Morton (2010, 2013)

The key *contributions* in the portfolio are (in the order addressed):

'An Ecology of Practice in the Everyday' (PRO1). This contributes ecosystemic

⁴¹ Collage enables putting 'things' that are not alike (text, image, 3D with 2D, found material with purposely made material) into the same frame. Selection and juxtaposition are critical. The overall composition is self-evidently more than the sum of the parts.

understandings of development, differentiation and co-development as critical ways of thinking about art practice and arts research. It also uses a form which acknowledges shared agency in the way the story is told, drawing on the approach of the Harrisons.

'The Hope of Something Different' (PRO8). This offers ways to distinguish between social practice and practices defined by ecological thinking. The paper highlights how eco-art practices seek to de-centre the human in various ways.

'Practising Equality?' (PRO2). This focuses on co-creativity and opens up a dialogue between theory in art, design, architecture and networked digital environments (social media) exploring the implications of sharing agency.

'Inconsistency and Contradiction' (PRO4). This takes up issues of complexity and focuses on them through the work of the Harrisons, contributing to our understanding of the importance of inconsistency and contradiction in creative practices, in improvisation and ecological thinking.

'Owning Failure' (PRO3). This contributes an understanding of failure in creative practices based on interviews of the role of failure in arts education.

The three elements of the portfolio discussed in Small Experiments with Radical Intent (Appendix 1) offer unconventional ways of approaching subjects relevant to ecological thinking.

'No Maintenance' (PRO6). This contributes through demonstrating the potential for ecological issues (the promotion of biodiversity) to inform the development of arts interventions in healthcare. It uses the form of a 'Brief' to articulate the challenge.

'The Art of Life Adapting' (PRO7). This highlights the potential to relate adaptation in the context of cancer to adaptation in the context of the environmental crises.

'Ecolibrary as Bing' (PRO5). This makes a primarily visual contribution by using the form of an art installation to question the material form of ecological thinking – books and other publications – through the lens of John Latham's concept of the Mental

Furniture Industry.

Some of the *impacts* of this research in this portfolio are:

- The use of key concepts from the work of the Harrisons ('Inconsistency and Contradiction (PRO4), 'Making Poetry to Invent Policy (SO1), 'What Poetry Does Best' (SO10)), in the Therapeutic Design and Art Strategy for the new NHS Greater Glasgow & Clyde Queen Elizabeth University Hospital & Royal Hospital for Children (SO3). This in turn led to new experiments in 'No Maintenance' (PRO6) and 'The Art of Life Adapting' (PRO7).
- The approach to relationality (Practising Equality (PRO2), Reflections on Collaboration (SO2), 'Working Together' (SO5), 'Nil by Mouth (SO7), 'Disciplinarity and Peripheries' (SO14)) informed the curation of the *Reclaiming Wetland Values* exhibition (SO15).
- The work with the Harrisons has resulted in the role of Associate Producer⁴² with the Barn, Scotland's largest rural multi-arts centre. I have worked with Anne Douglas and the Barn on *On The Deep Wealth of this Nation, Scotland*, (2018) shown at the Taipei Biennale as well as various Scottish venues⁴³; and on *Becoming Earthly*.⁴⁴

The overall trajectory of this essay has been to move through the portfolio progressively demonstrating the challenges and opportunities of thinking ecologically. This movement has enabled connections and translations between arts & health and art & environment to be clarified. Ecological thinking in arts practice requires both an understanding of systems and relationality, and also an understanding of the limits of

⁴² See <https://www.thebarnarts.co.uk/artist/newton-harrison>

⁴³ For a full list of exhibitions see <https://www.thebarnarts.co.uk/artist/newton-harrison/upcoming-events>

⁴⁴ *Becoming Earthly* is a learning space curated by the Barn and involving a programme of seminars with invited contributors. It ran first in 2020 and subsequently in 2022 <https://www.thebarnarts.co.uk/search?q=%22becoming+earthly%22>

those frameworks, further explored through 'Small Experiments with Radical Intent' (Appendix 1).

The challenge of understanding what 'ecological thinking' might mean to a producer working in public art in culture, health and environment has deepened my engagement with several key issues. It has framed and contextualised my understanding co-authorship and opened up the usefulness of the idea of 'joining a conversation'. This in turn has drawn out my understanding of the role of producer as one always working in the context of others (human and more-than-human) living and places of habitation. These aspects will have resonance for others working as producers.

The need to focus on a compelling 'common thread' to link the elements of the portfolio shifted my focus from relationality to positioning relationality, a dominant trope in public art, in relation to the multiple dimensions of the concept of difference. In particular the need to avoid a relationality which assumes homogeneity or holism and recognises temporariness and inherent contradictions is critical, particularly for producers.

This has in turn generated questions about whether 'ecological thinking' must have a dimension of materiality which attends to, is open to, impacts on, changes, even questions what 'thinking' might mean. It is the materiality of 'thinking ecologically' which holds it to account for wastefulness, pollution, extraction, colonisation and appropriation. It is this materiality which can open up lines of critique and enable us to see that even such an important project as 'thinking ecologically' has material implications which 'poke back through' our constructed cultural reality. In 'Small Experiments with Radical Intent' I highlight several works which aim to use materiality to subject the project of 'thinking ecologically' to scrutiny. The performance of 'thinking ecologically' is therefore critical, particularly as a producer, and an area for further investigations and experiments.

Future work:

1. A co-authored book on 'thinking with' the Harrisons, initial proposal already with MIT. "Thinking with" (Stengers 2011) is intended to focus on the process of learning to think/work ecologically evident from the development of their practice during the 1970s.
2. A Journal Article exploring artists approaches to 'first hand experience of local ecosystems' drawing on *Ecoart in Action* and other sources.
3. A 'Little Red Book' of the Harrisons' key sayings. In draft and already discussed with Breakdown Break Down Press.

With the drawing of this Love and the voice of this Calling
We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time.

(Eliot 1944 p. 48)

Appendix 1: Small Experiments with Radical Intent

The phrase 'Small Experiments with Radical Intent' is used by the arts organisation EMCarts in their work on adaptation and innovation.⁴⁵ I have used it as the title of this appendix because it usefully captures the spirit of the three publications I'm going to discuss. Each is a small experiment, i.e. not a full paper or chapter, and each is an attempt to approach a key complex issue from an unconventional perspective. Small Experiments with Radical Intent investigate complexity (paradoxes or 'wicked problems') through *small* experiments so that participants focus on the learning rather than the 'return on investment'. The experiments are generated through the identification of paradoxes (such as being participatory at a time of lockdown and social distancing) and the generating of 'wicked questions' from the paradoxes.

The paper 'No Maintenance' (PRO6) takes the paradox of 'no maintenance' requirements in briefs for arts projects in healthcare settings. It proposes a speculative brief to articulate the paradox. The aim of the paper is to ask if the generic requirement for low or zero maintenance could act as a creative constraint. The prompt that triggered this line of thinking was the phrase found within environmental management, "...the best management...is no management" (Harvie 2005 n.p.).⁴⁶ I encountered this in the context of work by colleagues considering the legacy of British post-Conceptual artist John Latham (1921-2006) (Collins, Goto-Collins and McLean 2019 p. 223). Latham undertook a 'placement' with the Scottish Office (1976) as a result of which he made the proposal that a series of bings⁴⁷ in the

⁴⁵ EMCarts <https://emcarts.org/> and 'Small Experiments with Radical Intent' https://www.artsfwd.org/melissa_blog_9/

⁴⁶ Other artists are interested in the issue of maintenance and ecological value in relation to public art (cf. Donald and Lassi re 2020).

⁴⁷ 'Bing' is a Scottish term for an industrial spoil heap.

landscape of West Lothian be considered 'monuments of our time'. His work on the bings continues to be a source of inspiration for artists (and my own response to that legacy in 'Ecolibrary as Bing' (PRO5) below). In the 'No Maintenance' (PRO6) paper I explore what the implications of 'no management' (equivalent to no maintenance in this context) might mean when translated to public art in healthcare environments. The 'No Maintenance' (PRO6) paper is a provocation developed in relation to previous healthcare papers and publications including: 'Working Well: People and Places' (SO3); 'Dignified Spaces' (SO4); 'Scottish artists bring nature into healthcare' (SO6); and 'Immersing the artist and designer in the needs of the clinician' (SO8). 'No Maintenance' (PRO6) draws on Mierle Laderman Ukeles' *Manifesto for Maintenance Art 1969!* (Ukeles 2016) and then provides a speculative brief for artwork proposals. The key contribution of this short piece is translational, exploring the potential to use ecological thinking as a provocation in considering ways of working in healthcare environments. As with the piece 'Owning Failure' (PRO3), it seeks to question systems.

The second 'translational' piece, 'The Art of a Life Adapting' (PRO7) exploring the potential for ecological thinking to inform approaches to healthcare, is more personal and draws on my experience of cancer. The paper includes works made to explore anger associated with cancer. These works involve direct use of anger in the creation of two of the works. The short essay draws on Wendell Berry's evocative statement made in relation to his own stewardship of land, "An art that heals and protects its subject is a geography of scars." (Berry 2017 p. 101). This is linked to the Harrisons, suggesting that cancer shares characteristics with their articulation of the '*Force Majeure*', something to which we can only adapt. The contribution of this paper is to link the concept of adaptation used in the context of healthcare, particularly in relation to surviving cancer, with adaptation used in the context of the climate crisis.

The final piece of this grouping, 'Ecolibrary as Bing' (PRO5) is a visual experiment,

drawing on John Latham's work on bings, previously mentioned in relation to 'No Maintenance' (PRO6) above. The initial experiment working with the materiality of the library was published as an artist's page in *Performance Research* and has been followed up with further iterations.

Ecoartscotland is a multifaceted curatorial platform including a mobile library. Mobile libraries as forms of artwork have precedents including the *Martha Rosler Library*⁴⁸ as well as examples in the works of Nils Norman⁴⁹. The ecoartscotland library has been exhibited in Edinburgh College of Art (2012) and as part of *Sylva Caledonia* at Summerhall, Edinburgh (2015).

'Ecolibrary as bing' (PRO5) came out of researching John Latham's conceptualisations of the 'mental furniture industry' (Measham 1976, Latham et al. 1976, Staunton et al. 2013). Latham critiques the production of knowledge and directly relates it to the bings of West Lothian saying,

In this view the Mental Furniture Industry—for that is what the system is said to be—is the single purveyor of pollution and dereliction, bearing responsibility for all other forms including the decline, inertia and disability associated with 19th-century industry, its sweated labour and its slag heaps, to say nothing of its manipulation of power and profit. (Latham et al. 1976 p. 1)

Although exhibiting the ecoartscotland library was successful, Latham's provocation challenged me to rethink the library—in Morton's terms, "strange stranger" (Morton 2010 p. 277), a 'thing' beyond its usefulness or existence as a part of the ecoartscotland project. Constructing a bing out of the ecoartscotland library is a way of acknowledging the potential "...*hypocrisy, weakness, and lameness...*" (Morton 2013 p. 2) of ecological thinking as another manifestation of the waste produced by certain

48 <http://projects.e-flux.com/library/about.php>

49 <https://www.southlondongallery.org/exhibitions/nils-norman-geocruiser/>

forms of productivity. The library can reasonably be interpreted as a product of the mental furniture industry. Latham says,

On this reading by far the biggest and most pervasive of all bings is the one (libraries of them) left by the Mental Furniture Industry over three centuries of undetected refuse tipping. (Latham et al. 1976 p. 1)

In terms of my discussion of ecological thinking, this work focuses on the material manifestations of ecological thinking. Most of the books, papers and other publications cited in this framing essay form part of the ecoartscotland library including works by Bateson, Biggs, Bishop, Douglas, the Harrisons, Kagan, Kester, Latham himself, and Nyrces. They could constitute part of the Mental Furniture Industry.

The contribution this work makes is towards recognising that the project of ecological thinking could in certain aspects be part of the problem. The question needs to be asked (revisiting a phrase from the subtitle of a different paper (PRO1) 'Does ecological thinking actually leave the ground more fertile?' Or does it simply constitute the further accumulation of knowledge? For whom or for what is ecological thinking in the arts valuable?

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Appendix 2: Portfolio and Supporting materials

Ref	Details	Type/Abstract (including comments on specific author contributions where multi-authored)
Peer Reviewed Outputs (PRO)		
PRO1	<p>DOUGLAS, A. and FREMANTLE, C., 2005. An ecology of practice in the everyday: leaving the (social) ground of (artistic) intervention more fertile. Presented at <i>Sensuous knowledge 2 (SK2): aesthetic practice and aesthetic insight</i>, November 2005, Bergen, Norway.</p> <p>http://hdl.handle.net/10059/2124</p>	<p>Conference Paper (Peer Reviewed)</p> <p>Jane Jacobs' <i>The Nature of Economies</i> (2000) offers an account of economies, based on the way energy operates and is transformed in ecosystems. The authors use this understanding to reflect on the Arts & Humanities Research Board funded <i>On The Edge</i> project, a practice-led arts research project in the rural North East of Scotland. The paper considers the ways in which development, co-development and differentiation open up understandings of research questions and project framings. Aspects of the five 'live' artists' projects within <i>On The Edge</i> undertaken between the researchers and partner organisations are considered in detail. Dialogue</p>

		<p>between researchers, partners and artists is articulated using a multivocal form which acknowledges shared agency in the way the story is told. The analysis offers a distinct way of understanding practice-led research co-produced with partners in terms of flows and transformations of energy.</p> <p>Douglas proposed using <i>The Nature of Economies</i>; Fremantle and Douglas jointly developed analysis; Fremantle introduced the Harrisons' multivocal approach; Fremantle and Douglas jointly developed multi-vocal form as well as the conclusions.</p>
PRO2	<p>HARRIS, P., and FREMANTLE, C., 2013.</p> <p>Practising Equality? Issues for co-creative and participatory practices addressing social justice and equality.</p> <p><i>Participations: Journal of Audience & Reception Studies</i>, 10(2), pp. 183-200.</p> <p>https://www.participations.org/Volume%2010/Issue%202/11.pdf</p>	<p>Journal Article (Peer Reviewed)</p> <p>Increasingly co-creativity and participation are considered central aspects of practices across art and design (including architecture) (Bishop, Bourriaud, Hope, Kester, Till). The discourse on Web 2.0 (Leadbeater, Shirky) addresses co-creativity and participation but from quite different perspectives. One of the key aspects of these discourses is the extent to which they recognise context as a critical factor. The other critical factor is the understanding of equality, not in terms of a general social aspiration, but rather as a function within a creative practice. This paper draws on</p>

		<p>examples including the Center for Urban Pedagogy and the projects of Suzanne Lacy to discuss what 'equality' can mean in creative practice. Practitioners seeking social justice and equality describe the importance of involving participants and co-creators, not through 'evenness' of participation, but rather through discernment opening out to larger audiences. The juxtaposition of art, design and web 2.0 in terms of both practices as well as critical literatures is distinctive.</p> <p>Fremantle led on the overall concept and developed the focus on Center for Urban Pedagogy as well as the project of Suzanne Lacy; Fremantle and Harris jointly developed the approach across the four domains (art, design, architecture and web 2.0).</p>
PRO3	<p>FREMANTLE, C. and KEARNEY, G., 2015. Owing failure: insights into the perceptions and understandings of art educators. <i>International Journal of Art and Design Education</i>, 34(3), pp. 309-318.</p>	<p>Journal Article (Peer Reviewed)</p> <p>Failure forms an important dimension of art and design and is inherent in creative endeavours. This article explores current literature on failure in the art and design context and offers a contribution through qualitative research drawing upon interviews with lecturing staff in a UK art school.</p> <p>The findings from this research emphasise the complexity of the concept of</p>

	<p>https://doi.org/10.1111/jade.12083</p>	<p>failure. Three key themes emerged regarding respondents' perceptions of failure: failure as a process; as a means of learning; and as an issue in assessment culture. This research is exploratory in nature, and whilst the limitations of the small sample are accepted, the article contributes to the dialogue and discussion surrounding the often-emotive concept of failure.</p> <p>Fremantle undertook the interviews and the literature review; Kearney led on analysis of the interviews; Fremantle and Kearney jointly developed the conclusions.</p>
PRO4	<p>DOUGLAS, A, and FREMANTLE, C., 2016. Inconsistency and Contradiction: Lessons in Improvisation in the Work of Helen Mayer Harrison and Newton Harrison. In: J. BRADY, ed. <i>Elemental: an Arts and Ecology Reader</i>. Manchester: Gaia Project Press. pp.153-181 http://hdl.handle.net/10059/1697</p>	<p>Book Chapter (Peer Reviewed)</p> <p>The essay draws out the learning from the authors' analysis of the practice of Helen Mayer Harrison (1927-2018) and Newton Harrison (b.1932), collectively known as 'the Harrisons'. Inconsistency and contradiction are conventionally eliminated in research but, according to the artists, are opportunities for creative improvisation. Drawing on key works including: <i>The Lagoon Cycle</i> (1985), <i>Atempause für den Save Fluss</i> (1989), <i>A Vision for the Green Heart of Holland</i> (1995), and <i>Greenhouse Britain: Losing Ground, Gaining Wisdom</i> (2008), the critical reflection on the artists'</p>

		<p>poetics focuses on their use of metaphor and improvisation. The artists describe actively seeking contradictory metaphors as starting points for projects and improvisation is manifest in the artists' work as process, as well as in the forms of language used in texts. The essay explores the Harrisons' interest in their methods being taken up by other practitioners and disciplines: they term this 'conversational drift'.</p> <p>Fremantle proposed the focus on inconsistency and contradiction; Douglas contributed research on improvisation; Fremantle and Douglas jointly analysed discursive approach.</p>
PRO5	<p>FREMANTLE, C., 2017. Ecolibrary as Bing. <i>Performance Research</i>, 22(1), pages 120-121.</p> <p>https://doi.org/10.1080/13528165.2017.1285576</p>	<p>Journal Article (Peer Reviewed)</p> <p>John Latham (1921-2006) drew our attention to the bings - a Scottish term for spoil heaps created from mining - of West Lothian, asking us to see them as monuments to our own time and as unconscious process sculptures. Latham also criticised aspects of contemporary education models, coining the term Mental Furniture Industry. This collage juxtaposes a collection of books on arts and ecology (the ecoartscotland library) assembled as a heap with a spoil heap in central Scotland using a 'plan and</p>

		elevation' format. The image draws attention to the materiality of knowledge and to the potential for knowledge to become waste.
PRO6	FREMANTLE, C., 2017. No Maintenance: A Provocation for Art and Design in Healthcare Settings. <i>Design for Health</i> , 1(1), pages 80-85. https://doi.org/10.1080/24735132.2017.1294844	Journal Article (Peer Reviewed) Briefs for public art commissions in healthcare frequently include stipulations of 'low' or 'no maintenance'. In other contexts, such as environmental assessments, the stipulation 'no management is the best management' can be found. This raises the question whether art works for healthcare should be re-imagined as benefitting from the 'no maintenance' regime. The author draws on the history of maintenance in art including '1969 Manifesto for Maintenance Art' by Mierle Laderman Ukeles (b.1939). A speculative brief setting out the creative challenge of 'no maintenance' forms part of the provocation.
PRO7	FREMANTLE, C., 2020. The Art of Life Adapting: Drawing and Healing. <i>Leonardo</i> , 53(1), pp. 83-84. https://doi.org/10.1162/leon_a_01833	Journal Article (Peer Reviewed) If more people are living with long term conditions, e.g. cancer, how can we think about the adaptations involved? Are there lessons from adaptation in environment policy and practice, e.g. in the writings of Wendell Berry (b. 1934) on scarred landscapes, and in the conceptualisation of 'the Force

		<p>Majeure' articulated by Helen Mayer Harrison (1927-2018) and Newton Harrison (b.1932)? The author, a practice-led researcher and cultural producer, draws on his experience of cancer treatment and his use of art as a way to make hidden features visible. He relates this to the larger intersubjective and social questions of cancer as an overwhelming force affecting society. Approaches in art, including improvisation, are relevant to adaptation, a process that is necessary for living with cancer.</p>
PRO8	<p>FREMANTLE, C., 2020., 'The Hope of Something Different', <i>Journal of Public Space</i></p>	<p>Journal Article (Peer Reviewed)</p> <p>Educational theorist Gert Biesta proposes that we need to be "...in the world without occupying the centre of the world." (Biesta, 2017, p. 3). This injunction provides a frame with which to interrogate the hybrid practice of ecoart. This practice can be characterised by a concern for the relations of living things to each other, and to their environments. Learning in order to be able to act is critical. One aspect is collaboration with experts (whether those are scientists and environmental managers or inhabitants, including more-than-human). Another is building 'commons' and shared understanding being more important than novelty. Grant Kester has argued</p>

		<p>there is an underlying paradigm shift in 'aesthetic autonomy', underpinned by a 'trans-disciplinary interest in collective knowledge production' ((2013 n.p.). This goes beyond questions of interdisciplinarity and its variations, to raise more fundamental questions of agency. Drawing on the work of key practitioner/researchers (eg Jackie Brookner (1945-2015); Collins and Goto Studio, Helen Mayer Harrison (1927-2018) and Newton Harrison (b 1932)) and theorists (Kester 2004, 2011; Kagan 2013) the meaning and implications of not 'occupying the centre of the world' is explored as a motif for an art which can act in public space.</p>
<p><i>Supporting materials (SO)</i></p>		
SO1	<p>FREMANTLE, C., 2008. 'Making poetry to invent policy: the practice of Helen Mayer Harrison and Newton Harrison'. In <i>Proceedings of Activism, Apocalypse and the Avant-Garde Association for the Study of Literature and the</i></p>	<p>Conference Paper (Peer Reviewed)</p> <p>The works of Helen Mayer Harrison (1927-2018) and Newton Harrison (b.1932) focus on large-scale landscape and environment issues from city scale to continental scale. The paper draws on <i>Greenhouse Britain: Losing Ground, Gaining Wisdom</i> (2008), <i>Green Heart Vision</i> (1995) and Kester's theoretical reading of their work (2004). Whilst the Harrisons' works are</p>

	<p><i>Environment conference</i>. 10-13 July, Edinburgh, UK.</p> <p>http://hdl.handle.net/10059/2769</p>	<p>conventionally interpreted as part of the visual, and more specifically environmental, arts this paper focuses on their poetic texts. It explores the use of poetry to address policy issues by focusing on the ways metaphors structure thinking about environments.</p>
SO2	<p>FREMANTLE, C., 2012., <i>Reflections on Collaboration</i>. Newcastle upon Tyne: a-n The Artists Information Company.</p> <p>https://www.a-n.co.uk/tag/reflections-on-collaboration/</p>	<p>Research Paper (Commissioned)</p> <p>Drawing on a-n's 'Collaborative Relationships' series along with other key research publications, Fremantle asks "Who is collaborating? Who 'wins' and what do they 'win'?" This critical reflection draws on 32 co-authored pieces which provide multi-vocal accounts of collaborative work between artists and project managers, curators, funders, technicians, as well as patrons, collectors, and commissioners. The archive is discussed and contextualised with reference to the work of Arts 'think-tank' Missions, Models, Money (2010) as well as theorist Kester (2011). Whilst quality of communication is seen as central, each collaboration is also specific, both in its context and in the individuals involved. Grounded in such a large sample, this review highlights a range of important aspects of collaboration.</p>
SO3	<p>GINKGO PROJECTS, 2011. Working</p>	<p>Public Art Strategy (Commissioned)</p>

	<p>Well: People and Spaces, Therapeutic Design and Art Strategy for the New South Glasgow Hospitals. Axbridge, UK: Ginkgo Projects.</p> <p>https://www.academia.edu/3655251/Working Well People and Spaces the Therapeutic Design and Arts Strategy for the New South Glasgow Hospitals</p>	<p>The Queen Elizabeth University Hospital and Royal Hospital for Children represents a significant service modernisation for NHS Greater Glasgow & Clyde, as well as the largest capital investment in healthcare in Scotland at the time of writing. The Working Well: People and Spaces Therapeutic Design and Art Strategy draws together evidence and proposals to coordinate the work of architects, landscape architects, designers and artists. The strategy is grounded in two key questions, 'How big is here?' and 'How long is now?' used by Helen Mayer Harrison (1927-2018) and Newton Harrison (b.1932). This contextualises the 'Patient Journey' which might be from the Northern or Western Isles, or from the South side of Glasgow. The Strategy is organised around four key priorities: way-finding, distraction, dignity and personalisation. Specific projects address key locations on the patient journey, delivering on the four priorities.</p> <p>Fremantle was Lead Producer for Ginkgo Projects and led writing the Strategy document working closely with lead artists Donald Urquhart and Will Marshall, Ginkgo Director Tom Littlewood, and NHSGGC Arts Senior Jackie Sands.</p>
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SO4	<p>FREMANTLE, C., HAMILTON, A., and SANDS, J., 2014. Dignified Spaces: participatory work de-institutionalises rooms in the heart of the clinical environment. <i>Proceedings of the 2nd European Conference on Design 4 Health</i>, Sheffield, 3 - 5 July 2013, pp. 109-123</p> <p>https://research.shu.ac.uk/design4health/wp-content/uploads/2014/09/D4H13_Vol2_web.pdf</p>	<p>Conference Paper (Peer Reviewed)</p> <p>There is increasing recognition of the need to treat not only patients but also families and carers with dignity, particularly at times of stress. New hospital design includes rooms variously labelled 'Quiet', 'Family' or 'Interview' for these purposes. This paper reports on the design process used during the development of the New South Glasgow Hospitals to meet user and service owner needs. The artist leading the project utilised a biophilic design approach and a participatory process of working to both understand users' issues and also to involve users in the design of elements of the scheme. The project demonstrates the effective branding, development process as well as engagement for a large-scale healthcare interiors project involving art and design.</p> <p>Fremantle led on the structure, evidence collection and discussion. Hamilton and Sands provided review.</p>
SO5	<p>FREMANTLE, C., 2014 'Working Together'. In (eds.) R. Ferry and E. Monoian <i>New Energies: Land Art</i></p>	<p>Book Chapter</p> <p>The Land Art Generator Initiative asks artists and designers to work with renewable energy engineers to develop place-making proposals. Proposals</p>

	<p><i>Generator Initiative</i>, Copenhagen. New York: Prestel.</p> <p>http://hdl.handle.net/10059/1603</p>	<p>to the Open Competitions are required to deliver mid-scale energy generation in the form of public art. Why is 'working together' so vital right now? It is at the heart of ecoart practices and at the heart of the Land Art Generator Initiative. It is one of the features that distinguishes these practices and programmes. Raising issues of social justice and collaborative practice, this chapter draws on the evaluation of Helen Mayer Harrison (1927-2018) and Newton Harrison (b.1932) <i>Greenhouse Britain: Losing Ground, Gaining Wisdom</i> (2008) as well as the artist group Superflex's <i>Supergas</i> (1996-97). Rather than using an academic framing (interdisciplinarity) or a social framing (participation) the chapter highlights multiple aspects of ecoart practice in terms of 'working together'.</p>
SO6	<p>FREMANTLE, C. 2014. 'Scottish artists bring nature into healthcare'. <i>Global Alliance for Arts and Health conference</i>, 9-12 April 2014, Houston, USA</p> <p>http://hdl.handle.net/10059/3011</p>	<p>Conference Paper</p> <p>Scotland has a strong portfolio of arts and health projects including both public art installations within healthcare buildings and participatory programmes. This presentation focuses on public art installations by artists and designers who use biophilic and other design approaches to bring nature into buildings. It is well known, thanks to the work of Ulrich (1984),</p>

		<p>that views of nature contribute to patient recovery, and it is clear, from the work of Kaplan (1995), that views of nature can play a role in restoring our ability to give our attention. In Scotland there have been a number of projects in the context of healthcare where artists and designers have specifically sought to use art and design to bring nature into buildings, in addition to what the architects and landscape designers are able to achieve. Four key examples are: Thomas A Clark; Alexander Hamilton; Dalziel + Scullion; and Donald Urquhart.</p>
SO7	<p>FREMANTLE, C., BONAVENTURA, M., BESTWICK, C., CLAUSEN, H. K., COLEMAN, R., DAWSON, L., DENFELD, Z., GILES, H., HODGES, J., KRAMER, C., MCDIARMID, J., RUSSELL, W., WATSON, C., 2014. Nil by Mouth: an Art Science Collaboration on Sustainability Focused by Food and Farming</p>	<p>Poster</p> <p>Sustainability is a cultural challenge as much as a social, economic and environmental one, and food is a key focus. Nil by Mouth brought together scientists (involved in soil, agriculture and food research) with artists and farmers. This poster visualises the process of the Nil by Mouth project as a triple helix with the three strands being Crichton Carbon Centre (instigator of the project), scientists at Scottish Research Institutes, and artists. The three strands of the helix are interpreted as a timeline with key events.</p> <p>Fremantle oversaw the production of the poster. Bonaventura proposed the</p>

	https://www.researchgate.net/publication/282218222_Nil_by_Mouth_an_art_science_collaboration_on_sustainability_focused_by_food_and_farming	triple helix as a conceptual model. All contributed to analysis.
SO8	<p>FREMANTLE, C., HEPBURN, L-A., HAMILTON, A. and SANDS, J. 2015. Immersing the artist and designer in the needs of the clinician: evolving the brief for distraction and stress reduction in a new Child Protection Unit. In Christer, K. (ed.) <i>Proceedings of the 3rd European conference on Design4Health 2015</i>, 13-16 July 2015, Sheffield, UK. Sheffield; Sheffield Hallam University [online], pages 1-10.</p> <p>http://research.shu.ac.uk/design4health/wp-</p>	<p>Conference Paper (Peer Reviewed)</p> <p>Engaging clinicians in the design of new, less stressful spaces in healthcare is an interdisciplinary challenge for artists and designers. The design brief is the primary means of ensuring shared understanding and success criteria for creative projects (Press and Cooper 2003) and highlights ambitions and constraints for the project. Conventionally the brief is prepared by the client and issued to the artist or designer. This assumes that the client knows at the outset how to articulate needs and is able to envisage the outcome. Alternative processes emerging through co-design and interdisciplinary working assume the brief is developed or evolved jointly as part of the process and is focused on the experience of the user. This paper focuses on the evolution of a meaningful brief for a Child Protection Unit in NHS Greater Glasgow & Clyde's new Royal Hospital for Children.</p>

	<p>content/uploads/2015/07/D4H_Fremantle et al.pdf</p>	<p>Development of the brief was driven by the art and design team and aimed at opening up mutual understanding with the clinicians. The visual mapping of dialogue between artist, interactive designer and clinicians provides a novel approach to understanding this key stage of the process.</p> <p>Fremantle co-ordinated the paper. Hepburn undertook the fieldwork and provided the analysis. Fremantle structured the paper and co-ordinated reviews with Hamilton and Sands.</p>
SO9	<p>FREMANTLE, C., 2016. Land Art Generator Initiative: Art and Energy. Presented at <i>Test Unit PechaKucha Night</i>, 6th July 2016, Glasgow, UK.</p> <p>https://www.youtube.com/watch?v=a8K66ReflbM</p>	<p>Presentation (Invited)</p> <p>The Land Art Generator Initiative brings together interdisciplinary teams to develop place-making using renewable energy technologies. LAGI builds on the history of energy infrastructure design: city centre power stations have been repurposed as art galleries. The presentation explores Scotland as a context for LAGI including energy histories; landscape/seascape opportunities for renewables; as well as land reform and community ownership. The role of arts and culture in the social dimensions of energy systems are explored through examples including PLATFORM/Sea Renue and Peter Fend. The presentation concludes with an overview of the LAGI</p>

		Glasgow project.
SO10	<p>DOUGLAS, A. and FREMANTLE, C.</p> <p>2016. What poetry does best: the Harrisons' poetics of being and acting in the world. In Harrison, H.M. and Harrison, N. (eds.) <i>The Time of the Force Majeure: After 45 Years a Counterforce is on the Horizon</i>. Munich London New York: Prestel</p> <p>http://hdl.handle.net/10059/2128</p>	<p>Book Chapter (Invited)</p> <p>"Simply paying attention guarantees the transformation from a nature supposedly asleep to the work that displays nature's strange vitality. Art is what attention makes with nature." This observation by Michel De Certeau (1985 p. 17), noted French philosopher of the everyday, writing the introduction to Helen Mayer Harrison and Newton Harrison's (hereafter the Harrisons) seminal work <i>The Lagoon Cycle</i> (1985), gets to the heart of the Harrisons' project to understand and work with the agency of all things, and to recognize that attention is central to being and acting in the world. A question arises about how our attention, as listeners, readers, and viewers, is drawn into a work of art? Or more specifically, how the Harrisons draw our attention through their poetics? One of the salient features of the Harrisons' work is attention to what is actually present, in the sense of suspending disbelief. The particular form of attention that the Harrisons exercise aligns with the forms of attention found in improvisation - being in the moment of an experience and using the materials at hand. They see</p>

		improvisation within the rich potential of inconsistency and contradiction in human relations with environments. This acts as a stimulus to the improvising of new futures.
SO11	<p>FREMANTLE, C. 2016. Work as if you live in the early days of a better nation: experiments in poetics and justice.</p> <p>Presented at 2016 <i>Petrocultures Conference: The Offshore</i>, 31 August - 3 September 2016, Newfoundland, Canada.</p> <p>http://hdl.handle.net/10059/1604</p>	<p>Conference Paper (Peer Reviewed)</p> <p>The Land Art Generator Initiative project in Glasgow is inspired by four key factors: Scottish Government's ambitious targets for renewable energy; the Scottish environment's multiple significant opportunities for renewables; the interaction between Land Reform and community owned renewables; and Scotland's creative sector, including artists and designers. This paper contextualises the LAGI Glasgow project in relation to historical and contemporary artworks: John Latham (1921-2006) and his work with the spoil heaps of the shale oil industry; and <i>Ebban an' Flowan</i> (Finlay, Watts and Peebles 2015) which explores the need for a vernacular language associated with marine renewables.</p>
SO12	<p>FREMANTLE, C., GULARI, M.N., FAIRBURN, S., HEPBURN, L.-A., VALENTINE, G. and MEAGHER, L. 2016.</p>	<p>Conference Proceedings (Peer Reviewed)</p> <p>This paper reports on the evaluation of knowledge exchange and impact generated through Design in Action (DIA), a design-led business support</p>

	<p>Impact by design: evaluating knowledge exchange as a lens for evaluating the wider impacts of a design-led business support programme. In <i>Proceedings of the 20th Design Management Institute(DMI): academic design management conference (DMI:ADMC): inflection point: design research meets design practice</i>, 28-29 July 2016, Boston, USA. Boston: DMI [online], pages 405-430. Available from: https://www.dmi.org/page/ADMC2016Proceedings</p>	<p>approach to answering the Arts and Humanities Research Council's call for knowledge exchange hubs. Can evaluation approaches to knowledge exchange reveal the complexity of impacts from design-led business support? Does design have a particular set of methods and processes relevant to knowledge exchange? To address these questions the paper draws on both interview and survey material and uses the Lyall/Meagher/Nutley Impact Prism (LMN Impact Prism) to analyse the emergent data. The LMN Impact Prism enables us to see different aspects of something in process which is otherwise indistinguishable (just as a prism enables us to see different wave lengths of light manifest as the colour spectrum). The paper addresses the interests of multiple stakeholders including economic development agencies, research councils, arts and cultural development bodies as well as design researchers and knowledge exchange intermediaries in demonstrating the multi-faceted value of design-led business support approaches to knowledge exchange programmes.</p>
SO13	FREMANTLE, C. 2018. Greenhouse	Case Study

<p>Britain: Losing Ground, Gaining Wisdom (2006-09): Case Study. Presented at <i>2018 Valuing Nature annual conference</i>, 13-14 November 2018, Cardiff, UK.</p> <p>https://rgu-repository.worktribe.com/output/249255</p>	<p>Greenhouse Britain: Losing Ground, Gaining Wisdom (2006-09) was a project resulting in a touring exhibition. It was created by the artists Helen Mayer Harrison (1927-2018) and Newton Harrison (b.1932) and funded by DEFRA's Climate Challenge Fund (£186,500). The Harrisons are pioneers of the ecoart movement and key examples of artist researchers. They collaborated with the Tyndall Centre on coastal defence aspects, with Sheffield University on landscape design elements, and with APG Architects. The work addressed the impact of sea level rise on the island of Britain and the transformation that this would affect. They proposed three strategies: of defence, of defence to enable withdrawal, and of withdrawal to the high grounds. It opened up space for the audience in which the narrative of climate breakdown was fully present, and the challenges of adaptation/transformation were explored. The audience, including the collaborators who might be regarded as the first audience, were led to think about the values that need to inform and underpin adaptation. The Harrisons' contribution to ecological research can be characterised in terms of 'imaginative engagement with narrative using metaphor and concept.'</p>
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		They took the existing narratives and the best science and, focusing on metaphor and concept, they provided a novel and integrated high level analysis and proposal.
SO14	FREMANTLE, C. 2019. <i>Disciplinary and Peripheries</i> . Presented at the <i>2nd Gray's Research Conference 2019: The Periphery</i> , 5 October 2019, Aberdeen, UK https://rgu-repository.worktribe.com/output/631057	Conference Paper Disciplines can be understood as structures or 'centres' and work across disciplines therefore must involve interactions on 'edges'. Some people conceptualise disciplines to have 'near' and 'far' relations i.e. visual art is 'near' art history and 'far' from environmental modelling. Disciplines certainly don't sit tightly next to each other and there are definitely gaps between them – we need only think about the rationale for 'multi-disciplinary teams' in ensuring that these gaps are addressed and acknowledged in, for example, healthcare (between clinical, nursing and other health professionals). This conceptualisation also raises interesting analogies in the other direction, including the possibility that attention to linking two 'centres' can produce, in the 'periphery', a new centre. The interdisciplinary developments between biology and chemistry resulted in due course in the emergence of bio-chemistry as a new discipline (and thus

		<p>a new 'centre'). One of the abiding 'disciplinary' debates is whether the objective is synthesis and holism – is the objective to produce centres or even one totalising centre? This presentation will be a meditation on the issues of disciplinarity drawing on the writings of Basarab Nicolescu (multi-, inter- trans-disciplinarity); Gavin Little (proximity and distance); and Murdo Macdonald & George Davie (the Scottish tradition of the Democratic Intellect).</p>
SO15	<p>READ, S. and FREMANTLE, C., 2020. <i>Reclaiming Wetland Values: Marsh, Mud and Wonder</i>. Exhibition held 27 January - 2 February 2020, Royal Geographical Society, London.</p> <p>https://rgu-repository.worktribe.com/output/845585</p>	<p>Curatorial Statement</p> <p>The exhibition formed a key output of the Valuing Nature Programme initiated by the Natural Environment Research Council (NERC)/UK Research and Innovation (UKRI). The exhibition was curated by Chris Fremantle and Simon Read on behalf of WetlandLIFE and CoastWEB respectively. The approach was collaborative and focused on revealing new understandings of the interrelations and interactions of disciplines across the two projects. Drawing out these aspects required an approach to curation which conceptualised and provided 'structure for diversity'. The curatorial approach foregrounded the diverse 'ways of knowing' of the different teams</p>

		<p>(entomology, medical entomology, geomorphology, cultural, human and physical geography, economics, psychology, other social sciences, history, literature, creative writing, sound art, performance art, visual art).</p> <p>Different 'ways of knowing' were presented through methods and tools (spreadsheets, 3D models, microscopes, maps, photography, video, soundscapes, infographics, historical artefacts). The non-linear character of an exhibition provided a distinct way of engaging with the two projects. It revealed connections between practices (eg between entomology and history) that have not yet been evidenced in outputs, as well as allowing different forms of valuing (eg economic modelling and inhabitant experience) to be treated as equivalent. 'Exhibition making' was used as an organising principle without seeking to turn everything into art. The artists (Simon Read, Kerry Morrison and Helmut Lemke, and Victoria Leslie) variously articulated the value of wetlands; the value of specific aspects of research; and the value of interdisciplinarity.</p>
SO16	<p><i>Demystifying Interdisciplinary Working</i> <i>(in Valuing Nature)</i></p>	<p>Research Report</p> <p>With the growing need to find solutions to the myriad complex issues the</p>

	<p>https://valuing-nature.net/demystifying-interdisciplinary-working</p>	<p>world is facing, transformative approaches are needed. Thinking in individual disciplinary terms in order to progress specialist approaches, is as crucial as ever. However, to address the complex technical, societal and environmental challenges we also need to break down the disciplinary silos, think outside the usual boxes, and bring a broad range of approaches together to best understand and provide solutions to these challenges. This report is aimed at a broad audience of both specialists and non-specialists both of whom have an interest in working beyond the traditional boundaries. It provides a summary of what one needs to know to undertake interdisciplinary work.</p>
SO17	<p>FREMANTLE, C., DOUGLAS, A., and PRITCHARD, D., 2020. 'In the Time of Art with Policy: The Practice of Helen Mayer Harrison and Newton Harrison Alongside Global Environmental Policy Since the 1970s' in (eds.) CARTIERE, C. and TAN, L., <i>Routledge Companion</i></p>	<p>Chapter and Timeline From around 1970 the artists Helen Mayer Harrison (1927-2018) and Newton Harrison (b. 1932), known as 'the Harrisons', started to focus on ecology and ecological systems influenced, by amongst other things, Rachel Carson's <i>Silent Spring</i> (1962). 'Earth Day' was established in 1970. <i>The Limits to Growth</i> was published in 1972 (Meadows <i>et al.</i>). International environmental policy took a step change with the first of the global</p>

	<p><i>to Art in the Public Realm</i>. New York and Abingdon: Routledge.</p> <p>https://doi.org/10.4324/9780429450471-27</p> <p>And</p> <p>FREMANTLE, C., DOUGLAS, A., and PRITCHARD, D., 2020. 'The Harrisons' Practice in the Context of Global Environmental Policy and Politics from the 1960s to 2019: A Timeline' in (eds.) CARTIERE, C. and TAN, L., <i>Routledge Companion to Art in the Public Realm</i>. New York and Abingdon: Routledge.</p> <p>https://doi.org/10.4324/9780429450471-28</p>	<p>environmental conferences, the UN Conference on the Human Environment in Stockholm (1972), as well as the adoption of the first of the modern global treaties on the environment – the Convention on Wetlands (Ramsar Convention, 1971) and the Convention concerning the Protection of the World Cultural and Natural Heritage (1972). What might a juxtaposition of the trajectory described by the work of the Harrisons with the expansion of global developments such as these since the 1970s reveal about the potential cross currents between art in the public realm and public policy?</p>
SO18	FREMANTLE, C. and DOUGLAS, A.	Chapter (Peer Reviewed)

	<p>[2021]. Foregrounding ecosystems: thinking with the work of Helen Mayer Harrison and Newton Harrison. In <i>Imaginative ecologies: humanities for sustainable societies</i>. Netherlands: Brill, (accepted).</p> <p>https://rgu-repository.worktribe.com/output/1317517</p>	<p>The approach we take to understanding, whether framed as 'measured, objective and in control' or 'entangled and adapting', is key to the health of the life web and ourselves. The problems associated with the 'measured', 'objective' and 'in control' version of this, have been identified by artists, philosophers and thinkers including Goethe, Steiner, Klee and Bateson over a long period and came to much wider recognition from the 1970s with, for example, the Club of Rome's <i>The Limits to Growth</i> (Meadows and Club of Rome 1972). Artists create ways of imagining the world that inspire us to feel as well as think. Helen Mayer Harrison (1927-2018) and Newton Harrison (b.1932), known as 'the Harrisons', do so through an ecological approach, as evidenced in their works, including <i>The Serpentine Lattice</i> (1993) on which this essay draws. Grounded in literary movements such as ethnopoetics and pictorial devices, including figure-ground reversal, the Harrisons present us with a fundamentally different way of knowing the world. However, where the environmental humanities have tended to reject ways of knowing associated with positivism, let alone financialisation of ecosystems, we find quantitative and financial proposals in the works of the</p>
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		Harrisons shaped to provoke us to redirect human institutions to address, first and foremost, the health of the life web.
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