GEODIVERSITY AND HUMAN DIFFERENCE:

DISABILITY, LANDSCAPE FORM AND PROCESS

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Geodiversity and Human Difference: Disability, Landscape Form and Process

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ABSTRACT

This thesis has emerged from a practice-based and interdisciplinary doctoral studentship at the University of Glasgow. It proposes The Performic Cycle as a new contribution to knowledge. The Performic Cycle is an adaptive model of theatre practice-based research which supports performative explorations of human/landscape relationship. The model has been created in collaboration with more than 40 neurodivergent (largely learning-disabled and autistic) trainee performers and horticulturalists from across Central Scotland, through five exploratory and experimental performance projects called *The Panarchy Projects. The Panarchy Projects* focus on human performances with rivers and estuaries. Documentation of *The Panarchy Projects* can be found here: Link to Panarchy Projects documentation. The Performic Cycle model works across disciplinary boundaries and through human differences. It hopes to contribute to a growing body of site-responsive interdisciplinary research which is making connections between environmental and social justice.

The Panarchy Projects were created in collaboration with the following artists, performers, organisations, horticultural workers/students/trainees, support workers, and friends:

Panarchy 1: Euan Hayton, Krissy Neilson, Andrew Lamb, Paul Michael Henry, Susan Worsfold, Lindsay Brown, Carlton Studios and Tony Sweeten.

Panarchy 2: Chris Ford, Giles Nicholson, Ben Marriott and Tracey Paddison.

Panarchy 3: Hughie McIntyre, Chloe Maxwell, Paul Robertson, "Andrew," Karen Stewart, Cheryl MacArthur, Laraine McLeish, Adnan Mohammad, Peter McInnes, Tracy Vannet, "T-Dollar," "Blunderbus," "Tyler Timpson," Donna-Marie Stillie, Nikki Frew, Craig Devlin, Louise Brown, Euan Hayton, Lindsay Brown, Bel Pye. A partnership with Citizens' Theatre Friday Club.

Panarchy 4: Craig Jackson, Sam Ridley, Cameron Browne, Georgia Dullagun, Amanda Martin, Marjorie Martin, Patrick McLean, Daniel McLean, John McAlpine, Craig Denny, Ashleigh Rider, Robyn Horsburgh, Barry, Chloe, Danny, Willy, Michael, Scott, "David," Jamie Little, Jamie Henderson, Neil Ferrier, David Goodall, Ewa Kuniczak, Gartmore House, MacRobert Arts Centre, Play Alloa, Emma McCaffrey/Reluctant Penguin Productions, Maria Oller/Lung Ha Theatre Company, Liam Kelly, Anne Shore, David Thomas, Jo Sharp, Key Housing, Inclusion Scotland, West Moss Side Farm and Sniffer Scotland. A partnership with Green Routes Horticultural Training Centre.

not panicky: Chloe Maxwell, Alison Mackenzie, Euan Hayton, Hughie McIntyre, Jassy Earl, Susan Worsfold, Tony Sweeten, Karyn Priestley, Ashley Andrews, SoundsMove and Inclusion Scotland.

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My heartfelt thanks go to all the co-creators of *The Panarchy Projects*, as listed on page iii. There are a number of performers and practitioners whose sustained engagement with the practice-based research has been critical to its findings. In particular, my thanks go to: Euan Hayton, who was a huge part of *The Panarchy Projects* from start to end, Krissy Neilson, Andrew Lamb, Susan Worsfold, Ben Marriott, Giles Nicholson, Citizens' Theatre Friday Club, Nikki Frew, Karen Stewart, Alan Cullen, Paul Robertson, Louise Brown, Bel Pye, Green Routes, Jean Gavin, Gillian Forster, David Goodall, Sam Ridley, Cameron Browne, Georgia Dullagun, Craig Jackson, Amanda & Marjorie Martin, Patrick & Daniel McLean, Chloe Maxwell, Alison Mackenzie and Hughie McIntyre.

I am eternally grateful to my family and friends (human and nonhuman) for their love, companionship and patience, especially to Carmen, Rory and the rest of the menagerie. Finally, I would like to acknowledge the Clyde, the Severn and the Forth river networks. I hope that this thesis serves them, too.

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CHAPTER 3: *THE PANARCHY PROJECTS*

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CONCLUSION TO THE THESIS

LAY SUMMARY/EASY READ VERSION

Introduction

This PhD was created and advertised by the University of Glasgow. Rachel Clive applied for and was chosen to do the research. The PhD worked across four different subject areas – Theatre Studies, Disability Studies, Cultural Geography and Geomorphology.

Chapter 1: How did the PhD work?

The PhD worked in three main ways. It worked through

- theatre: it asked and explored research questions through theatre processes and performances, and created new kinds of theatre as a result
- participation: it invited people who weren't at the University to consider the research questions, identify what was important to them, and explore these concerns through theatre processes.
- ecology: it worked through our interconnections with "nature," with landscape forms and processes, especially with rivers and estuaries.

Through the research, Rachel created a new model of theatre practice-based research called The Performic Cycle. This model builds on the ecological understanding that diversity is essential to survival. It is based on four phases: Growth, Conservation, Release and Reorganisation, and four main methods: Bodyworlding, Vital Materialist Storying, Dialogical Performance and Critical Reflection. The Performic Cycle creates performances which explore how humans and "nature" interact. It supports performers to lead creative processes which concern their own living connections with nature, to identify questions they are interested in and to lead discussions about these questions.

Chapter 2: How does the PhD relate to other research and theatre practice?

The Performic Cycle builds on three main areas of research and theatre practice:

- "Social drama." The idea that performance is not just about putting plays on in theatres, it is about being alive in the world, and being connected to other beings in the world in ways that are constantly changing.
- Site-responsive performance. The different ways of performing which explore how humans interact with places, with nonhuman entities and with "nature," for example with rivers and estuaries.
- "Neurodivergent" performance. The performance work made by or with neurodivergent people. The understanding that neurodiversity is not a deficit but a difference and that stigmatisation needs to be challenged.

NB The term neurodiversity includes neurological/cognitive differences like autism, learning disability, mental distress, dyslexia, dyspraxia, ADHD, sensory processing differences and epilepsy, among others.

Chapter 3: *The Panarchy Projects*

Rachel Clive facilitated five performance projects called collectively *The Panarchy Projects*. Link to Panarchy Projects documentation. These projects supported a variety of neurodivergent performers to explore ways of connecting and performing with rivers (and with each other). All of the projects staged a variety of performance events, both outdoors and inside, which were led by the performers who had co-created them. The first four projects established The Performic Cycle as a model of practice. *Panarchy 1* was a collaboration with performers Euan Hayton and Krissy Neilson, in connection with the Cart rivers. It established rivers as the research focus. *Panarchy 2* was a project with the River Severn. In this project Rachel worked out if/how her own neurodivergence was affecting the work. *Panarchy 3* was a collaboration with the Citizens' Theatre Friday Club, in connection with the River Clyde. It

focused on resisting stigma through solidarity. *Panarchy 4* was a collaboration with Green Routes Horticultural Training Centre, in connection with the River Forth. It focused on flood risk management and community empowerment.

Chapter 4: *not panicky* – Performing in a Pandemic

The final *Panarchy Project, not panicky* tested out The Performic Cycle in the context of the COVID-19 pandemic. It found that working in connection with the rivers we live with, through practices of "freedom space" and "flow" can help us to adapt, support each other and manage our anxieties, even in a crisis situation. The *not panicky* performers shared these insights and engaged audiences in discussions about them in a series of live and digital performances.

Conclusion

The Panarchy Projects generated new kinds of discussions, performances and friendships. They explored and shared insights and understandings through experimental artworks, performances and art-science processes. *The Panarchy Projects* could not change structural inequality, or solve the climate crisis, but they could bring attention to both, and to links between them. *The Panarchy Projects* proved that The Performic Cycle can support people to:

- adapt to (personal, social and climate) change
- communicate their own ideas and express their experiences
- develop living connections with nature
- create new kinds of art/performance with human/nonhuman others
- make links between social and environmental justice
- challenge stigma/injustice through team-work and solidarity
- make new kinds of friendships, develop new skills
- lead explorations of new ways of doing things

The model hasn't yet been tested out with landscape forms that aren't rivers.

LIST OF FIGURES

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Introduction

This thesis has emerged from an LKAS (Lord Kelvin/Adam Smith) funded doctoral studentship at the University of Glasgow. The studentship was entitled *Geodiversity and Human Difference: Disability, Landscape Form and Process* and it was, from the outset, interdisciplinary and practice-based in design. The project was initiated by four professors from three different schools; Dee Heddon from Theatre Studies, Nick Watson from the Strathclyde Centre for Disability Research and Hester Parr and Larissa Naylor from the school of Geographical and Earth Sciences. LKAS scholarships are competitive, and the aims of this one were established collaboratively by these four scholars, and presented in a proposal which had to compete against numerous other proposals before being advertised to prospective PhD students. Prospective students then competed in their turn for the opportunity to receive a scholarship to research these predetermined aims, and I was the applicant who was selected.

I have attempted throughout this PhD project to remain faithful to the aims set out in the original proposal while allowing the specific research questions, and a new performance practice, to emerge organically and collaboratively through the work. The aspects of the six core aims of the original PhD brief that I have focussed on, are:

- investigate ableist presumptions of body-place interactions
- influence the value of geodiversity for human culture and welfare in a greener Scotland
- engage with landscapes as performative cues to rethink disability/embodied access issues

- develop innovative, interdisciplinary models of body-landscape research
- explore the inter-relationships between disability and the environment
- explore affective and sensuous dimensions of body-place affordances and entanglements

I brought to the project my neurodivergent brain and life experiences (which I have learned to accept and respect during the course of the PhD, see chapter 1 and 3.2). I also brought many years of experience of working across a variety of disability, theatre, ecological, educational and creative learning contexts, and some expertise as a result of that.

I have a longstanding professional commitment to "disability theatre," with disability theatre being understood as an "impulse towards social justice in the face of ableist ideologies and practices" (Johnston, 2016, p25), and as coming from a "profound recognition of disabled lives and experiences as inherently valuable, particularly in their connection to […] 'human variation'" (ibid). My professional commitment to disability theatre has included working extensively with theatres of learning disability, or perhaps more accurately with what Matt Hargrave defines as "theatre involving the collaboration of learning disabled artists" (Hargrave, 2015, p45). My practice-based Masters research at the Royal Conservatoire of Scotland, supervised by Professor Maggie Kinloch, employed a variety of creative practices to explore learning-disabled performers experiences of participating, training and/or working professionally in theatre/arts contexts, and it identified a number of significant gaps in practice as a result. On the back of this research, I founded the Theatre Arts Group, an integrated performance ensemble based at Tramway, Glasgow's international art-house, and invited visual artist Kirsty Stansfield to lead it with me. This

ensemble created a body of exploratory and experimental pieces of theatre and performance art, and nurtured an ensemble of skilled learning-disabled performers. One of these performers, Hughie McIntyre, collaborated in the practice-based research of this PhD (see Chapter 3.3 and Chapter 4 below). The work of the Theatre Arts Group led to me being asked by Citizens' Theatre Creative Learning Officer Louise Brown to co-found a theatre group for learning-disabled performers at the Citizens' Theatre in Glasgow. This group, the Friday Club, is ongoing, and although I had not worked with the group for a number of years, they partnered one of the projects of this PhD (*Panarchy 3*, see Chapter 3.3).

In approaching the research questions of this PhD, I also brought my environmental and horticultural interests to the work, including my working relationship with Green Routes, a Horticultural Training Organisation for People with Additional Support Needs in rural Stirlingshire. Working in partnership with Green Routes on one of the performance projects (see Chapter 3.4) brought a practical environmental focus to the work of the PhD and contributed to the building of a bridge across disability and environmental discourses, one of the original aims for the research as set out by the supervisory team. It enabled the performance model that was emerging to be tested out in ecological and social as well as theatre contexts, led to some innovative art-science practices, and generated a number of valuable insights about differences in disability/environment interactions across rural and urban contexts (see Chapter 3). Findings from this project were shared by two collaborating performers/Green Routes students and myself at Scotland's National Flood Risk Management conference, in January 2020 (see Chapter 3.4).

The third main strand of professional experience that I brought to the research was my work in applied theatre and creative learning contexts. Theatre scholar Nicola Shaughnessy has observed that "against the backdrop of globalization, corporate capitalism and consumerism, applied theatre practitioners are generally working from positions which are both within […] and outside institutional structures" (Shaughnessy, 2012, p13). Based on many years' experience of working as an applied theatre/arts practitioner in cultural, criminal justice, festival, educational, residential, arts in health and social care contexts, I would certainly agree with Shaughnessy's observation. I would also argue that the work of the theatre practice-based researcher is similarly both "within" and "outside" institutional structures; my experience in applied theatre and creative learning was, as a result, very useful in helping me to navigate some of the complexities of practice-based research in the University context. My most recent applied theatre and creative learning work before embarking on this PhD research included developing a dialogical performance practice in collaboration with a group of highly stigmatised creative writing students/prisoners in a high security prison. Some of this work resulted in the prisoners calmly initiating difficult, but important conversations about rehabilitation with a variety of institutional stakeholders; these stakeholders included educationalists, social workers, psychologists, employment support agents, community health workers and prison officers. This work taught me that dialogical performance processes have the capacity to nurture respectful dialogue across multiple human differences and agendas and to intervene positively in stigmatising discourses, even in volatile and complex social situations.

In the practice-based work of this PhD I collaborated creatively over the course of four years with more than 40 neurodivergent (largely learning-disabled and/or autistic) performers and students in a variety of social, cultural and

geographical contexts (see Chapter 3). All of the 40+ collaborators who were interviewed individually mentioned, at some point during our processes, feeling stigmatised or disadvantaged socially on account of being learning-disabled, autistic and/or neurodivergent. We explored some aspects of this in our work together (see Chapters 1, 3 and 4) through a number of dialogical processes. My experience of facilitating dialogical performances in the criminal justice context was useful in supporting this work.

One of my concerns when I embarked on the PhD was that the research, as a result of working across so many academic disciplines, creative practices and human/nonhuman differences, would end up falling into the cracks between them all. I therefore set myself the aim of keeping the work relevant both to collaborators' lived experiences/material realities and also (and ideally at the same time) to all four academic disciplines of the research. The primary focus of the research was our living relationships with rivers, and performances of these relationships. Working with rivers as the landscape focus of the research was very helpful in working across the multiple human differences and academic disciplines of the research – not just do rivers flow between places and people, connecting them and creating a "watery commons" (Neimanis, 2017), but river systems are made up of complex interconnected networks, with each tributary completely different and many directionally opposed. Working with the interdisciplinary concept of panarchy, a cyclical systems thinking approach of ecological adaptation first proposed by ecologists Lance Gunderson & C.S Holling (2002) (see Chapter 1 and Chapter 2), was equally helpful; their panarchy concept enabled me to create a structure with which to navigate the different disciplines as well as the human/nonhuman interests of the research.

I attempted to ensure that the work was meaningful to performance collaborators by facilitating participatory processes and performance events which supported the identification and exploration of real-world issues and experiences (see Chapter 1), and which deepened/enhanced living connections with place, especially with rivers. I nurtured innovation, skills, co-operation and neurodivergent leadership in "ecological" performance practices in a variety of cultural, social and environmental contexts (see Chapters 3 and 4).

I sought to keep the research relevant across the academic disciplines by sharing ideas, practices and work in progress at a number of conferences, symposiums and seminars across the UK and by inviting feedback wherever I could. The feedback from live audiences/participants at performance events and academic events directly influenced the work as it developed, and I am very grateful to all those who engaged with the research throughout these processes.[1]

I am proposing, as a critical part of the new knowledge being created by this PhD, a model of "adaptive" theatre practice-based research called The Performic Cycle. The Performic Cycle has emerged through five separate but linked learning disabled and neurodivergent-led riverine performance projects. These projects are collectively called *The Panarchy Projects*, with reference to Gunderson & Holling's adaptive, non-hierarchical and interdisciplinary concept of panarchy. The Performic Cycle builds explicitly on Gunderson & Holling's idea of the adaptive cycle, but within a performance context. As documentation of *The Panarchy Projects*, I am submitting alongside the written element of this thesis a portfolio of research practice in the form of a series of videos: Link to Panarchy Projects documentation.

[1] For a list of conference presentations please see the Appendix

Figure 1 below summarises the five different *Panarchy Projects* through which The Performic Cycle evolved, outlining the dates of each project, the collaborating performers, the rivers being performed with, and the documentation being submitted for each project.

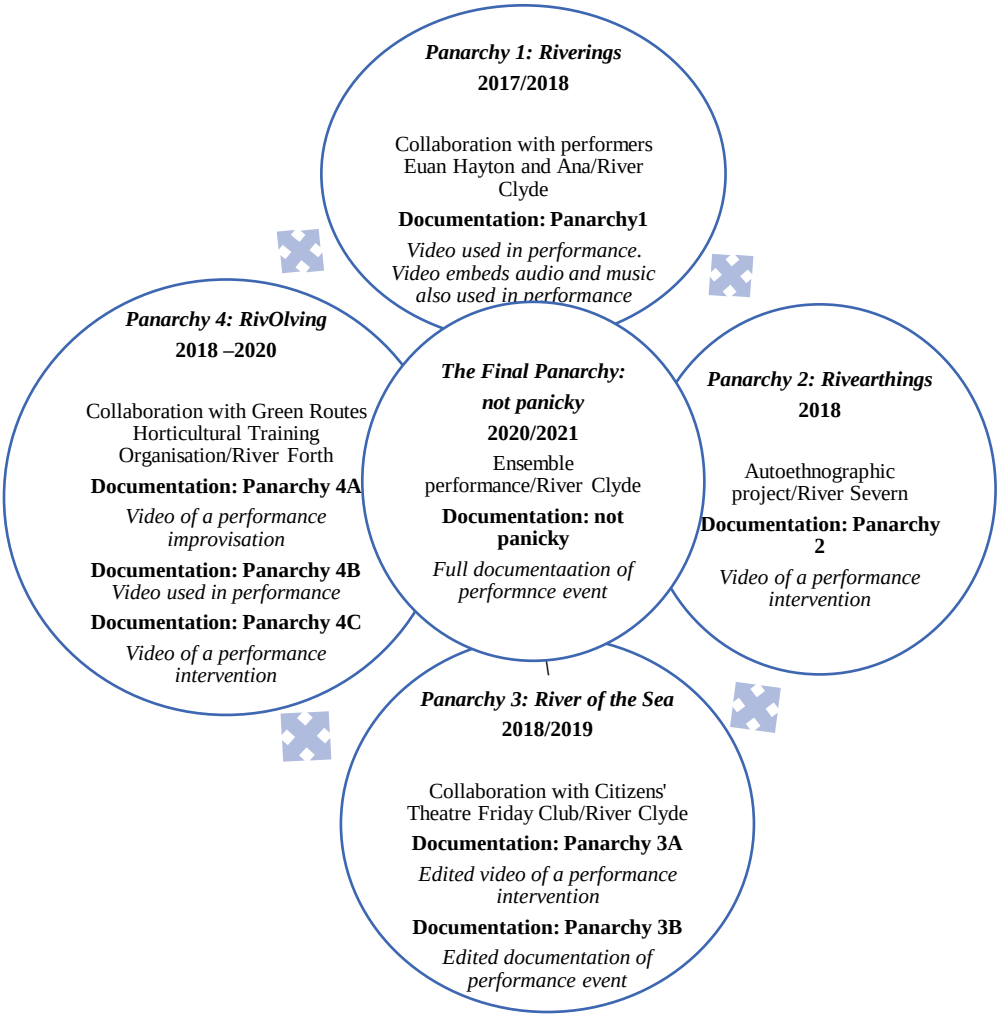

Figure 1: *The Panarchy Projects:* A Guide to the Performance Documentation

The documentations I offer do not, on the whole, present full recordings of performance events. Instead, they present snapshots of exploratory processes and edited video of site-responsive performance interventions. All of *The Panarchy Projects* evolved through multiple performance processes, interventions and explorations with rivers, as well as through more formal events in studio or theatre contexts. I hope that the documentations shared give a sense of some of the many layers of process and inquiry involved in each project. Only the documentation of the final performance project, *Panarchy 5*: *not panicky*, is straight documentation of a theatrical event.

Given that the theory and practice of this practice-based PhD informed each other constantly in an ever evolving and looping participatory and process-relational performance *praxis* (see Chapters 1 and 2), the videos are intended to be viewed *alongside* the reading of this thesis as an integral part of it. I signpost clearly within this document (largely in Chapters 3 and 4), when it would be most useful to view each video, providing a weblink with which to do so.

Structure of the Thesis

Chapter 1: Methodology introduces the Performic Cycle as a "panarchic" (Gunderson & Holling, 2002), adaptive and process-relational methodology, informed by participatory action research (Cook & Inglis, 2012; O'Leary, 2007; Kindon, Pain & Kesby, 2007) and theatre practice-based research (Arlander et al, 2018; Nelson, 2013; Trimingham, 2002). It then outlines The Performic Cycle both theoretically and practically, and introduces the key practices/methods of Bodyworlding, Vital Materialist Storying (including geomythology and autotopography), Performance (primarily dialogical and site responsive performance) and Critical Reflection. **Chapter 2: Dramaturgy**

introduces The Performic Cycle as a panarchic *dramaturgy*, informed by ideas of social drama (Turner, 1982, 1987; Shechner, 1983,1988), autopoiesis (Fischer-Lichte, 2008), hydrofeminism (Neimanis, 2012, 2017; Strang, 2014), human/nonhuman agency (Bennett, 2010; Haraway, 2016), learning-disabled capacity (McCaffrey, 2019) and "autistic flow" (Milton, 2017; yergeau, 2018). It contextualises the work of the research both practically and theoretically in the fields of "ecological" performance and disability theatre and performance, and identifies where the work of *The Panarchy Projects* responds to current gaps in practice. **Chapter 3: *The Panarchy Projects*** reflects critically on the performance practice itself. It charts chronologically the iterative development of *The Panarchy Project*s, which utilized cyclical processes of questioning and experimental practice. It also discusses how the first four *Panarchy Projects* led to the development of The Performic Cycle model and nurtured a loose network of neurodivergent "ecological" performers. The final chapter, **Chapter 4: *not panicky* – performance in a pandemic,** analyses how the adaptive Performic Cycle model was tested in the context of the global coronavirus pandemic through the creation of the final performance piece of the research. It discusses what new understandings, concerns, limitations and possibilities emerged in this unpredicted and unpredictable situation, and how these understandings might be useful in approaching some of the gaps identified in Chapter 2. The conclusion summarises the findings of the research, identifies limitations as well as strengths of The Performic Cycle model, and points to areas that might benefit from further research in the future.

Chapter 1

METHODOLOGY

Introduction

As introduced above, my prior training and professional expertise have determined the practice-based and participatory methodological base of this doctoral research, and have been integral to the development of what I have called The Performic Cycle, a new interdisciplinary adaptive model of performance practice that I am proposing through the research. However, as will become clearer, especially in Chapter 3, developing The Performic Cycle has also prompted me to re-evaluate many of the assumptions that some of my former practices were predicated upon, and this process continues. Indeed, re-evaluation, reorganisation and critical reflection are built into The Performic Cycle, and it cannot function without them.

In the first half of this chapter (1.1 and 1.2) I discuss how The Performic Cycle model builds on the cyclical and praxical[2] understandings of both theatre practice-based research and participatory action research (PAR) within an expanded "ecological" field. In 1.3 I clarify the panarchic and process-relational underpinnings of The Performic Cycle, and in 1.4 I outline the model itself, its phases and its main methods.

[2] I use the term praxical as a grammatical extension of the notion of praxis. (A neologism that gestures towards practical, but the inflection is actually praxis rather than practice.)

1.1 THEATRE/ PERFORMANCE PRACTICE-BASED RESEARCH

The primary methodology of this PhD is that of theatre/ performance practice-based Research. Theatre scholar Robin Nelson describes practice-based research as a "research project in which (theatre/performance) practice is a key method of inquiry and where […] a practice […] is submitted as substantial evidence of a research inquiry" (Nelson, 2013, pp8-9).

Alongside this written element of the thesis, I am submitting a new model of ecological performance practice, The Performic Cycle, which has emerged through five separate but linked neurodivergent-led riverine performance projects. These projects are collectively called *The Panarchy Projects*. The Performic Cycle model, as it has evolved through *The Panarchy Projects*, provides the methodological foundations for the practice-based research of this thesis.

Practice-based (or "practice as", or "practice-led") research is an established methodology in creative arts contexts, although there remains discussion around models of practice and presentation of outcomes. It tends to generate a praxis in which open questioning and exploration in the practice informs theoretical analysis, which reshapes the questions, which then changes the practice and so on in a cyclical manner until the questions and explorations are being coherently addressed, expressed and examined *through* the praxis; that is, through the *relationship* between the theory and practice.

Melissa Trimingham understands practice-based research to be a "hermeneutic methodology" which is "aware that the question asked ultimately determines the answer" and "allows for constant change within a specified structure of working" (Trimingham, 2002, p55). She understands progress in this

"hermeneutic-interpretive spiral model" to be "not linear but circular, a spiral which continually returns to our point of entry but with renewed understanding" (ibid, p56). It is this notion of circularity - of spirals, of ever changing and transitioning cycles of practice and theory - that I find particularly interesting within the field of theatre practice-based research scholarship, and which I build upon with The Performic Cycle methodology, within an expanded interdisciplinary field.

This idea of where theatre practice-based research is located, and who (or what) it is for, is, I believe a crucial one. Robin Nelson defines it as being "located at the confluence of different, but interlocking spheres" and he defines these spheres as being the spheres of the "arts world", the "media sphere" and the "academy" (Nelson, 2013, p23). I would suggest that theatre practice-based research can extend well beyond purely arts, media and academic spheres, and into social and environmental spheres, and I hope that this thesis, and the research practice from which it has emerged, will demonstrate that.

There is an established genealogy of "performance as research" from which more contemporary forms of theatre practice-based research are arguably descended. This genealogy explores the intersections between performance practices and anthropology, and experiments with aspects of performer *training* which push at the boundaries of the physical, cognitive and spiritual. It includes "laboratory" performance and performer training from the 1930's to the 1970's, such as Antonin Artaud's Theatre of Cruelty, Joan Littewood's Theatre Workshop, Jerzy Grotowski's Poor Theatre and Richard Schechner's Performance Group, all of whom could be understood as radical forerunners of contemporary theatre practice-based research, and all of whom challenge the existing arts, media and academic spheres of their times. Laboratory type

performance and performer training is essentially innovative and interdisciplinary, seeking to collectively transition into new ways of being, doing and understanding through exploring new ways of being, doing and understanding "theatre" and "performance." The work of Richard Schechner, which bridges pre-modern practices and ritual with modernist experimental performer training practices *and* postmodern "transformative" theatre scholarship, is key to this research in that it elucidates concepts such as "environmental theater" (Schechner, 1973) and "social drama" (Schechner, 1983; 1988) (see Chapter 2.1). Schechner's understanding of the aesthetics of theatre and performance practice as being anthropologically, socially and environmentally constituted is foundational to The Performic Cycle methodology.

The work of some early twenty-first century practitioner-researchers working with autoethnography (Pearson, 2006; Heddon, 2002; 2007; 2008; 2012; Custer, 2014), affect (Massumi, 2015; Manning, 2012, 2014, 2016) and proximity (Hill & Paris, 2014) can be understood as attempts to escape the dominant conventions of contemporary arts, media and academic spheres. Some of this work has emerged in protest against the increasing domination of theatre and performance practices by capitalist/corporate "giants" and has evolved in and through relationship with cultural studies, feminist, queer, ecological and disability discourses and movements. Theatre studies scholar Annette Arlander has described "performance as research" as "speculative," in this regard, as involved both in "imagining, envisioning and rehearsing futures," and in "analysing, criticizing and recreating the past" (Arlander, 2018, p346). The Performic Cycle builds explicitly on this understanding of performance practice as research as being "speculative", and is interested in the work of theatre practitioners and researchers who are exploring "speculative" alternatives to the

dominant cultural narratives and practices of consumerism and exploitation. This thesis is not greatly interested in the academic differences between practice *as* research, practice-*based* research, and practice-*led* research, or between theatre practice-led research and research-led theatre practice, or between *theatre* practice-led research and *performance* practice-led research. It is more broadly interested in the speculative potential of theatre/performance practice-based research methodologies, as outlined by Arlander, to explore different ways of being and performing with landscapes in a time of climatic and social precarity. The theatre/performance practice at the heart of this thesis explores ways we might "imagine, envision and rehearse" (ibid) different futures to those currently predicted by climate change scientists, social/political scientists and economists. It also explores how we might "analyse, criticize and recreate the past" (ibid), by reclaiming and repositioning the histories, experiences and insights of people (and landscapes) that have been marginalised or ignored in the dominant discourses, and by learning from these stories. Most of all, it is interested in how a theatre/performance practice-based research "praxis" might generate new aesthetics, new understandings, new kinds of relational dynamics, new kinds of dialogue across differences *in the present.* Praxis, for Nelson, is when theory and practice are "imbricated within each other" (Nelson, 2013, p62); one does not precede the other, rather they inform and change each other constantly. Practice-based research is for Nelson (2013) an intrinsically reflective and dialogic discipline, and for Trimingham (2002) an intrinsically hermeneutic one. The Performic Cycle builds on their understanding of the importance of questioning, dialogue and critical reflection (indeed these components are built into the structure of The Performic Cycle) but it also extends it. My argument is not with the importance of critical reflection and dialogue, but is rather that if this critical reflection and dialogue is confined to

"arts, media and academic spheres" then the knowledge produced can also be limited to those spheres.

The basic premise of this thesis (and of The Performic Cycle model of theatre practice that it proposes) is that when theatre practice-based research expands out of purely arts, media and academic spheres into environmental and social spheres, but remains focussed on a performance practice and the *dynamics* and *materialities* of that performance practice, it is capable of generating new insights, new understandings and new aesthetics. This capacity can be observed in the exploratory/experiential walking practice-based research work of Heddon et al, which focuses on conviviality and everyday performances of connection with place (Heddon 2012, 2014 & 2015), and the experimental/laboratory *Guddling About* practice-based research work of Minty Donald and Nick Millar, which focuses on the everyday performative agency of water in urban landscapes (Donald 2015, 2018 & 2019). The theatre/performance-based research practices and writings of both Heddon and Donald have influenced and informed this research substantially (see Chapter 2.2), and I hope this thesis adds to the body of work they are nurturing at the University of Glasgow. When theatre practice-based research expands, as it does in their work, into collaborations with non-academic partners and "more than human" forms and processes, it can begin to engage dynamically and playfully with questions of change, whether that change be personal, social, aesthetic, political or environmental. The Bodyworlding and Vital Materialist Storying methods of The Performic Cycle (see 1.4) build on and extend Heddon's and Donald's approaches, in order to generate new kinds of dialogical performance explorations that are *created with and owned by* diverse collaborating performers and participants, in connection with the landscape forms and processes they are closest to. In doing this, The Performic Cycle is influenced

by feminist, queer and disability studies thinking, and by questions of equality, agency and empowerment. It explores alternative relational dynamics and socio-environmental imaginaries with partners not usually represented or consulted in the academy, in ways not often supported by the theatre industry, and in connection with landscape forms and processes.

A growing body of research in cultural geography (Thrift, 2008; Lorimer, 2008, 2012; Lorimer & Parr, 2014; Macpherson, 2008, 2009, 2011, 2016; Olden, 2017), philosophy of science (Haraway,1987, 2003, 2016; Latour, 1991, 2005, 2017) and the earth sciences (Dixon, 2014; Risner, Naylor & Marshall, 2019) is already interested in the potential of arts practices to foreground the workings of landscape forms and processes and diverse human relationships with them. Exploratory and interdisciplinary research is increasingly generating new insights, knowledge, practices and policies that we need (and will need) to survive and thrive together in a time of intensifying climate crisis and increasing socio-economic precarity. Theatre/performance practice-based research has much to offer and also much to learn from engaging with these new forms of interdisciplinary exploration. The Performic Cycle works across the four disciplines of Theatre Studies, Disability Studies, Cultural Geography and Geomorphology, but is at its heart concerned with developing performance *practices* that can explore material as well as affective realities of human/ landscape interactions. It stages performance *events* that have the ability to share/open out some of these explorations and nurture new kinds of dialogue across social and environmental discourses as a result.

The *adaptive cycle* as defined by ecologists Lance Gunderson & C.S Holling (2002) is central to the ecological concept of panarchy and to the adaptive Performic Cycle model of practice that I am proposing through this research

(see 1.3, 1.4 and 2.1 below). The adaptive cycle as defined by Gunderson & Holling is based on the principle that all living entities go through cycles of growth – conservation – release and reorganisation. The dynamics of these cycles as they transition and intersect non hierarchically across space and time can be understood as panarchy. Panarchy, Gunderson & Holling argue, can help us to understand that adapting to climate change is not just about thinking scientifically, but also about thinking economically and socially.

Gunderson & Holling stress the importance of diversity in maintaining healthy ecosystems, but omit to take consideration of *human differences*, embodiment and cultural/aesthetic discourses in their cyclical and interdisciplinary analyses of the dynamics of change. The practice-based research of *The Panarchy Projects* seeks to address these gaps in Gunderson & Holling's conceptualisation, while building on their understanding of the adaptive cycle, and in doing so it hopes to return attention to panarchy as an important way of thinking about adaptation and change. *The Panarchy Projects* explore *bodily, practically, conceptually, aesthetically and discursively* how the "adaptive cycle" can be performed "across the emergent interface between organism and environment" (Ingold, 1993, p157). The projects support performance practices and events which work (kin)aesthetically across the "emergent interface" (ibid) between neurodivergent people and riverine landscapes in a time of increasing climate precarity. They have, collectively, informed the development of The Performic Cycle as an *interdisciplinary* model of practice-based research. This model takes Trimingham's conceptualisation of the "hermeneutic-interpretive spiral model," Nelson's idea of interlocking spheres, and Arlander's proposition of a "speculative" model of performance practice-based research into an expanded social and ecological field. It also takes Gunderson & Holling's social, ecological and economic conceptualisation of the adaptive cycle and

panarchy into an expanded cultural/discursive field, one which champions human and neurological diversity as well as geo and bio diversity, and which explores the spaces between them .

I was particularly interested in working with neurodivergent (in particular learning-disabled and autistic) people for a variety of reasons. Firstly, because I have expertise and contacts in this area of theatre practice and because I identify as neurodivergent myself. Secondly, because I am interested in the proposition that the sensory differences and unique lived understandings of neurodivergent people can lead to new understandings of how humans interact with landscapes and are mutually constituted with them (Baggs, 2007; Manning, 2012 & 2014; Judge, 2017). And thirdly, because the lived experiences and understandings of learning-disabled and neurodivergent people have traditionally been overlooked in both theatre practice-based research discourses, and in environmental/landscape discourses. Working collaboratively prompted me to clarify the methodology I was using with regard to both the "vulnerability' and the specific expertise of my collaborators, and with regard to the intentions for the work socially, aesthetically and materially. The key methodology that I identified in this regard was that of participatory action research.

1.2. PARTICIPATORY ACTION RESEARCH

Within the field of disability studies, a distinction is often made between participatory and emancipatory research methodologies. Emancipatory research, according to disability scholar Michael Oliver (1992) requires adherence to six "principles." Firstly, the research must be accountable to disabled people, and if the researcher is nondisabled, it should transfer power from the nondisabled researcher to the disabled people that the research concerns. Secondly, researchers must adhere to the social model of disability, which argues that disability is created through social systems and barriers and not by individual impairment. Thirdly, researchers must abandon claims to "objectivity" and admit that they are situated in the research process. Fourthly, while both qualitative and quantitative research methods can be used there is a bias towards qualitative methods which can interrogate positivist or ableist hegemonies. Fifthly, personal experience must be central to the understandings generated, and all experience should be framed as political and environmental. And finally, the research should have positive practical outcomes for disabled people.

I am deeply sympathetic to emancipatory research as a concept, and to the related emancipatory thinking of both Paulo Freire's *Pedagogy of the Oppressed* (1968) and Augusto Boal's *Theatre of the Oppressed* (1974). Although it was never the intention of *The Panarchy Projects* to create issue-based or forum pieces of theatre which adhered rigidly to an emancipatory research paradigm, I was nonetheless loosely guided by the six core emancipatory principles throughout the research, and this can be evidenced throughout the practice as research work (see Chapters 3 and 4). However, I would hesitate to define the research as emancipatory. This is for several reasons. Firstly, because of the original aims I inherited from my supervisors,

which necessitated a multi-disciplinary and open-ended research approach. Secondly, because the work was initiated as part of a PhD that I was working towards, and was delivered in partnership with organisations which had their own sedimented hierarchies. A full transfer of power to learning-disabled research participants/ performance collaborators would have been very difficult, if not impossible within these contexts, and to deny this would have been both dishonest and naive. Thirdly, as outlined above, the research was striving to go beyond purely human and social emancipation in order to bring in nonhuman dimensions of being, and to see how this could interrogate and extend existing discourses in productive ways. I will return to this with respect to hydrological and phenomenological thinking in Chapter 2.2 below. The original intention of this research, as indicated in the aims shared in the Introduction above, was to generate performances and performance-based research processes, in which multiple complex aspects of body(mind)-landscape(river) interaction could be explored and interrogated from disability perspectives. The exploratory and multidisciplinary nature of this endeavour required a more *open-ended*, *emergent* and *contestable* approach to the research than the emancipatory paradigm allows for.

The participatory action research (PAR) paradigm felt more harmonious with the theatre practice-based research methodology I was already committed to using. While related to the emancipatory model, and in some ways rooted in it, it is more flexible, contestable, generative and cyclical. Participatory action research employs methods and strategies "that tackle real-world problems in participatory, collaborative, and cyclical ways in order to produce both knowledge and action" (O'Leary, 2007). Kesby, Kindon & Pain (2007) similarly understand the "process of PAR" as "cyclical" rather than linear, just as Nelson (2013) and Trimingham (2002) understand processes of theatre

practice-based research to be cyclical, and just as Ingold (1993) and Gunderson & Holling (2002) understand life (human and nonhuman) processes to be cyclical. In Kesby, Kindon & Pain's cyclical understanding of PAR, "researchers and participants identify an issue or situation in need of change; they then initiate research that draws on capabilities and assets to precipitate relevant action. Both researchers and participants reflect on, and learn from, this action and proceed to a new cycle of research/action/reflection" (2007, p1).

In addition to these general orientations of PAR, I was also drawn to FCAR, an acronym for "facilitated collaborative action research" which is an inclusive participatory action research methodology that is sometimes employed with learning-disabled research participants. In FCAR, "the researcher/facilitator provides a supportive but questioning arena to enable all participants to contribute to the debate and allow diverse assumptions and opinions to be explored" (Cook & Inglis, 2012, p93). Cook & Inglis specify that "a key facet of action research is collaborative learning (Reason, 2001; Cook, 2004)" (ibid), something that I would argue was a key facet of *The Panarchy Projects*, and which was supported by my own experiences as a learner/teacher/facilitator and as an applied theatre and creative learning practitioner.

The performance practices in *The Panarchy Projects* offered everyone involved the possibility to learn from/with each other and from/with the environments we are constantly evolving with, while also creating shared and shareable and increasingly dialogical performances that opened these processes out to others. More specifically, the collaborative performance and learning practices identified multiple "real-world problems" that neurodivergent collaborators agreed were urgent with regard to our relationships with environments and landscapes (with a focus on rivers and estuaries). These "real-world problems"

could be reduced to three recurring problems identified by collaborators across all five of *The Panarchy Projects:*

1. the social stigmatisation of and discrimination towards learning-disabled/neurodivergent people
2. littering and pollution of rivers and river environments
3. storm events, increased river flooding, surface water flooding and sea level rise as a result of climate breakdown and global warming.

These concerns took different forms depending on the geographical location of the work. The performers and audiences who live in the upper reaches of the River Forth, for example, and who engaged in various ways with the *Panarchy 4* project, were understandably the most aware of river flooding. Many identified river flooding as a pressing problem because it regularly stops them getting to places or following established routines. There were a number of serious flood events during the course of the project itself. The performers and audiences who live in the *estuarine* areas of both the River Forth and the River Clyde, by contrast, were more aware of *surface water* flooding, and more concerned about industrial pollution or the littering of rivers.

These "problems" informed the ongoing questioning of the participatory practice as research, and were explored collaboratively throughout the processes, in a multitude of ways. We were not seeking to "solve" these problems. We were, however, open to what actions might occur, what insights might emerge and what new conversations might develop as a result of exploring them theoretically, practically and collaboratively. At times these insights involved realisations about power imbalances both within the wider society and the research process itself.

Participatory action research, like emancipatory research, necessitates a reflexive practice, and an awareness of what social science researcher Linda Finlay describes as the inherent "power imbalance between researcher and participant" (Finlay, 2002, p539). This imbalance can also manifest in theatre practices in disability contexts. As theatre studies scholar Colette Conroy puts it, "to work in disability arts […] is to experiment with one's own positioning and to struggle with the meanings that arise at the point where practitioner (disabled or non-disabled) meets work" (Conroy, 2009, p5). This struggle with positioning has certainly been my experience during the process of this doctoral research, and was one of the major reasons for the autoethnographic and reflexive *Panarchy 2* project (see Chapter 3.2) in which I attempted to clarify my own positioning in the wider research project. I was concerned that I was in danger of being a "parasitic" researcher (Stone & Priestley, 1996), feeding off the differences of my collaborators without being prepared to put my own differences and experiences on the line. I was determined not to fall into the trap of objectifying my creative collaborators, or using them in any way for my own gain. I realised after the first performance project of the PhD, due to a number of intersecting factors, that I no longer felt confident of where I was positioned in the research, either with regard to my own identity, or with regard to the institutional framework of the University. I was concerned that not knowing where I stood might compromise my integrity as a researcher as well as a practitioner working with others. While I was acutely aware of the dangers of undermining the struggles and material realities of past or future collaborators by focussing too much on my own struggles and positioning (Finlay, 2002), I also knew I could not ask anyone else to work with me until I could work honestly and with integrity in relation to the practice-based research framework myself (see 3.2). I took three months to work out my own positioning through

a solo/ autoethnographic/ reflexive performance project (see 3.2). This work prompted me to "come aut" as neurodivergent, something that has brought its own insights and realisations as well as challenges. It has made me re-evaluate my own personal history, including my long-term commitment to/interest in learning-disabled and other neurodivergent performers and performance practices. It has also made me acknowledge and confront my own internalised ableisms (Singer, 1999; Thomas, 2007), something that has not always been easy. Working out my own positioning has led me to an understanding of neurodiversity as a very broad category, which includes a vast spectrum of neurological and cognitive differences from the norm. It has left me very aware of my multiple privileges as a highly educated, mobile, white European doctoral student, and of the skewed power dynamics that those privileges bring with them. It has reminded me of the necessity of paying attention to differences within categories of difference, while also practising solidarity across differences, in order to avoid repeating or reinforcing dominant ableisms. And finally, it has confirmed to me that differences can shift and change over time, and are not static, or fixed. This complex learning is ongoing.

Challenging dominant ableisms can be particularly "fraught" (Leighton, 2009) for non-learning-disabled participatory action researchers (whether neurodivergent themselves or not) working with learning-disabled participants/collaborators. Some of this complexity is concentrated in the academic theorising and dissemination of the research (Leighton, 2009; Hargrave, 2015), and I return to this in the Conclusion below.

Whatever the chosen methods of theorising and disseminating participatory action research with nonacademic partners, there is clearly an imperative to credit all participants/collaborators appropriately and there is still a long way to

go to generally establish a working protocol in this regard (see Strnadova & Walmsley, 2018). There is as yet no consensus or protocol on what is the most ethical or equitable way to credit participants/collaborators in participatory action research, especially when they are classed as "vulnerable." This can be complicated in participatory theatre practice-based research if performers want to be recognised in the creative outputs of the research, which has its own independent life in the world, but are (understandably) wary of academic research.

As part of the ethical framework of this research, I asked all collaborators whether they would like to be credited as co-creators of any work created, and if so, how. All, without exception, wanted to be credited as co-creators of performance outputs, but several wanted to use a pseudonym because of the academic context of the work. In this thesis, I use the names given to me by my collaborators, in accordance with their instructions. I also, when possible, reference collaborators ideas, words, actions, experiences and expressions, and/or point to documentation which evidences these.

While this is a genuine attempt to credit collaborators ethically, it does, as with almost all aspects of participatory action research, require ongoing rigorous scrutiny with regard to the dynamics of power. Using learning-disabled people's words in an academic context they were not originally voiced in, and which will most probably be inaccessible to them, could be seen as manipulative or appropriative, as a "negative power effect" (Kesby, Kindon & Pain, 2007, p21) of participatory action research. As Max Harris (1993) notes in *The Dialogical Theatre,* "citation embeds the other's curtailed voice within the scholar's discourse and, in doing so, *modifies* it" (Harris, 1993, p18) (my italics). Harris goes on to argue that *dialogical theatre*, by allowing no one all-encompassing

voice, "protects the plurality of voices in a way that scholarly discourse […] does not" (ibid). In *The Panarchy Projects*, I was acutely and increasingly aware of the dangers of appropriating people's words or experiences, and that was one of the reasons for the nurturing of performer leaders, and for the development of performer-led dialogical practices. These dialogical and leadership aspects became more significant with each project, and I discuss this at more length in Chapters 3 and 4 below. It was also one of the reasons for the collaborative writing and editing processes that I increasingly developed as the research practice evolved.

The ethics of citation can be democratised in some respects in collaborative writing and devising practices (Heddon & Milling, 2006), although these too are contested practices which risk "ventriloquism," in which "researchers pronounce 'truths' while whiting out their own authority so as to be unlocatable and irresponsible" (Fine, 1994, p19). In an attempt to avoid "ventriloquism" or even "ventriloquism by stealth" (Fine, 1994, p22) I used a variety of reflexive techniques in the performance processes, including ongoing collective analysis of process-based video, group and individual creative reflection activities, group and one-to-one discussions. I also used a "postdramatic" multiplicity of voices approach in the writing and editing processes. As disability theatre scholar Yvonne Schmidt (2018) has observed, "Disrupted plots, cracks, and polyphony are essential characteristics of postdramatic storytelling" (Schmidt, 2018, p211) and "'polyphonic speaking' is characteristic of many postdramatic theater productions—as well as in works by disabled artists" (ibid, p212). As with Schmidt, I am aware of various limitations of the postdramatic, especially in work with learning-disabled performers, however I used this polyphonic approach in a conscious attempt to both "de-hierarchise" the editing process, and to disrupt my position of power within it. As a general rule, whenever it was

logistically possible, I would collaborate with performers on the editing, as part of our creative processes, or even better, support the performers to edit their own scripts. This was more possible in the projects with fewer performers, when we had more time together. When this wasn't possible, for whatever reason, performers would instruct me as to what they wanted left in and out and I would check and re-check that they were happy with any edits I or collaborating professional artists made with their words, recorded voices or filmed performances. These processes could be laborious and time-consuming and did not come without their difficulties. On several occasions they led to tensions with contributing non-learning-disabled professional artists who were used to more autonomy in their editing processes, and wanted more artistic control, but these were tensions that were necessary to accommodate in order to maintain the integrity of the research process and my accountability to the performers, and this was usually able to be discussed. Sometimes it was frustrating to me as both an artist and a researcher, too, and I had to (and still have to) wrestle with my own ego. However, the dialogue that occurred between us all as a result of these checks helped to refine and interrogate the research questions as they evolved, deepen trust in our creative relationships, enable some interesting aesthetic explorations and remind us all that the questions and practices of the research were multiple, various, ever-changing, contestable and shared.

Although *The Panarchy Projects* performance collaborators have not co-authored any of this written part of the thesis, and did not come up with the concept and model of The Performic Cycle, I have, where it has been possible, read selected parts of this thesis that concern their stories or performance processes to them, in order to check that I am not misrepresenting them in any way. This has been more possible in the final project, when we have had more time (not least because of the COVID-19 pandemic) to reflect on our processes

collaboratively. I recognise the performance collaborators of all five performance projects as fellow explorers in the research practices of this thesis, co-creators of the performances, and co-researchers in terms of developing and interrogating questions of their own in the research process. (Some collaborating performers, such as Cameron Browne and Euan Hayton have gone on to develop these questions in other ways and in other areas of their lives). As such the collaborating performers should be considered co-producers of any new knowledge created by this PhD and shared in this thesis. My acknowledgement of this is an attempt to rebalance the "power imbalance" (Finlay, 2002, p539) of the participatory research process, but it is clearly a problematic statement on its own. In disability theatre discourses dynamics of power are often understood through material conditions and through questions of professionalism and payment for work (Hadley, 2020). In bringing participatory and theatre practice-based research discourses together it would therefore follow that acknowledging co-production of knowledge/art theoretically has to be balanced with an open discussion of the material/practical conditions of the co-production of that knowledge/artwork.

The material conditions of this LKAS doctoral studentship – 4.5 years of funding with an annual resource allowance to support the research - meant that I was in the very privileged position of being supported financially to engage in the research, with a research allowance to help with travel and other research costs. Most of the non-professional learning-disabled and autistic performers I collaborated with were in receipt of government benefits. In an attempt to balance the material terms of the research, I only used the research allowance to support the practice side of the research and not to pay for any of my own expenses such as travel to conferences or conference fees. In the autoethnographic *Panarchy Project, Panarchy 2*, which was an interrogation of

my positioning in the research (see Chapter 3.2) I only used the allowance to pay for a local collaborating artist to document a performance event. I used the budget principally to cover performance and collaborative field work costs; these included transport costs and refreshments for participating performers on field trips, performance production costs and payment of contributing professional artists. The fact that professional contributing artists were paid Equity wages but participating performers were not highlights the systemic nature of inequality in the research process, and is one of the areas that I suggest will need further attention in the future. I return to this in the Conclusion.

Facilitated and collaborative methodologies in research with/concerning learning-disabled people are evolving rapidly at the moment, and I hope that The Performic Cycle model and the insights generated through *The Panarchy Projects* might contribute in some small way to this expanding and evolving field. One of the central ideas of The Performic Cycle, borrowed from Gunderson & Holling's concept of panarchy, is that if we attend to the connections *between* the social, the economic and the ecological, (and I would add the cultural/dialogical/philosophical), then we might be able to see where we are currently getting it wrong and as a result, we might be able to begin to find different ways of surviving and evolving with each other, and with an ever-changing earth.

I will now go on to discuss in more depth how The Performic Cycle integrates theatre practice-based research and (facilitated) participatory action research methodologies with the ecological concept of panarchy.

1.3 THE PERFORMIC CYCLE MODEL: THEORY

1.3.1 Panarchy

The term panarchy was coined by ecologists and system thinkers Gunderson & Holling "as an antithesis to the word *hierarchy* (literally, sacred rules)" and as "a framework of nature's rules, hinted at by the name of the Greek god of nature, Pan" (Gunderson & Holling, 2002, p21). It is an integrative non-hierarchical theory which seeks to "transcend boundaries of scale and discipline" in order to "help us understand the changes occurring globally" (ibid, p5). It was proposed by Gunderson & Holling as a way of thinking about adaptation across ecological, economic and social discourses and practices. "The complex issues of sustainable development are not just ecological problems, or economic, or social ones," they argue, but are "a combination of all three" (ibid, p8).

Their panarchic thinking can perhaps be compared to philosopher Félix Guattari's earlier idea of "ecosophy," and his argument in *The Three Ecologies* that an "ethico-political articulation" between "the three ecological registers" of "environment, social relations and human subjectivity" (Guattari, 1989 (2014) p17/18), is necessary for us to respond to the "ecological disequilibrium" caused by "intense techno-scientific transformations" (ibid, p17). For Guattari this is elaborated as the need for "new social and aesthetic practices, new practices of the Self in relation to the other, to the foreign, the strange" (ibid, p46), practices that are capable of articulating "a nascent subjectivity; a constantly mutating socius; an environment in the process of being reinvented" (ibid, p47).

Gunderson & Holling's less poetic articulation of this unfixed, unbounded and constantly emergent aspect of being comes through the concept of the adaptive

cycle and panarchy. Indeed, a main focus of panarchy as defined by Gunderson & Holling is to "rationalise the interplay between change and persistence, between the predictable and unpredictable" (Gunderson & Holling, 2007, p5). Exploring the relationship between the predictable and unpredictable is also something that has been identified as essential by theatre scholar Sarah Hopfinger (2017) in her attempts to redefine "ecological theatre." Hopfinger's practice-based research thesis at the University of Glasgow challenged established notions of "ecological theatre" through intergenerational theatre practices and performances which focussed on aspects of "wilding" and rewilding. Her stated aim was "to explore how performance process and public event might, in their very doing, enact our unavoidable entanglements with each (human) other, the more-than-human and other ecologies (including environmental/ "natural" ones)" (Hopfinger, 2017, p23). This resonates with my own desire to explore how we perform our "unavoidable entanglements" (ibid) not just with each other but also with the rivers with which we live. Hopfinger found "that it is by participating in the dynamics between what is predicted and what is profoundly unpredictable that collaborative devising can challenge fixed hierarchical and binary structures between all - human and nonhuman - collaborators" (ibid, p37). This interest in the relationship between the predictable and the unpredictable would appear to echo that described by Gunderson & Holling, as outlined above.

For Gunderson & Holling, linked human and nonhuman (what they call natural) systems "evolve and are highly uncertain" (2002, p31). Given the extent of human interference in "natural systems," for example through an economic overemphasis on growth and globalisation, Gunderson & Holling argue that, by rights, all ecological systems should have collapsed by now, and humans should be extinct (ibid, p14). Although some might argue that this is still an

increasingly real possibility, the fact that it has not yet happened led Gunderson & Holling to find some hope for the future. Largely, their (qualified) hope lies in the resilience and *diversity* of ecological systems, in the *creativity* and innovation of humans, and in the capacity of both to *adapt* to changing conditions. Their understanding of this adaptivity has led them to develop the concept of *panarchy*, a complex systems theory which works through the principles not just of uncertainty and unpredictability but also of resilience, potential and connectivity. Their concept of panarchy is predicated on the idea of the adaptive cycle. The adaptive cycle is an interpretation of the "infinity cycle" or life cycle that is common to all dynamic life forms and processes, and it goes through repeating phases of growth – conservation – release - reorganization in an "infinity cycle," as shown in Figure 2 below.

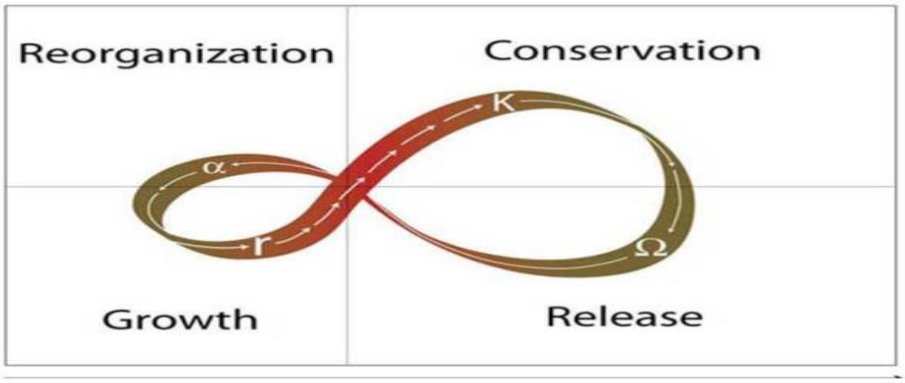

Figure 2: The Adaptive Cycle
From https://alderloreinsightcenter.com

Panarchy explores the dynamics of conceptual adaptive cycles as they both transition across and nest inside each other through different dimensions of space and time. With the concept of panarchy, Gunderson & Holling encourage us to pay attention not just to the ways that human and nonhuman systems

interact in the world but also to how different kinds of human systems (in their case ecological, economic and social systems) interact with each other.

In *The Panarchy Projects*, the concept of the adaptive cycle and panarchy enabled me, as a theatre practice-based researcher to work *integratively* across theatre/cultural studies, the earth sciences and the social sciences in a unique praxis that I am calling The Performic Cycle. The Performic Cycle is a cyclical and "adaptive" methodology which generates and co-produces knowledge and art-works, through participatory performance processes, which explore agency and intra-agency in the living relationships between *people and landscapes* in a time of climate breakdown and socio-economic precarity.

In The Performic Cycle, cyclical models of theatre practice as research (Trimingham, 2002; Nelson, 2013) and cyclical models of participatory action research (O'Leary, 2007; Kesby, Kindon & Pain, 2007) are brought together with the "adaptive cycle" or panarchic model of ecological research (Gunderson & Holling, 2007). The result is a participatory and panarchic theatre practice-based research model which is interested in both change and diversity; a model which can support people to develop relationships with (and understandings of) landscape forms and processes, generate adaptive and collective strategies for coping with unpredicted/unpredictable change, and rehearse resistance to stigmatisation/disempowerment through aesthetic experimentation. It can also support interrogations of the connections between environmental and social justice, through performance events and practices which invite discussion, understanding and dialogue rather than disagreement, guilt or recrimination (see Chapter 4 and Conclusion).

In the participatory and panarchic practice-based research methodology of The Performic Cycle, as it emerged through *The Panarchy Projects*, research questions were articulated and explored by the participating researcher-performers through a series of site-responsive and studio-based performance practices, or "methods". These methods included exercises and practices which brought attention to the multiple and various interlocking spheres that constitute our lives, from the landscape forms and rivers we "dwell" with, to the family and social circles, economic cycles and cultural spheres which define us, to the hydrological cycle and the cycles of earth, sun and moon which make human life on earth possible in the first place. To do this effectively, and *aesthetically*, I discovered that the panarchic systems theory thinking of Gunderson & Holling needed to be complemented by a process-relational and phenomenological approach.

1.3.2 Process-Relational Philosophy and Phenomenology

Process philosophy, according to C. Robert Mesle,

> is an effort to think clearly and deeply about the obvious truth that our world and our lives are dynamic, interrelated processes and to challenge the apparently obvious, but fundamentally mistaken, idea that the world (including ourselves) is made of *things* that exist independently of such relationships and that seem to endure unchanged through all the processes of change (Mesle, 2008, p8).

The panarchic Performic Cycle model of practice that I am proposing is process-relational in that it employs embodied, process-oriented and "relational approaches to conceptualising landscape" (Macpherson, 2016, p427). It seeks

to “perform” (with) processes of change, adaptation and becoming. It engages in site-responsive and sometimes immersive field/ river/ performance methods which emphasise the “complex interdependent nature of landscape as an idea and as an experience” (ibid). The methodology I am proposing focuses on “affective atmospheres,” on “transpersonal […] circulations of moods, materials and emotional change” (Wylie, 2013, p61) which enable “attention to be paid to how senses of selfhood and landscape are equally emergent” (ibid). In The Performic Cycle methodology the expressions and perceptions of academics and theoreticians are no more important than the expressions and perceptions of learning-disabled and neurodivergent creative collaborators. The expressions and perceptions of both are understood as being related parts of the same broad philosophical inquiry. In The Performic Cycle methodology the performance practices and the various academic disciplines of the research support and inform each other as equal partners in ongoing ever-changing relational configurations. Art is not understood as being in the service of science, nor is science used as an inspiration for art. Neither art nor science is understood as being in the service of social science or cultural studies, but rather The Performic Cycle sees them as endlessly and necessarily informing and challenging each other, conceptually as well as practically, as we attempt to adapt to the “ecological disequilibrium” (Guattari, 1989/2014, p37) that we, as a species, have helped to create.

Similarly, the panarchic approach I am proposing is *process-relational* in that it does not see either performances or academic outputs as definitive final statements of findings, but rather as markers in an ongoing “ecological” and ontological exploration into affectivity, agency and relationality in the wider context of ableism, socio-political precarity and climate breakdown.

By working with this concept of panarchy across a series of performance projects with a variety of neurodivergent collaborators, I have discovered that the "adaptive cycle" provides a structure or "form" through which intangible "felt" aspects of being and becoming, as well as everyday observations and accounts of experience, can be explored aesthetically and dialogically by multiple and diverse performers. This exploration can then be opened to others, whether "in"formally or form"ally"[3], through artworks, events and performances in which audiences or passers-by can also access intangible felt aspects of being and becoming, and can begin to position themselves in relation to either (or both) the human or nonhuman "actants" at work in the performances (Bennett, 2010). These performances may involve challenge, comedy and/or communitas, and audiences, participants or passers-by may find that "normal" positioning or discourses will not work in this context, which may necessitate an uncomfortable (or perhaps comfortable) repositioning as a result. These feelings and repositionings can then be articulated in dialogical processes which permeate the performance event (see Chapters 3 and 4). In this way, Performic Cycle performances can resemble at times ritual processes, such as those explored by anthropologist Turner (1973) and theatre studies scholar Fischer-Lichte (2008) (see Chapter 2).

In Chapter 2 I deepen my analysis of the Performic Cycle as a *dramaturgy*, and in Chapters 3 and 4 I discuss *The Panarchy Projects*, but in the final part of this Methodology chapter I will outline the structure and specific *methods* of The Performic Cycle as they have emerged through the experimental participatory processes and practices of the research.

[3] See Leighton (2009) and Hadley (2020) on the ways in which learning disabled performances and performance as research practices can nurture non-learning-disabled "allies" who can support emancipatory change

1.4 THE PERFORMIC CYCLE MODEL: PRACTICE

In The Performic Cycle model of participatory, practice-based research that I am proposing in this thesis, every performance project (and every artwork and performance created by every performance project, which can be multiple) goes through the four stages of the adaptive cycle. The four stages of the adaptive cycle as defined by Gunderson & Holling are, as iterated above, growth, conservation, release and reorganization. Performance processes called Performic Adaptive Cycles, or PACs, are nested within each phase of each Performic Cycle. PACs go through their own cycles of growth, conservation, release and reorganisation. Although only a fraction of the Performic Adaptive Cycles are ever explicit or visible in the "final" and "shared" performance/research outputs, they are all at work, and all are equally important in The Performic Cycle dynamics.

Each phase of The Performic Cycle is explored, understood and interrogated through a distinct practical *method*. The first Performic Cycle phase of Growth, for example, is largely explored, understood and interrogated through the method of Bodyworlding. The second Performic Cycle phase of Conservation is largely explored through Vital Materialist Storying, the third phase of Release through (Dialogical) Performance, and the final phase of Reorganisation through Critical Reflection. As with Gunderson & Holling's adaptive cycle, between each phase of the Performic Cycle there is a "transition" process. The first "front loop" transition, between the phases of Growth/Bodyworlding and Conservation/Storying, is dominated by processes of Remembrance. The second transition, between the phases of Conservation/Storying and Release/Performance, and between the front and back loops of the cycle, is dominated by processes of Revolt. The "back loop" transition, between the phases of Release/Performance and Reorganisation/Critical Reflection, is again

dominated by processes of Remembrance. This basic Performic Cycle model is summarized in Figure 3 below.

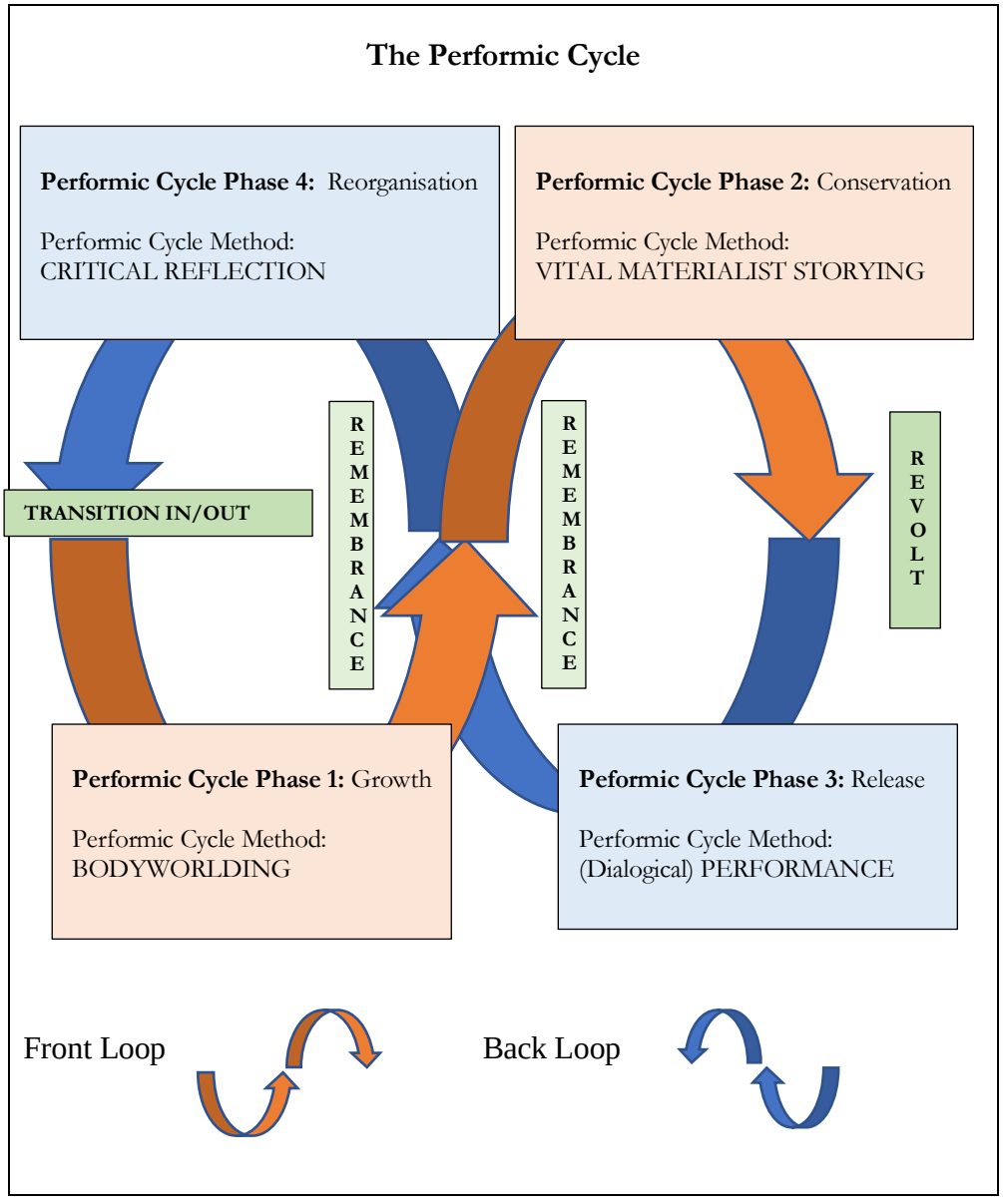

Figure 3: The Performic Cycle - Phases, Methods and Transitions

In the rest of this chapter I will outline the key methods of Bodyworlding, Vital Materialist Storying, (Dialogical) Performance and Critical Reflection, how they work with the concept of the adaptive cycle and how they can be employed in each phase of The Performic Cycle.

1.4.1 Performic Cycle Phase 1: Growth & Bodyworlding

The first "Growth" phase of the adaptive cycle is the longest phase in Gunderson & Holling's understanding of it, and is defined by high resilience, experimentation and diversity, but low potential and connectedness, with a gradual move towards increased "connectedness" (2002, p35).

The primary method employed in the corresponding "Growth" phase of the Performic Cycle that I am proposing is the method of "Bodyworlding." In brief, Bodyworlding in The Performic Cycle refers to the sensual, material and experiential processes through which our "bodyminds" (Butler & Parr, 1999) interact with, communicate with and "make sense of" the environments (built and "natural", human and nonhuman) that we live with, and which we often depend upon to survive. Bodyworlding in The Performic Cycle builds on Erin Manning's phenomenological dance work and on feminist and social science concepts of embodiment and enmindment (see Chapter 2). Bodyworlding *practices* in The Performic Cycle focus on experiencing, exploring and deepening a shared awareness and understanding of the "field of relations that cuts across the emergent interface between organism and environment" (Ingold, 1993, p156). They engage the "complex interdependent nature of landscape as an idea and as an experience" (Macpherson, 2016, p427).

In *The Panarchy Projects* each Growth or Bodyworlding phase started with a process of one-to-one semi-structured teller-focussed interviews in which this "complex interdependent" (Macpherson, ibid) "emergent interface" (Ingold, ibid) was first explored (Clive, 2021). This was to ensure from the start that the processes which followed were informed by and responsive to the various neurodivergent and learning-disabled collaborators. I decided on this kind of interviewing for a number of specific reasons. Firstly, I chose a semi-structured interview method (using broad themes and open questioning rather than specific or closed questioning) because it is commonly advised for research with a phenomenological basis (see Fontana & Frey, 2008). Secondly, I chose a teller-focussed interview method because it is advocated by social researchers such as Hyden (2014), for use with studies concerning sensitive, complex types of human behaviour and experience. Teller-focussed interviewing prioritises listening over questioning, aims to create a safe space and is oriented towards narration and relational practice, all things I felt it was important to establish at the start of each *Panarchy Project*. And finally, I chose one to one interviewing because I wanted to intervene in established group dynamics, especially in the projects with the theatre group at the Citizens' Theatre and the student cohort at Green Routes Horticultural Training Organisation, in which hierarchies are sedimented and the same voices tend to dominate, and some voices are rarely, if ever, heard. Conducting interviews in the first phase of The Performic Cycle can clarify the main concerns of the participating artists in response to the broad themes. In *The Panarchy Projects*, (with the exception of *Panarchy 1*, which started with questions extrapolated from the original PhD brief) the open questions and themes of these initial interviews had evolved from previous *Panarchy Projects* interviews, performance processes and iterations.

Through one-to-one interviews, multiple dialogues can be opened, and rich data gathered. Transcribing and analysing these interviews can identify commonalities and connections as well as differences in experiences. Feeding these back to performers can lead to participating performers beginning to form questions of their own. This can lead to a shift in process from thinking and reflecting to "being" and "doing," to experiencing "in the moment" and "in place." Map-making, field trips and other exploratory and "connective" site-responsive "Bodyworlding" practices can then follow.

In *The Panarchy Projects*, these Bodyworlding practices included:

- Walking practices
- Leading, following and witnessing practices
- Mapping and map-making
- Deep listening, sounding and voicing practices
- Somatic practices and breath work
- Relaxation and visualisation practices - eg accessing "flow"
- Improvisatory site responsive performance practices
- Sensual body/water practices and other kinds of water rituals – collecting, smelling, pouring, sharing, transferring, touching, washing, immersing, observing, drawing, water writing, water marking, mixing, releasing
- Dance practices - contact/no-contact improvisations, Butoh, Qi Gong
- Movement practices –moving with/on/by/in rivers and with "the 8"
- Sensual body/earth practices –smelling, touching, holding, sampling, mixing, earth drawing, body painting, earth writing
- Growing practices - sowing, growing, harvesting, composting
- "Finding" practices: digging where you stand, using what you find

- Adventuring and exploring - in the case of *The Panarchy Projects* this included following rivers from source to sea, tracing tributaries and connecting at confluences
- Independent and supported travel practices – stepping (safely, and with support) out of comfort zones
- Journalling, drawing, notemaking, observing, photographing

These Bodyworlding practices, some of which can initially feel odd or challenging to participants/performers, build on areas of interest or experience already identified as significant in the individual interviews. They can deepen feelings of belonging and generate performative expressions of human/nonhuman relationship.

Within Gunderson & Holling's model of the adaptive cycle, processes of remembrance are common in the transition from the first phase of growth to the second phase of conservation. As with the adaptive cycle, there are often processes of remembrance in the shift from the first phase to the second phase of the Performic Cycle. During this transition, processes can be reviewed and taken stock of. There can be a compiling or gathering of materials and ideas engaged with so far and decisions can be made about what to take forward individually and/or collectively. As connectedness with landscape deepens, memories can surface from the past. Bodyworlding practices can open new and expanded "awarenesses of being" (Heddon, 2017; Conroy, 2017; Harpin & Nicholson, 2017), which can themselves lead to new stories, understandings, relationships (with human or nonhuman others), experiences, or questions. This first transition phase is a good opportunity for facilitators and participants to check in with each other and clarify what it would be helpful to carry on working with, and what might be better explored elsewhere. It can also be a good

opportunity to remember what the point of the project is, and what different people might want from it.

1.4.2 Performic Cycle Phase 2: Conservation & Vital Materialist Storying

The second major phase of the adaptive cycle as identified by Gunderson & Holling, is that of "Conservation." In this phase, as "the system's connectedness increases," so does it's "potential" (Gunderson & Holling, 2002, p35). The primary method in the second "conservation" phase of the Performic Cycle is the method of "Vital Materialist Storying."[4]

Vital Materialist Storying is employed to begin to work aesthetically, to make "forms" or "experiments" with the expanded awareness and to deepen the connectivity across human and nonhuman that has developed in the first Growth/Bodyworlding phase of The Performic Cycle. Vital Materialist Storying practices work with the understanding that human and nonhuman actants are equally alive and participative in the "vibrant" entangled ecologies that we are all a part of (see Bennett, 2010; Tsing, 2015; Donald, 2019). Vital materialist storying practices engage with stories which emerge and develop in the "emergent interface" (Ingold, 1993) between human and nonhuman, and between human and landscape, in what Haraway imagines as the "Cthulucene" (Haraway, 2016) via what Barad understands as intra-agency (Barad, 2007). Practices of Bodyworlding deepen into practices of Vital Materialist Storying, which have the potential to work with forms, to make forms and to reveal forms in this interface, to "make sense" of our entangled ecologies, to begin to perform them. The stories which emerge may be personal stories of lived experience,

[4] I believe I coined this phrase when I first used it in 2018. I was certainly not aware when I first came up with it of anyone else using it.

dwelling and relationality emerging from the Bodyworlding practices and individual interviews (see Kuppers, 2014 or Heddon, various). They may be local stories or mythologies embedded in the landscape and responded to performatively (see Kenyon, 2019; Tuulikki, various). They may be movement stories, told without words in communication with a landscape form or process, and/or in communication with other humans. They may be material "stories" emerging from observations and experiments with specific materialities (see Risner et al, 2019; Donald, various; Irland, various). No one kind of story is prioritised over the other. All are possible. All are interesting. The stories and performances which emerge may develop with reference to notes, drawings, photographs, video or audio recordings, or they may be rehearsed from body memory through movement and improvisation. These stories may develop outside, in connection with the river(s) or landscapes in question, or through experimentation and rehearsal in the studio. Usually, they develop through both. They may evolve in connection with a material, landscape form or process, or be discovered through connection with another living being whether natural or man-made, biotic or abiotic. They may only exist or be able to exist in the landscape in which they "form." Or they may be able to travel, to transition, and "perform" elsewhere. The crucial aspect of Vital Materialist Storying processes is that they are informed (and where possible led) by the performers who will go on to perform them, in connection with the landscape forms or processes that gave rise to them.

Vital Materialist Storying practices include the practices of "geomythology" and "autotopography." Geomythology in The Performic Cycle draws on the "mythogeographical" performance practices of Phil Smith/Wrights & Sites (2010; 2011), the phenomenological "geopoetics" of Kenneth White (2003) and the geomythological thinking of Dorothy Vitaliano (1973; 2007). For

Smith, mythogeography can be multiplicitous, elusive and in between; myths can be "accounts which are capable of symbolically representing patterns (of power, of physical forces, of cultural paradigms)" but they are also "rendered questionable by their popular-cultural exploitation, blatant fiction or absurdity and unresolved contradictions" (Smith, 2011, pps268-269). Geopoetics, as White has developed it, opens possibilities of transcendental being and experience, grounded in physical relationship with the earth (White, 2003). For Vitaliano "myth and geology are related," with myth being "inspired by unusual topography" (Vitaliano, 2007, p1), "invoked to explain geologic processes" (ibid, p2), used to "record geologic events" (ibid) or to help "solve a geologic problem" (ibid, p3).

Geomythology in The Performic Cycle blends these three understandings in its vital materialist storying approach. It can engage myths and folk tales that are held in landscapes over time and passed down culturally, largely orally, through stories, poems, songs and place-names (Galbraith & Willis, 2017; Watson, 1926). In the Scottish storytelling tradition this can include stories of fairy hills and underground creatures, of water spirits or goddesses associated with certain rivers, of mountain giants or shapeshifting creatures known to frequent certain places, and it can include ghost stories and urban myths. An example of geomythology as used in *The Panarchy Projects* is the local mythology of Robert Kirk, the "faery minister" of Aberfoyle, a real historical figure who was reputed to have communed with the fairy world in the woods around that area (Stott, 2018; Kirk, [1691/1893/1933]2008); this "geomythology" informed some of the *Panarchy 4* performance work (see Chapter 3.4). Another example would be the mythology of "Clota," goddess of the River Clyde (Watson, 1926); this "geomythology" informed some of the *Panarchy 3* performance work (see Chapter 3.3).

Equally, however, geomythological practices in The Performic Cycle might engage "generic" geomyths, myths which are shared across cultures, or across place and time, which explore human relationship with landscape forms or processes more generally, and through which localized and personal connections can develop. An example of this is the ancient Egyptian story of Isis, Osiris and their jealous brother Set (Schama, [1995]2004), a story explored in specific connection with the tributary rivers of the River Clyde in the *Panarchy 1* project (see Chapter 3.1). Geomythological practices enable an exploration of the "vitality," the power and the unpredictability of our living connections with the earth across human differences by being equally accessible to all. No specialist knowledge or training is required, no specialist language. There is no controlling author or hierarchy of thinking in Vital Materialist geomythology. In The Performic Cycle, geomyths are both imaginary and real and are shared by all; they belong to no-one and everyone, are both universally "vital" and "materially" specific, and crucially, they emerge from connection with landscape. Just as adaptive cycles loop and nest and transition in and across different timescales and spatial dimensions, so does geomythological storying. These scales and dimensions are all related, even if the forms change, in the same way that water circulates endlessly through hydrological cycles across space and time, changing forms and states but retaining its molecular structure.

Our stories now are connected to other stories in time and space, to stories which keep performing in landscapes even as they change. Geomythological storying practices can nurture new connections with familiar landscapes, and support understandings of "deep time" or geological time. They can also open ways of working safely and collectively with people with diverse lived experiences and

multiple sensitivities, which can include experiences of trauma (Kuppers, various; Baim, 2020).

Autotopography is another storying practice that can support what I am calling Vital Materialist Storying. Autotopography as articulated by Dee Heddon (2008) is a relational performative practice of physically co-scripting self and place. It can include mark-making or writing on the landscape. This practice can help us to make sense of place and of *our place in a place* in the moment and place we find ourselves in. It can build on Bodyworlding practices and support Vital Materialist Storying practices in many ways, not least through creating narratives of physical connection with place, whether this connection is an easy one or not. I extend this understanding to include mark-making, track-leaving, writing or drawing *with* the earth or soil or other earth materials, moving through or *with* water, responding to the materiality of the earth with our own materiality, seeing how the earth "performs" us just as much as we "perform" it. This variant of Vital Materialist Storying might be playful or serious, depending on the questions being asked or the intentions of the work. It can be performed in a familiar or unfamiliar place. It is not necessarily driven by words, it could be sensorially or movement driven. It is essentially performative.

In the Vital Materialist Storying phase of The Performic Cycle multiple "stories" and performances, whether human or nonhuman, material, geomythological and/or autotopographical are developed, enacted, witnessed, shared and gathered. These stories begin to be practised and rehearsed. Explorations begin to take form in film, audio, movement, music and/or scriptwriting practices, depending on the communication preferences and interests of the performers and the forms of the stories emerging. The insights, connections and understandings generated through the Bodyworlding and Vital

Materialist Storying processes intensify to a point of maximum connection. The risk now is not *lack* of connection but *over*connection and a rigidity or fixity of process as a result.

In Gunderson & Holling's adaptive cycle, transitions of rebellion are common at this stage, between the second and third cycles. Without diversity the system cannot continue. Dominating or rigid forces which are preventing or squashing diversity will need to be challenged, overthrown or released. In the earth cycle this is when "agents of disturbance such as wind, fire, disease, insect outbreak, and drought, or a combination of these" can force radical change and release, so that the "tight organisation is lost" (Gunderson & Holling, 2002, p35) and life can continue. The coronavirus pandemic could be understood in terms of the adaptive cycle as an "agent of disturbance" signalling that we have reached a point of maximum "exploitation," or Conservation, and that human/social/economic/ecological release and systemic change is necessary for the life cycle to continue (see also Chapter 4). Within The Performic Cycle it is common for the overall focus to change radically between the second and third phases of the cycle, and for new leaders, new insights and new performances to emerge, often powerfully, unexpectedly and unpredictably, at this time. The structure of The Performic Cycle allows for this, understands that unpredictability and uncertainty are inherent and necessary parts of the cycle, and it embraces the fact that rebellious dynamics rising in the "emergent interface" can reveal what needs to be challenged, released or changed in order for the cycle to continue.

On a micro scale, this was experienced in the first *Panarchy Project* when it became clear that one of the two central performers might not want/be able to perform in the formal theatre space. But also, that they might. We needed to let go of the vision for the piece we had been creating, and open ourselves to a very

different way of working. Doing this required an adaptable structure which kept this performers place open, and honoured their contributions, without placing any pressure on anyone to perform live if that would not be a good thing for them on the night, and without compromising the legibility of the piece as a whole (see Chapter 3.1). On a macro scale this unpredictability, and "revolt" was experienced dramatically in the fifth and final *Panarchy Project*, through the COVID-19 pandemic, and the enforced social distancing and lockdown which necessitated a total and radical rethink of what was important, what was forming, what had to be let go of and what needed to change in order for the work to continue (see Chapter 4). The Performic Cycle evolves through the same phases and transitions as the adaptive cycle, in relationship with the ecological, the economic and the social. Although it has its own performance and aesthetic dynamics, The Performic Cycle cannot be completely separated from the ecological, the economic and the social. Because of this it cannot be used to enact predetermined or superimposed aims or visions. It is, essentially, an *emergent, dynamic* and *adaptive* methodology, and the "revolts" and transitions are crucial in ensuring it remains so.

1.4.3 Performic Cycle Phase 3: Release & (Dialogical) Performance

The third phase of Gunderson & Holling's adaptive cycle is that of "Release." Following "revolt," the adaptive cycle twists round into its "back loop" and the connectivity and potential that has been developing in the "front loop" is both realised and released. This is where the cycle begins to *perform* itself. The primary method in the third "release" stage of the Performic Cycle is, accordingly, that of performance.

The questions and Bodyworlding explorations of the Growth cycle, the remembrances of the first transition, the aesthetic experiments, deepening of questions and Vital Materialist Storying of the Conservation cycle, are crystallised by the rebellions or dramatic events of the second transition, and the questions and performances are rehearsed until it is clear that they have realised their maximum potential within this particular cycle and need to be released. In this release they are shared with others (whether human or nonhuman others or both) through a variety of performances. These performances might be in open "public space" "wild" environments, in social or community spaces, or "in between" in theatre/studio or "garden" spaces. Each performance "performs" the adaptive cycle (hence "The Performic Cycle"), and releases the questions and connections of the research practices performatively. In doing so it invites audiences and passers-by to engage with these questions and connections in their own ways (if they would like to), and nurtures new kinds of dialogues.

Once the connectivity, potential and insights of the second phase of the Performic Cycle has had a full release in the third cycle, and the first performance or performance phase comes to an end, there can be a collapse in dynamic energy. Transitions of remembrance are again common at this stage, as are rituals of celebration. It is important that the meaningful connections, insights, changes and/or shifts that might have occurred are acknowledged and celebrated, but it can also feel at this stage as though the process is not finished.

For the collaborating humans, rituals and dialogue between performers, as well as between performers and audiences are crucial in this transition in determining who is interested in moving into the final phase of the cycle. These practices can clarify who feels that their question(s) have been answered and who feels their question(s) are still urgent. They can identify new (or existing) leaders who want

to take the processes forward further, and they can identify who would prefer to let go of this particular cycle, question or performance project and transition elsewhere. Although the ethics and practices of all projects clearly state that any participating performer can leave the practice as research process *at any time* without having to give any reason, this third transition is the most common stage at which participating performers begin to transition out of the Performic Cycle.

1.4.4 Performic Cycle Phase 4: Reorganisation & Critical Reflection

The final phase of the Adaptive Cycle, according to Gunderson & Holling,

> begins a process of reorganisation to provide the potential for subsequent growth […] At this stage, the ecological resilience is high, as is the potential. But connectedness is low, and internal regulation is weak […] Because of those features it is a welcoming environment for experiments […] many [of which] will fail" (Gunderson & Holling, 2002, p41).

This phase, argue Gunderson & Holling, "is the condition for the greatest uncertainty – the greatest chance of unexpected forms of renewal as well as unexpected crises" (ibid, p43).

The main methods employed by The Performic Cycle in this fourth phase of reorganisation are those of critical reflection, writing up of findings, (after)care, editing of documentation, experimental forms of dissemination, new dialogues and the identification of new ideas or possibilities. The performance processes and research questions are reflected upon and re-examined, rigorously. Both participants/collaborators and audiences are asked for their feedback. The practices are interrogated and evaluated. Practices which have not worked well

may be discarded. Any changes emerging as necessary begin to be identified by those engaged in the project (across the scales of personal - interpersonal - organisational - political). Any ideas emerging as important or interesting are clarified, perhaps shared outwith known circles in a variety of contexts, both academic and non-academic, thus starting new cycles of inquiry, practice, adaptation and change. New leaders and performers emerge who begin to raise the questions which will define the practices of a new cycle, or intersect with another ongoing one. In *The Panarchy Projects* this phase has been the phase during which some participating performers have made great leaps in their lives, some securing new employment, others new performance opportunities, others embarking on further/ higher/online education courses or engaging independently with environmental groups or activities.

The processes loop and twist on, transitioning into other spheres and activities and demographics, along with the landscape forms and processes which have enabled and informed them, and the social, economic and political processes which have defined them. The end of performance explorations or projects can be marked and celebrated, much as phases of the earth's cycling can be marked and celebrated, for example at times of full moon or new moon, solstice or equinox. The practice differs from most theatre practice-based research, and from most participatory action research, by working consciously with identified landscape forms and processes as co-performers, through an understanding that both they and we are constantly performing our life cycles, in ever changing interlocking spheres across both space and time.

Conclusion

In this chapter I have outlined the interdisciplinary methods that were used in this doctoral research. I have discussed the two main bases to the research – theatre practice-based research and participatory action research, and shown how the work of this PhD is rooted in them both, and can be understood as a "participatory practice-based research" methodology. I have outlined a new model of "panarchic" practice that I call The Performic Cycle, and which I am proposing as the key contribution of this thesis. I have suggested that this model could be understood as an ecological provocation, and something that might be particularly valuable in this era of accelerating climate breakdown.

Given that The Performic Cycle has emerged through a practical and philosophical understanding that dynamics and outcomes can neither be fixed nor predicted in panarchic and process relational work, I am not offering it as a model to replicate in detail by others, with ideas of fixed outcome in mind. I am proposing it as an integrative, adaptive and generative methodology which can be borrowed from, engaged with or built upon, and through which:

- dynamics between predictability and unpredictability can work freely
- relational dynamics across both human and nonhuman differences can be reimagined and explored
- resistance, adaptation and change can be rehearsed and performed safely and openly, with others and for others, both human and nonhuman, within an expanded and interdisciplinary field.

In Chapter 2 I move from an analysis of The Performic Cycle as a panarchic participatory practice-based research *methodology* (a way of doing research) to

an analysis of The Performic Cycle as a panarchic *dramaturgy* (a way of doing theatre) as it has evolved through the interdisciplinary and practical enquiry of this PhD. In presenting The Performic Cycle as a way of doing theatre, I will also locate *The Panarchy Projects*, the practice through which The Performic Cycle has evolved, within the contemporary performance context.

C h a p t e r 2

LITERATURE AND PRACTICE REVIEW

Introduction

In this chapter I discuss how The Performic Cycle has evolved as a model of theatre practice-based research in connection with a variety of other cyclical models of thought in performance theory, feminist theory and disability theory. I also identify the gaps in contemporary performance practice that *The Panarchy Projects* attempted to fill.

Firstly, I discuss how The Performic Cycle builds on performance theorist Richard Schechner's infinity cycle model of social drama (1977), which evolved in connection with social anthropologist Victor Turner's ideas about ritual theatre and change (1974). I also engage with and extend Fischer-Lichte's (2008) thinking about the "transformative" autopoietic feedback loop that operates between performers and audiences. The thinking of Schechner, Turner and Fischer-Lichte, understood in conjunction with the adaptive cycle thinking of Gunderson & Holling, form the backbone of The Performic Cycle dramaturgy. However, I note that their cyclical "dramaturgical" models do not necessarily work when river systems are the principle dynamic performers in the cycle. Riverine feedback dynamics would appear to contradict the human dynamics of their models, bringing attention to an inherent contradiction, or paradox, in much ecological performance practice and theory. I suggest that a neurodivergent and river-led performance practice such as The Performic

Cycle, might be capable of challenging or "queering" normative human dynamics, thus enabling a more nuanced and expansive autopoietic feedback loop that takes account of human differences and works between humans and nonhumans as well as between performers and audiences.

Secondly, I discuss how, in developing The Performic Cycle dramaturgically, I have engaged with the agential qualities of water itself, and the scientific concept of the hydrological cycle. I have done this largely through the hydrofeminist work of Veronica Strang (2014) and Astrida Neimanis (2014; 2017), and with reference to an evolving body of contemporary "site-specific" or "site-responsive" riverine performance work. I contextualise *The Panarchy Projects* with reference to the water-based performance practices of Minty Donald & Nick Millar, Ruth Olden, t.s.beall, Hannah Tuulikki, Saffy Setohy, Basia Irland and Steve Scott-Bottoms. I locate their work with specific reference to the site-specific performance scholarship of Mike Pearson (2010) and Miwon Kwon (2004), and indicate where *The Panarchy Projects* respond to gaps in contemporary practice and offer something new to the field.

Thirdly, in developing The Performic Cycle dramaturgically, I have explored the concept of neurodiversity, with particular reference to ideas of "autistic flow" (Milton, 2017; Judge, 2018) and learning-disabled capacity. I introduce the essay by Australian scholar and autism activist Judy Singer (1999), in which she coined the term neurodiversity, and suggest that neurodiversity emerged through an historic interaction of different disability paradigms that has both informed and been informed by the disability movement and arts scene in the UK in the last 20 years. I track the evolution of neurodiversity as a disability paradigm, as driven by critical autism studies, and as currently led by autistic scholars such as Damian Milton (2017), melanie yergeau (2018) and

Bertilsdotter-Roqvist et al (2020). I contextualise *The Panarchy Projects* within this context as well as within the contemporary field of disability performance practice in the UK, with a particular focus on autistic and learning-disabled led practices in Scotland.

2.1 THE SOCIAL DRAMA CYCLE

As introduced in Chapter 1, "Panarchy is a conceptual model that describes the ways in which complex systems of people and nature are dynamically organized and structured across scales of space and time (Gunderson and others 1995; Gunderson and Holling 2002; Holling and others 2002)." (Allen et al, 2014, p578). Panarchy is a concept that proposes ways in which humans might understand dynamic processes of human/nonhuman/systemic entanglement and transformation practically and scientifically across *ecological, social and economic spheres*, and across ecosystem differences, through the concept of *the adaptive cycle.* Figure 4 below summarises the panarchic systems thinking which explores correlations between social connectedness and economic/creative potential with reference to the positive feedback loop dynamic of the adaptive cycle.

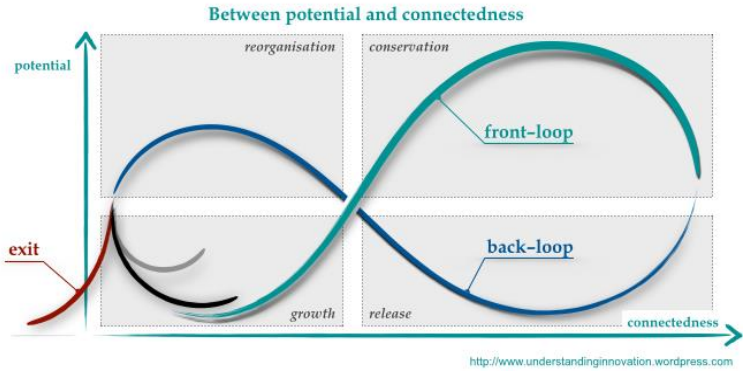

Figure 4: Cycling between potential and connectedness.
From Understanding Innovation website http://www.understandinginnovation.wordpress.com

A central panarchic insight is that too much emphasis on the Growth and Conservation phases of the adaptive cycle occurs at the expense of the Release and Reorganisation phases, and *decreases* the *diversity* that is essential to ecosystem resilience. As a result, too much emphasis on Growth and Conservation (an emphasis which characterises capitalism as a system) *increases ecological precarity*. "Exclusive emphasis on […] engineering resilience," in areas designated as vulnerable, for example, an anthropocentric tendency that is increasingly dominant in mainstream conservation discourses, "reinforces the dangerous myth that the variability of natural systems can be effectively controlled, that the consequences are predictable, and that sustained maximum production is an attainable and sustainable goal" (Gunderson & Holling, 2002, p28). Limiting variability, or diversity, leads to shrinkage, and reduced ecosystem resilience, and "as resilience is lost, the system becomes more vulnerable to external shocks that previously could be absorbed" (ibid).

Sustainability and resilience, Gunderson & Holling argue, can best be realised through nurturing diversity and through understanding dynamic processes as being adaptive, "cyclical" and transitional. In other words, *diversity is necessary* and *can be nurtured* through processes and systems which understand that the release and reorganisation phases of life cycles are just as essential and important to consider as the growth and conservation phases. Gunderson & Holling conceptualise this through the symbol of the adaptive cycle, through the interaction between the front loop of growth and conservation and the back loop of release and reorganisation, and through the idea of transitions between adaptive cycles working across different scales of space and time.

Chapter 1 focussed on the cyclical interdisciplinary *methodology* of The Performic Cycle. In this Chapter I focus additionally on the cyclical

interdisciplinary *dramaturgy* of The Performic Cycle as it has evolved through bringing Gunderson & Hollings adaptive cycle insights into conversation with performance, hydrological and neurological discourses which also use the mobius loop or infinity cycle to conceptualise their processes.

Thinking cyclically can help us to work across disciplinary divides. It can also help us to work with complexity across human and nonhuman dimensions. Anthropologist Tim Ingold (1993) and literary studies scholar Timothy Morton (2018) have respectively claimed that "landscape" works cyclically and ecology is "looped;" social scientist O'Leary (2007) has claimed that participatory action research works cyclically and theatre scholar Melissa Trimingham (2002) has claimed that theatre practice as research works through "hermeneutic spirals." Well before any of these thinkers made their claims, founding "environmental" performance theorist Richard Schechner (1977) and social anthropologist Victor Turner (1974) were conceptualising performance dynamics, "social drama" and ritual process through the idea of cycles.

Ritual process, as theorised by Victor Turner, goes through four stages; some kind of breach is followed by a crisis, which leads to redressive action and finally to reintegration (Turner, 1974). *Transformation* can occur in the "visible drama" or "live action" of the crisis and redressive action stages. The breach and reintegration stages of the cycle are "invisible" or "staged," creating the structure through which the liminal space, the transformative "betwixt and between" space is held. In communication with Turner, Richard Schechner developed in the 1970's an "infinity loop" model of social drama through which the relationship between "the social and aesthetic," the visible and hidden could be understood. "The 'infinity loop' depicts dynamics of positive feedback between the social and aesthetic. Social dramas affect aesthetic dramas,

aesthetic dramas affect social dramas," writes Schechner, ([1977] 2003, p214). For Schechner, *performance* can be understood as the interplay between the social and the aesthetic, and this can be understood through the infinity cycle, through the idea of positive feedback loops operating between social and aesthetic, visible and hidden, actual and virtual processes. Performance, or "social drama" is what happens in the space between unscripted "social and political" action and its consequences, and "staged" theatricality and its performative iterations. Schechner, like Turner, believes that change can occur in this "in between" space. The social drama model as Schechner understands it is summarized in Figure 5 below.

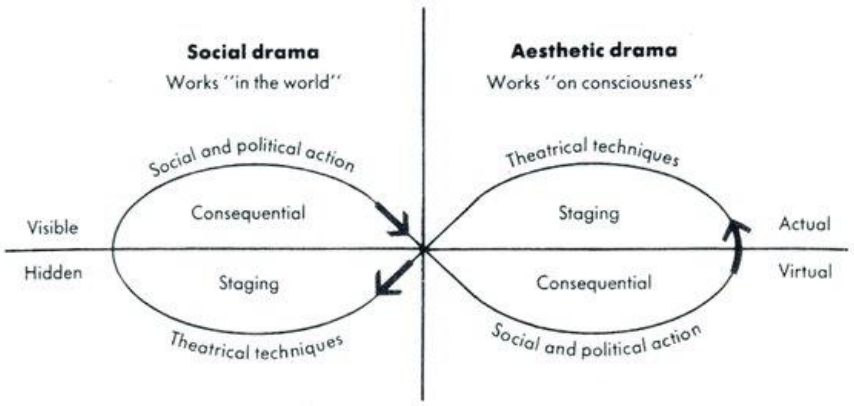

Figure 5: Schechner's model of social drama.
From *Performance Theory* (Schechner, 2003 edition, p215)

Panarchic thinking also explores ideas of change and transformation through the transitional dynamics of the infinity cycle. Unlike Schechner's model of social drama, panarchy is concerned with the transitions between the four *phases* of the adaptive cycle as well as between the front and back *loops* of the infinity cycle, and it also explores the transitions between adaptive *cycles* in their entirety, across scales, and across space and time. In the concept of panarchy,

the “front loop” of the adaptive cycle process is concerned with the phases of Growth and Conservation. As outlined above, much capitalist thinking, and indeed much ecological or “new conservationist” thinking that supports a capitalist system, could be seen as being stuck in this “front loop,” of the cycle, concerned overwhelmingly with ideas of Growth and Conservation (or “exploitation”) and with maintaining high levels of productivity. To maintain diversity and resilience/adaptivity however, there needs to be a “revolt” followed by Release. This revolt could be compared to the breach, and the Release to the “crisis” in Turner’s model of ritual drama. The revolt activates the “back loop,” the Release of the adaptive cycle and the “visible drama” of Turner’s ritual thinking, opening up the liminal “betwixt and between” space of transformation. In doing this, it ensures continuing diversity, which itself makes continuing survival more likely. During the Release, productivity is *low* but resilience and innovation are high. After the Release the adaptive cycle can move into Phase 4 of change, adaptation and Reorganisation. This relates to Turner’s “redressive action.” From the fourth phase, the cycle can either repeat into Growth, which relates to Turner’s reintegration (thus forming a “nest”) or it can transition out, perhaps into new or alternative cycles, across scales of space and time, or perhaps into something else completely.

The “back loop,” or the “positive feedback loop” of the adaptive cycle is thus understood by both Gunderson & Holling and Schechner & Turner as being important in ensuring diversity and in helping humans to adapt and survive. The “back loop” of Gunderson & Holling’s adaptive cycle compares to the “visible drama” of crisis and redressive action in Turner’s model of ritual theatre, and to the consequential “social and political action” in Schechner’s model of “social drama.” In Schechner’s model, aesthetic/staged processes can “make visible” the social and political processes which define human interactions, and can

intervene in them in order to create "virtual" imaginative alternatives. Performance can be understood as the cyclical looping interplay between staging and consequential action, between the aesthetic and the social.

Performance scholar Erika Fischer-Lichte built on Schechner and Turner's cyclical understandings of social and ritual drama and transformation in *The Transformative Power of Performance: A New Aesthetics* (2008). For Fischer-Lichte it is the energy that circulates between audience members and performers that collapses the dichotomy between the aesthetic and the social and creates the sense of "communal experience" which is essential to "performance" (Fischer-Lichte, 2008, p59). She understands this through the autopoietic feedback loop; the actions of performers elicit responses from audiences, and these responses impact on the whole performance, in what can be understood as "a self-referential and ever-changing feedback loop" (ibid p38). In Fischer-Lichte's understanding, "the autopoietic feedback loop is generated and kept in motion not just through visible and audible actions and attitudes of actors and spectators but also through the energy circulating between them" (ibid, p59). This "physically perceptible" (ibid) energy is set in motion by the "bodily presence of the actors" (ibid, p74). This "bodily presence" is essential to live performance, and is for Fischer-Lichte where the social and aesthetic cross over.

The Panarchy Projects "queer" (Mortimer-Sandilands, 2008) and "crip" (Kafer, 2013) this notion of bodily presence, and they do so through being neurodivergent (including learning-disabled) led. Queer theory, according to performance scholar Katherine Bennett, "takes aim at norms that legitimize prescribed ways of knowing and living at the expense of abnormal others" (Bennett, 2014, p 49). In other words, it *subverts* prescribed ways of knowing and living, and it often does this playfully or humorously, while celebrating

alternative ways of being. The queer "ecosexual" practices of Annie Sprinkles and Beth Stephens, for example, stage spectacular camp marriages to the earth, complete with costumes and vows, in what are ultimately joyful and inclusive celebrations of our connections across human and nonhuman dimensions, celebrations which subvert conventional heteronormative notions of marriage and relationship (see https://sprinklestephens.ucsc.edu) Crip performance practices use very similar techniques to subvert the *ableist* human. Disability studies scholar Alison Kafer, in her 2013 monograph, *Feminist, Queer, Crip*, called for a "cripped environmentalism," one "that looks to disabled bodies/minds as a resource in thinking about our future natures differently" (Kafer, 2013, p131). Kafer requests more "narratives of people whose bodies and minds cause them to interact with nature in nonnormative ways" (ibid). The work of *The Panarchy Projects* responds directly to this call. It is primarily concerned with creating "nonnormative" narratives and performances of connections with rivers and estuaries. It is specifically concerned with neurodivergent (largely learning-disabled and autistic) narratives and performances of connections with rivers and estuaries, and with what Nick Walker (2021, 2014) calls the "neuroqueer." The "bodily presence" of the neurodivergent, autistic or learning-disabled performer "queers" and "crips" the autopoietic feedback loop just by being what it is.

Like panarchic thinking, queer and disability thinking reminds us of the importance of diversity, of the fact that there is no one story, no one direction, no one dynamic at play in the many cycles that make up life on earth. Queer and disability thinking, I propose, can help us to get beyond the dominant and limited understandings of both "nature" and "culture" that the "Capitalocene" (Haraway, 2016; Moore, 2016) would impose on us. "Queering" and "cripping" the adaptive cycle of panarchy, the infinity cycle model of social drama and the

autopoietic feedback loop between performer and spectator can *subvert* and *release* dominant assumptions of what both nature and culture are, and nurture more expansive, diverse ecological performance processes as a result.

The other key way in which *The Panarchy Projects* "queer" the "bodily presence" of the autopoietic feedback loop, and build on the idea of the social drama cycle to create The Performic Cycle, is by bringing the "bodily presence" of "the river" into the performance frame. *The Panarchy Projects* work with the bodily presence of rivers as well as the bodily presence of human performers, and The Performic Cycle is interested not just in the interplay between the social and the aesthetic, but in the interplay between the social, the aesthetic and the "natural"- more specifically, in the case of *The Panarchy Projects*, with the riverine.

River and watershed systems are "complex open process/response systems", in which "energy and materials are in constant flux" (Morisawa, 1985, p6). River dynamics can be understood as the complex interplay between earth, water and climate, between force and resistance, between form and process. With river systems, "a change in any part of the watershed necessitates a response which may occur elsewhere" and this "self-regulation" of rivers "implies that fluvial systems generally have a *negative feedback*" (my italics, ibid, p3) which works to stabilise the river.

The negative stabilising feedback cycle of the river process, as with many earth and biological processes, is directionally and dynamically opposite to the positive feedback cycling of Schechner's "infinity cycle" model of social drama, Fischer-Lichte's transformative autopoietic feedback loop model of performance *and* Gunderson & Holling's adaptive cycle. These *positive*

feedback loop systems are concepts designed by humans through which to understand and maximise *human* potential for change, transformation or adaptation. Given that the work of *The Panarchy Projects* is interested in exploring how humans perform with rivers this difference in understanding of the directional dynamics between riverine and human processes is significant.

I am suggesting that there is a tension, a contradiction between the "generally negative" feedback/stabilising dynamic of rivers (and other natural systems), and the generally positive feedback /"transformative" dynamic of many human social systems (including both ecological and dramaturgical systems). Furthermore, I am suggesting that this makes sense of the inherent contradiction or apparent paradox in many performance practices and theories which purport to be "ecological" in terms of working across the nonhuman and the human.

To return to Fischer-Lichte, if "the autopoietic feedback loop is generated and kept in motion not just through visible and audible actions and attitudes of actors and spectators but also through the energy circulating between them" (Fischer-Lichte, 2008, p59), then what happens when this "energy' includes the stabilising negative feedback energy of the river? I would argue that just as the bodily presence of neurodivergent and learning-disabled performers can "queer" and "crip" the dominant *ableist* energies at work in a performance space, so the bodily presence of rivers can subvert the dominant *anthropocentric* energies at work. This leads to an *aesthetic* that is "more than human," that is informed by the energies and dynamics of rivers as much as by the energies and dynamics of humans. These riverine energies can be as predictable and unpredictable, as complex and variable, as humans can.

The Panarchy Projects explore this complexity and variability in performative explorations of "agency," "flow," and "confluence" and I expand on this in 2.2 and 2.3 below. In performing both negative and positive feedback dynamics, The Performic Cycle of *The Panarchy Projects* seeks to enable performers and spectators to engage differently not just with each other, across human differences, but also together, as humans, with the rivers we live with. The Performic Cycle, by reading Schechner and Turner's model of social drama through Gunderson & Holling's concept of the adaptive cycle, and by queering Fischer-Lichte's autopoietic feedback loop through taking it to the river, shifts the dramaturgical focus from processes of "human crisis" and reintegration to a more expanded focus on processes of "climate crisis" and the earth's processes of reorganising itself. This is the dramaturgical premise of The Performic Cycle. I propose The Performic Cycle as a dramaturgy that celebrates the diversity of the human in relation to the diversity of the nonhuman, and subverts the controlling human tendency to normativity. In Section 2.2, I will expand on this, exploring how The Performic Cycle can subvert the human tendency to anthropocentrism through river-led performance work which engages with the concept of the hydrological cycle and the work of hydrofeminist scholars. In Section 2.3, I will expand on how The Performic Cycle can subvert the human tendency to ableism, through neurodivergent-led performance work which engages with the neurodiversity cycle and ideas of flow.

2.2. THE HYDROLOGICAL CYCLE

Thinking and performing with rivers can help us avoid getting stuck in the anthropocentric "growth and exploitation" phase of the adaptive cycle. Rivers remind us of the necessity of release. It is only in releasing that the continuation of the life cycle is ensured. Water operates cyclically; through the hydrological cycle it releases old forms and adopts new ones but retains its chemical composition as it moves through earth and air. It is essential to life on planet Earth, including all human life.

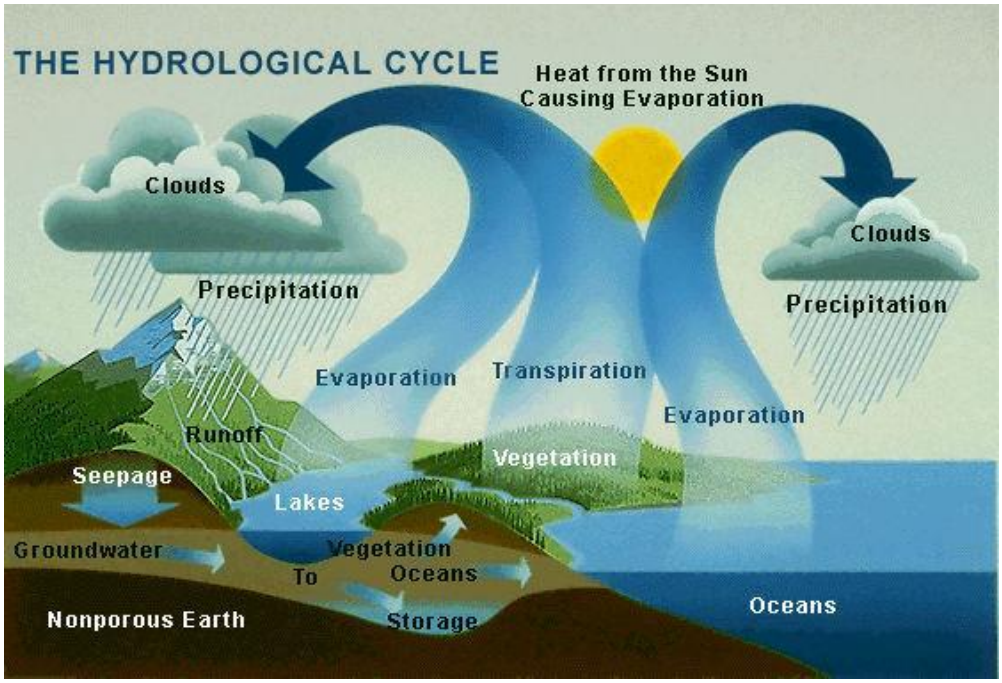

Figure 6: The Hydrological Cycle

From ECRA (European Climate Research Alliance) http://www.ecra-climate.eu/

Hydrofeminism prompts us to consider not only that we need water to live, but that we *are* water; it invites us to change our perception of our connection with the nonhuman from one of independence and dominion to one of

interdependence and respect. Hydrofeminism is a relatively new form of feminism, which has emerged from posthumanist, new materialist feminist and vital materialist thinking. Hydrofeminists such as Veronica Strang and Astrida Neimanis approach water as the living agential conduit between the discursive and the material, the human and nonhuman, the self and the other. Strang, engaging also with the work of Ingold, suggests that "water is useful in dissolving theoretical divides between 'textual' analyses of material culture and more abstract processual views of how 'human beings and other organisms are bound in webs of life'" (Ingold 2012, 428)" (Strang, 2014, p138). "We think with water both literally, as it enables the neurons via which thought is carried," argues Strang, "and metaphorically, by employing its properties to conceptualise notions of flow" (Strang, 2014, p135). Hydrofeminism posits that water can help us to materially understand human/nonhuman "co-substantiality," and as a result it can also help us to understand identity, interdependence and responsibility differently.

It is important to hydrofeminism that the material realities of water are identified as they move through places, via specific systems both human and nonhuman. Strang argues, after geographer David Harvey (2012), that "a useful way to articulate material relationality is to follow a water stream as it flows through a specific social and material context" (Strang, 2014, p143). Neimanis similarly suggests that "water calls on us to give an account of our own (very human) politics of location, even as this situatedness will always swim beyond our masterful grasp, finding confluence with other bodies and times" (Neimanis, 2017, p4). Paying attention to specific human and nonhuman social and material realities is something that I have attempted to do in *The Panarchy Projects,* in collaboration with a variety of neurodivergent and learning-disabled performers/collaborators (see Chapters 3 and 4), and in connection with a

variety of rivers and estuaries. Indeed, paying attention to specific human and nonhuman social and material realities while also connecting with broader concerns is something that I propose as critical to The Performic Cycle.

Like Strang in her work, I was interested in *The Panarchy Projects* to explore how "the flow of water between bodies and environments" can "lead to deeply relational ideas about common substance and connection: for example in imagining the co-identification of people and places" (Strang, 2014, p138). Strang's relational-material analysis includes looking at questions of resourcing, pollution and distribution at both local and global scales. For example, she analyses how "fresh water has been commodified and enclosed and […] 'disembedded' from its locality" (ibid, p146) across the world, and how "the privatization of water has direct impacts upon democracy, contributing to the disenfranchisement of all but a very powerful international elite of water owners and political decision-makers" (ibid, p148). Both Strang and Neimanis suggest that increasing instability in the hydrological cycle, water scarcity, flooding and toxicity *necessitate new ways of relating*, ways which acknowledge rather than deny our interconnections and interdependences across geographical areas and socio-political structures, across human and nonhuman differences, and across the material and the discursive. Thinking through water, argues Neimanis, through the knowledge that *we are* "bodies of water" (Neimanis, 2017) as well as *reliant upon* other bodies of water, offers us the potential to do this.

Hydrofeminism also builds on the vital materialist thinking of Donna Haraway, Bruno Latour and Jane Bennett, and on the posthumanist feminist thinking of Anna Tsing, Rosi Braidotti and Stacey Alaimo. It is interested in how realities and identities are not fixed but are constantly being constituted and reconstituted *in between* the shifting materialities of the biological, the environmental, the

social and the cultural, *in between* different modes of understanding, being and doing. The Performic Cycle brings this posthumanist /materialist understanding of the liminal "in between" quality of water into conversation with Schechner, Turner and Fischer-Lichte's performative/ anthropological understanding of liminality, through the concept of the adaptive cycle, as outlined in 2.1 above. It takes account of the specific, if shifting, *materialities* of the human/nonhuman, as well as of the shifting dynamics of their energetic feedback loops. It pays attention to the specific "politics of location" (Neimanis, 2017, p4) within which these shifts occur and to "the co-identification of people and places" (Strang, 2014, p138) that can develop as a result. From a practical dramaturgical point of view, this clearly locates The Performic Cycle, and *The Panarchy Projects* which have informed the Performic Cycle, within the field of site-specific performance practice.

Theatre scholar Mike Pearson, in *Site Specific Performance* (2010), outlines a number of contemporary understandings and approaches to site specific performance practice but resists settling on any single definition, preferring to identify three practical requirements: "an *activity*, an *audience* and a *place*" (Pearson, 2010, p19). Pearson, an interdisciplinary researcher and practitioner with an interest in anthropology, archaeology and cultural geography as well as performance, claims that site itself is not a fixed thing but "produced *through* and *in* interaction" (Pearson, 2010, p13).

Rivers both trouble and clarify the interactive concept of "site" as Pearson understands it. Rivers frustrate human desires to fix, dominate and control. Rivers are neither one thing nor another but shape shifting bodies, operating across multiple materialities, and across scales of space and time, always finding the path of least resistance, always finding a way to keep moving. Both

relentlessly active and absolutely passive, rivers change constantly with the earth that defines them. They change the shape and materiality of the earth both directly ("carving" rock and shaping landscapes over time) and indirectly (by nurturing biological life, including human life, whose processes have an impact on earth structures). They change as the earth they run through changes, across geological timescales, as the climate changes and as humans interfere with them to meet their own needs. They change as they meet dams or weirs, as they meet other rivers, as they release into the sea, or the earth, or the air. They loop and twist, meander, braid, flood, dry up and change direction, unlikely to ever return to where they came from. And yet, within human consciousness, and human timescales, rivers are often perceived as constant, familiar, sometimes threatening and sometimes calming but essentially enduring "bodily presences," as "sites" of work, home and leisure alike, as "co-identifiers" (with humans) of place.

Miwon Kwon, in *One Place After Another: Site-Specific Art and Locational Identity* suggests that in "art practices of the past thirty years the operative definition of the site has been transformed from a physical location - grounded, fixed, actual – to a discursive vector – ungrounded, fluid, virtual (Kwon, 2004, p29). Kwon appreciates the potential of a fluid/"nomadic" understanding of site to "dismantle […] traditional orthodoxies that would suppress differences, sometimes violently" (ibid, p165). However, she also argues that "adherence to the actuality of place […] may not be a lack of theoretical sophistication but a means of survival" (ibid). Although she is wary of "essentialized notions of national, racial, religious, and cultural identities in relation to geographical territories" (ibid), Kwon is equally wary of fluid notions of nomadic identities which emerge as "compensatory fantasy in response to the intensification of fragmentation and alienation wrought by a mobilised market economy" (ibid).

Kwon identifies what she understands as three intersecting "paradigms of site specificity – phenomenological, social/institutional, and discursive" (ibid, p30) and seems to favour a relational and dialectical approach which can "think the range of the seeming contradictions" (ibid, p166) between them all. Just as it is the relationship *between* "flow" and "sediment" that defines river forms and processes, so Kwon advises a dialectical approach to "site-oriented practices" that can work *between* "fluidity" and "sedentariness." Hydrofeminism picks up from this point of seeming contradiction. For hydrofeminists, human co-identifications with place (and with bodies of water) can be understood through a material "politics of location" *as well as* through phenomenological posthumanism and discursive experiments (Neimanis, 2017, p4). The Performic Cycle has emerged from river-centred performance explorations (*The Panarchy Projects*) which can be understood with reference to Kwon's thinking about site-specificity in conjunction with Schechner's thinking about social drama, and Neimanis' hydrofeminist thinking.

Different *Panarchy Projects* explored phenomenological, social/institutional and discursive aspects of site-specific performance practice in different ways and in different combinations, with a variety of different rivers and people, and I discuss these in Chapters 3 and 4. In the rest of this section I outline some of the key "water" and/or river-based site-specific performance *practices* that have influenced or inspired *The Panarchy Projects*. I do this with reference to Kwon's three paradigms of the discursive, the phenomenological and the social/institutional and with reference to the hydrofeminism of Neimanis and Strang. In doing so I hope to show that *The Panarchy Projects* responded to a number of gaps in contemporary water-based site-specific performance practice.

2.2.1 "Discursive" river practices

Minty Donald and Nick Millar's water-based *Guddling About*[5] (Donald 2015; 2016; 2019) performance practice is perhaps best understood through what Kwon calls the *discursive paradigm* of site-specific performance. Kwon characterizes discursive practice as an attempt "to engage (nonart) issues in the hearts and minds of the 'average man on the street'" (Kwon, 2004, p107). *Guddling About* works primarily across live/public art, science/environment and cultural geography/ heritage discourses, and embraces both phenomenology and material analysis. Recently, Donald has, like many artists working agentically with water, become interested in the work of Astrida Neimanis; she states, in a 2019 essay in *Geohumanities* that "the methods I use to evoke and reflect on the [*Guddling About*] performances have affinity with Astrida Neimanis' 'posthuman phenomenology' (2017)" (Donald, 2019, p594). Donald claims that "The paradox of Neimanis' posthuman phenomenology, which indorses the inescapability of 'body-subjects' while aspiring to inhabit a post or more-than-human world, is at the core of our performance practice and research imperatives" (ibid). The paradox that Donald refers to - the necessity of exploring the agency and materiality of the nonhuman through human processes - is the paradox that I make sense of in the interaction of negative (riverine) and positive (human) feedback loops in *The Panarchy Projects* (see Chapters 3 and 4). Where I approach the paradox of humans challenging anthropocentrism through human performance processes via feedback loops, dynamic energies of flow and the imperative of diversity, Donald and Millar approach this paradox through the material and discursive practice of *Guddling About.*

[5] https://guddlingabout.com/about/

"Guddling" is a Scottish word which has connotations of messiness and playfulness, as well as of catching fish by hand. Donald and Millar aim, through "guddling about," to "trouble" understandings of human-water interaction in the context of climate change. Donald defines guddling as "a practice through which human-environmental interrelations are mobilized, experienced, and attended to" (Donald, 2019, p 593), and the practice itself works through "ludic" laboratory type "performances," each of which are "devised in response to the particular watery context in which we are working" (ibid, p 596). Donald and Millar are concerned, like Strang and Neimanis, with the material qualities of the waters they work with, and they "typically spend time in each location, observing how water appears, moves, and disperses, and [observing] the local characteristics of human-water interaction" (ibid). They may "meet and speak to residents and experts," (ibid, p596) but they do not generally seek to share or perform human narratives or stories and they shy away from engaging directly with social or political agendas; their primary concern is to experience, observe and document the shifting materialities of the human and the "more than human" through their watery site-based interventions and improvisations, and to engage discursively with others interested in these materialities (including scientists, environmentalists, other artists, residents, urban planners and so on) in the process. This, they believe, will reveal its own social and political insights.

Donald and Millar's *Guddling About* work has directly inspired me both as an independent artist and as a practice-based researcher, and the Vital Materialist Storying method of the Performic Cycle (see Chapters 1 and 3) developed in part from engaging with their thinking and practices. However, *The Panarchy Projects* also diverge from Donald and Millers work in a number of key respects. Firstly, *The Panarchy Projects* explore the human/nonhuman paradox through the contradictory human/natural dynamics of The Performic Cycle,

through the mechanism of the 8, through feedback loops and the energetic and (kin/syn)aesthetic dynamics of flow. Secondly, *The Panarchy Projects* unashamedly nurture diverse *human* and *imaginative/poetic* narratives, and accounts of relationship with rivers and earth (see Chapter 3), and explore how these might be performed *in connection with* rivers and places, informed by a hydrofeminist understanding that "we are water." Thirdly, *The Panarchy Projects* do not shy away from activist, social or political discourses in either practice or theory, but are interested in exploring *the interactions between* social, aesthetic and environmental discourses, and in *intervening* in oppressive or stigmatising discourses through *dialogical* performance practices. As discussed above, *The Panarchy Projects* subvert or "queer" dominant ableist and anthropocentric discourses. They do this consciously by centring the voices, visions and accounts of performers who have traditionally been silenced or marginalised in both arts and ecological contexts– specifically neurodivergent performers– and also by centring the rivers which are important to these performers.

The two main rivers centred in *The Panarchy Projects* are the River Clyde and the River Forth and their tributaries. The Clyde and the Forth are two of the major rivers of Scotland; the River Clyde flows (north) west through the largest city of Scotland, Glasgow, on its way to meet the Atlantic Ocean, and the River Forth flows (south) east where it meets the North Sea in the capital city of Edinburgh. Between them there is a watershed. The Clyde and the Forth have inspired multiple, and sometimes conflicting, human stories, performances and cultural heritage discourses over time, and no doubt these will continue to evolve and change. In recent years there has been a concentration of discursive site-specific performance as research practice around discourses of heritage in Govan in Glasgow, an area formerly famous as a centre of the Clydeside

shipbuilding industry. Performance artist t.s.beall and cultural geographer Ruth Olden engage performatively with the Clyde at this site, in very different ways, both of which relate theoretically and dramaturgically to The Performic Cycle.

t.s.beall's work engages with the pan-European *Memory of Water* project, which defines itself as "an artist-led project exploring post-industrial cultural heritage on waterfront in the context of urban planning and community development."[6] The *Memory of Water* project is interested in engaging with local knowledge and questions of "heritage," "identity" and "culture," through commissioned artworks, participatory place-making practices, collaborative activities, performative events and the setting up of an interdisciplinary pan European cultural network. In one such project, *Strong Women of the Clydeside: Protests and Suffragettes*[7] (2013- ongoing), beall stages a number of participatory events and interventions celebrating the forgotten "strong women" of the Red Clydeside, activist union leaders and influential suffragettes such as Mary Barbour and Helen Crawford. beall's work is of interest to *The Panarchy Projects* not just because of its river-based performance interventions but also because of its feminist praxis. Where beall attempts to decentre the dominant patriarchal narrative and celebrate/ recentre the forgotten women of the Red Clydeside from a feminist perspective, *The Panarchy Projects* seek to decentre the dominant *ableist* narrative from a disability studies perspective, and to celebrate/centre contemporary neurodivergent and learning-disabled peoples stories, experiences and voices in connection with the Clyde and Forth river networks. beall's *Strong Women of the Clydeside* project recentres influential female figures who have been side-lined in patriarchal Clydeside heritage discourses. Most of *The Panarchy Projects* centre people whose everyday

[6] https://www.memoryofwater.eu

[7] http://wovenart.works/beall

stories and relationships with river environments have *never* been influential in dominant patriarchal and capitalist river heritage discourses.

The second Govan-based "discursive" practice which has influenced *The Panarchy Projects*, is cultural geographer Ruth Olden's creative research practice at the Govan graving docks, a practice that she developed at the University of Glasgow as part of her PhD thesis. Olden takes a "critically vitalist"/ "minimal ethics" (Olden, 2017, p513) approach to the decline of the formerly industrial area. Olden traces the life in the ruins of the "unresolved" site of the Govan graving docks, including the return of biological life, long suppressed or contaminated by the pollution of the shipbuilding industry, and now threatened again by capitalist redevelopment of the river. Olden writes about her engagements or "stagings" with a number of human and nonhuman "actants," and of the precarity of biological as well as human life that she encounters along the river. She makes a series of collaborative performance interventions in a creative research practice which she describes as "creative pragmatics," "part craft, part graft" (Olden, 2017, p528), and she proposes a minimal ethics practice that is "sensitive to the violence that is inherent to material and conceptual differentiation (and to the processes of co-emergence and co-dependency that they enable)." Minimal ethics, she argues, building on the work of cultural theorist Joanna Zylinska "works out the 'possibilities for making . . . better differences across various scales' to minimize this violence (Zylinska 2015, 181). In short, minimal ethics is one 'that makes sense—and that senses its own making' (Zylinska 2014, 180)" (Olden, 2017, p 514).

Olden's work engages at various points with members of the GalGael Trust[8], a "working community" and social justice organisation which emerged in the 1990's from the environmental activism of Colin MacLeod, the ecowarrior, or "BirdMan" of the Pollok Free State,[9] and the thinking of "spiritual activist," ecologist and visionary Alastair McIntosh (2001; 2016). GalGael actively seeks to rebuild community and connection with the River Clyde in an area decimated by the loss of the shipbuilding industry (see Derickson, 2016). It seeks to do so not just through reviving traditional boatbuilding skills but also through exploring new relations, aesthetics and ethics of care, work and respect across human and nonhuman materialities. Many of its activities could be understood as performances of resistance (Hekman, 2008) to the identity of hopelessness imposed upon a community first defined and then decimated by the vagaries of human industrialisation and capitalism. The Galgael Trust celebrates and nurtures our interdependences with each other and with the Clyde. Three of the *Panarchy Projects (Panarchy 1, Panarchy 3* and *not panicky*, all of which explored performers living connections with the River Clyde and its tributaries) speak to the vision and practices of the Galgael Trust (see Chapter 3).

While connected to the work of the Galgael Trust, Olden's activism is a quieter, what she calls "critically vitalist" one. She intervenes, or "cuts into" (Olden, 2017, p 514) life, in order to enact "quiet moments of sociality and knowledge building" and "small acts of resistance" (ibid, p518). Olden's work is, like Donald & Millar's *Guddling About*, of particular interest to the Vital Materialist Storying side of *The Panarchy Projects* performance practice, and to the

[8] https://www.galgael.org

[9] The Pollok Free State was an activist organisation protesting against the building of the M77 motorway through public woodlands in Pollok in Glasgow

challenging of the anthropocentric bias in cultural heritage discourses. I see Olden's work as an attempt to bring the material and the discursive together through a practice of critical vitalism, and in this respect it is resonant with the thinking of The Performic Cycle, if different in approach and aesthetic. It would appear that Olden's work (alongside a more front-facing activist campaign) has helped to promote ongoing consideration of the Graving docks as a heritage site, as opposed to a commercial redevelopment site. The fact that the Graving Docks site continues to be a contested one, might itself support Olden's arguments for the potency of a critically vitalist "minimal ethics."

Donald and Millar's *Guddling About* work and Olden's critical vitalist work are both concerned with the specific materialities of the landscapes they work with, and with intervening in dominant discourses through a vital materialist "site specific" practice which decentres the human. The Performic Cycle similarly seeks to decentre the human, however it does not seek to get rid of the human altogether. Indeed, *The Panarchy Projects*, as mentioned above, are explicitly concerned with the material realities, experiences and stories of humans, not just in relation to riverine materialities and heritage discourses, but also in relation to socio-political discourses, and in this respect they also speak directly to the work of beall and the Galgael Trust. Unlike the work of beall, however, *The Panarchy Projects* primarily support and centre the riverine experiences of neurodivergent humans, and stage performances of these relationships in conscious living connection with the dynamic energies of rivers and estuaries. I would argue, therefore, that *The Panarchy Projects*, and The Performic Cycle model of practice they have informed, both speak to and fill a gap in contemporary discursive river-based performance practice.

2.2.2 "Phenomenological" river practices

The second "paradigm for [site specific] performance practice" that Kwon refers to, is the "phenomenological paradigm," of "lived bodily experience" (Kwon, 2004, p12). "Phenomenological" river-based performance practices, although sometimes explored through a discursive/vital materialist lens (Donald & Miller, 2019; Olden, 2017), tend to refer to bodily and somatic experiences and performative expressions of human connections with rivers, and as such they relate as much to the *Bodyworlding* method of The Performic Cycle, as to the *Vital Materialist Storying* one.

Bodyworlding is a term coined by dance practitioner and scholar Erin Manning, who explored the concept, with philosopher Brian Massumi (2014) in relation to what she describes as the affective and "pre-cognitive" dimensions of autistic experience and movement with the world. For Manning, bodyworlding is a process of being "one with the world, not body/world but bodyworlding."[10] She refers to the *In My Language* video work of autistic blogger Amanda Baggs[11] as an example of autistic bodyworlding in action (Baggs, 2007). Baggs explores in her video work how she communicates with the world energetically through practices such as stimming, flapping and rocking. These communications are not portrayed as one-way expressions of defectiveness, but as expressions of human/nonhuman connection and relationship; an important aspect of Baggs' work is the reclaiming of behaviours labelled defective by ableist medical discourses as behaviours of complex and vital interaction with a dynamic moving world.

[10] http://erinmovement.com/dance accessed 7th November 2020

[11] http://www.interactingwithautism.com/section/understanding/media/representations/details/12 accessed at various times between 2016-2021

In *The Panarchy Projects*, I bring Manning's and Baggs' "bodyworlding" into conversation with Neimanis' hydrofeminism to develop a specific kind of "riverworlding." There are a number of artists whose work directly influenced some of the "riverworlding" movement practices I explored with collaborators. Performance artist Hannah Tuulikki is one of these artists. Tuulikki's ecological performance work is primarily interested in mimesis, and in the creation of vocal and movement "scores" through which to articulate mimetic processes. Tuulikki's *Sourcemouth: Liquidbody* (2016) was commissioned by Kochi-Muziris Biennale, an international exhibition of contemporary art held in the city of Kochi in Kerala, India. On her website Tuulikki describes *Sourcemouth: Liquidbody* as "an audiovisual installation, featuring a visual-score and suite of films incorporating choreography, vocal composition, and costume. The installation flows between gesture and sound, inspired by the mnemonic landscapes of India and the relationships between river-systems and the human body."[12] As part of her creative process Tuulikki consulted with local artists and took lessons from Kapila Venu, a leading practitioner in Kutiyattam, a form of Sanskrit theatre practice that Tuulikki then embedded into her performance. In her blog about the project, Tuulikki describes a part of this process:

> Kapila explained how I must visualise a high mountain ahead of me, slowly taking my eyes to the summit, and once there, wait for the rain to fall. It was a purposeful meditation and, in his book on Kutiyattam, Kapila's father G. Venu writes *"The acting is done in such a manner as to make the presence of the absent object felt realistically in the mind of the viewers".* What was required was beyond 'imagining', but to really *see* and *feel* the single raindrops falling, to *see* and *feel* the river,

[12] https://www.hannatuulikki.org/portfolio/sourcemouth-liquidbody/

> and thus *become* the rain and river, transforming the eyes into raindrops and flowing water.[13]

In Tuulikki's sensitively and expertly crafted final piece we certainly get a strong sense of "the river". We also get, both from the work, and from Tuulikki's descriptions of her processes, a strong sense of a deep and rich cultural understanding of human/riverine entanglement in the Kutiyattam theatre tradition. In terms of the performance of conflicting riverine/human feedback loop dynamics that The Performic Cycle model of practice explores (see 2.1 above), this work is fascinating. Through mimesis, and as instructed by the Kutiyattam tradition, does Tuulikki's practice collapse, momentarily, the conflicting feedback dynamic of the human and the riverine, the cultural and the natural? By observing, "scoring", embodying and performing the dynamic energies of the river, is Tuulikki's performance at once human and beyond the human, or "more than human?" Is it working *aesthetically* and *kinaesthetically* with "The paradox of […] posthuman phenomenology" (Donald, 2019, p594)?

Perhaps it is. At least in part. At least momentarily. However, there is a trade-off for the near perfection of this phenomenological abstraction, and the cost is material specificity. Ultimately, we get no sense of any particular river in Tuulikki's beautiful work, or of the material realities of any humans who live in connection with any river. The hydrofeminist thinking of Neimanis and Strang suggests that paying attention to specificity can lead to a "politics of location," something that is needed to cultivate new relations of respect and responsibility across the material and the phenomenological. This, I would argue, is missing from Tuulikki's work. We get an abstract sense of "the river" in *Sourcemouth: Liquidbody* and an aesthetic sense of "the human" embodiment of this in Indian

[13] https://hannatuulikkdiary.tumblr.com/post/155120386636/sourcemouth-liquidbody

culture, as interpreted by Tuulikki. But an abstract sense of "the river" is a very human concept. Rivers themselves are much more materially specific and diverse, as are humans, and it is this diversity and multiplicity which is identified by Gunderson & Holling in panarchic thinking, as being the key to ecosystem survival. *The Panarchy Projects* are interested in phenomenology, and engage in their own abstract, poetic, kinaesthetic and mythic explorations of being in connection with rivers (see Chapters 3 and 4), but they are also interested in *diversity*, and in the diverse *specificities* and living material realities of both rivers and people. In exploring material realities *alongside* not just discursive modes but also phenomenological abstractions, *The Panarchy Projects* aimed to open up opportunities for exploring alternative ways of "assembling" – not just ways of "being" but also ways of "doing" - across human and nonhuman differences, according to the experiences, needs and/or desires of the performers engaging with them, and the material realities of the rivers we were engaging with. This meant that unlike Tuulikki's work, they were sometimes messy and sometimes noisy, sometimes still in the process of becoming, sometimes "odd" or uncategorisable, and rarely traditional or classical.

Glasgow-based dance artist Saffy Setohy is another artist whose work has inspired *The Panarchy Projects*. Setohy's dance piece *Bodies of Water*[14] (2019 - ongoing), shares its name with Neimanis' 2017 book, *Bodies of Water: Posthumanist Feminist Phenomenology* and it works across the phenomenological and the social/institutional paradigms identified by Kwon. Setohy's work evolved from participatory workshops with a rural community in the Highlands of Scotland, in which she and her collaborators were the expert artists. The *Bodies of Water* piece attempts to "connect communities" through a

[14] https://www.saffysetohy.co.uk/bodies-of-water

variety of innovative practices. Firstly, Setohy exhibits, in the performance space, materials such as stones and shells which she informs the audience were collected during earlier workshops with a rural community. Secondly, she extends activities explored with participants and audiences of earlier workshops and performances to the current audience through a paired activity on arrival. In this activity, audience members create a small clay bowl together, each using only one hand. These bowls are then gifted for the next performance, and audience members are instructed to choose a different bowl, made by a previous audience member, to take into the circular performance space. Later, the audience passes water round this circle, from tiny bowl to tiny bowl. In this way Setohy connects people and audiences over space and time and plays with ideas of the receptivity, connectivity and relationality of earth and water, as well as of the receptivity, connectivity and relationality of humans. However, as in Tuulikki's performance, neither bodies of water nor earth, neither places nor humans are named in the piece. The water connection is abstract and the opportunity to build a "politics of location" is lost. Unlike the practice-based research of Tessa Buddle (Buddle, 2020), whose innovative research proposes a carnivalesque touring model of practice which connects communities and audiences across diverse politics of location through sharing specific stories, expressions, laughter and "gifted" objects, *Bodies of Water* does not tell us anything about the community it started with, nor any subsequent communities; not where they are, nor the rivers or waterways which run through them, or what people think or feel about them. We do not know where the clay has come from that the bowls are made from, nor where the water has come from that is being passed around from bowl to bowl, or anything about any of the other communities who have engaged with the piece on its journey. What we do get is an *abstract* and phenomenological *sense* of being connected with and through water and earth.

Setohy and Tuulikki's "phenomenological" river and water-based dance pieces speak to the Bodyworlding and movement practices of *The Panarchy Projects*, and to the dynamic/energetic/kinaesthetic understandings of The Performic Cycle dramaturgy. Tuulikki's piece momentarily collapses the contradictory dynamics of the directionally opposite human/riverine feedback loops through mimesis, and Setohy's gentle sensual offerings and fluid hydrofeminist choreography bring audiences into a more active awareness of the water moving within, between and around us all. Although both pieces work with the "paradox of posthumanism," and begin to shift out of the "front loop" of the adaptive cycle phases of growth and conservation and into the "back loop" of release, neither quite get to Reorganisation, or manage to create a "politics of location." For me, this is where *The Panarchy Projects,* and The Performic Cycle, bring something new to the field of phenomenological water-based performance practice.

The movement work of *The Panarchy Projects* develops by and with the rivers or watercourses with which the performers identify living connections, and this is as important to the aesthetic exploration of the apparently contradictory human/riverine dynamic in the work, as it is to the development of a "politics of location." Performance processes in The Performic Cycle model of practice, as proposed in this thesis, move *through* dynamics of Release and into dynamics of Reorganisation, through processes of critical reflection. It is in doing this that The Performic Cycle opens up possibilities for change, and relates most specifically to the social/institutional paradigm of site-specific art identified by Kwon.

2.2.3 "Social/institutional" river practices

Working with a "politics of location" raises complex social and aesthetic questions regarding community, collectivity, agency, intention and integrity, some of which I introduced in Chapter 1 and built on with reference to Schechner's social model of drama in Chapter 2.1. In Kwon's analysis of the "social/institutional paradigm" of site-specific art, "the interaction between an artist and a given community group is not based on a direct, unmediated relationship. Instead it is circumscribed within a more complex network of motivations, expectations and projections of all involved" (Kwon, 2004, p141). Contemporary artists such as Basia Irland[15] and Stephen Scott-Bottoms, both employ *participatory* practices in their river-based work, albeit in very different ways, and in doing so address some of the complexities of the social/institutional paradigm as outlined by Kwon. I suggest in this section that *The Panarchy Projects* fill a gap in Irland and Scott-Bottoms' performative and participatory explorations of human/riverine interaction, but are also limited by their own social/institutional context.

Participatory practices are common in site-specific performance work with rivers, and generally aim to make art-works or perform processes which bring diverse communities and rivers together. These projects are often initiated and/or delivered by artists or performance artists who themselves have a developed working connection with rivers and water, and/or who themselves live in the river catchment area.

In the artistic statement on her website, USA-based visual artist Basia Irland says of her long-term river-based practices that she hopes "to offer a creative

[15] https://www.basiairland.com

perspective of water while examining how communities of people, plants, and animals rely on this vital element." She seeks out "work with scholars from diverse disciplines building rainwater harvesting systems, connecting communities and fostering dialogue along the entire length of rivers."[16] Irland brings her skills and experiences and her artistic and intellectual processes to riverine landscapes, and hopes to use them, as in the work of Donald & Millar or Setohy in the Scottish context to "foster dialogue" or to "connect communities" through creative projects and interventions. The work is large in scale, interdisciplinary in execution and international in scope, while also rigorous in its explorations of material specificity. Irland has travelled the world "connecting communities" through participatory artwork with rivers, and has developed significant expertise and a substantial body of artwork in the process. But could such work, especially in contexts where the communities "being connected" might have long and fractious histories with each other, be considered colonial and appropriative, presuming that the privileged status of "artist" or "researcher" somehow gives the right to intervene in complex relationships one has no lived experience of? Donald & Millar avoid this danger by their ludic laboratory-style "Guddling;" they do not claim to or seek to intervene in established dynamics, rather they offer opportunities to play or experiment or talk. Setohy avoids this danger by not naming the particular communities or rivers she engages with and by working through the phenomenological abstraction of water. But as I have already mentioned, this means ultimately that the opportunity to create community or a politics of location able to act together, in connection with rivers, is lost.

Many of Irland's projects seem to work on the presumption that the expert outsider/artist perspective enables interventions that it might be impossible for

[16] www.basiairland.com

"insider" communities to make given the embedded power dynamics that might be at play (Kwon, 2004). In making such interventions does such large-scale participatory work open up new possibilities of being together, new ways of "making kin" and "staying with the trouble?" (Haraway, 2016) Or does it undermine them? Irland's impressive work raises these questions for me, although it does not resolve them, and they are questions which resonate with the questions about power dynamics in participatory research action work that I discussed in Chapter 1.2 above.

Unlike many of Irland's projects, the bulk of *The Panarchy Projects* emerged from existing, and ongoing relationships both human and riverine. Both myself and performers, as well as organisational partners, many audience members and spectators, had ongoing lived relationships with the communities, institutions and rivers in each project. The projects were focussed on nurturing these connections in an expansive way, that did not reduce them to local explorations of no interest to anyone from outside of the locality, or bury them in the oppressive normative discourses of the local areas being explored, but which emerged from them and which initiated new kinds of dialogue with them. The powerful agency of water, and the relentless flow of rivers themselves, coupled with the diversity of the performers and the experimental practices we explored, ensured that the work could both speak to local dynamics and travel/make new connections. Indeed, every project moved and travelled with the rivers in question, mapping them as they joined with other rivers and other people, and made their way to the sea. But every project also explored questions of identity and home, resistance and solidarity in a world of flux and ever-shifting power dynamics. It was important to *The Panarchy Projects* that the creative individuals and communities who engaged with the work co-determined how the work travelled, and where it travelled to. *The Panarchy Projects* nurtured

connection between performers, audiences and rivers, across various scales. They also promoted neurodivergent agency in a wider context of ableism, and explored riverine agency in a wider context of anthropocentrism. In order for them to do this, I had to continuously challenge my own internalised ableisms (see 2.3) and anthropocentricities, my own need to control, my own positioning and my own privileges as the facilitator of the practice-based research processes. We all had to learn to trust each other, to release our own egos and "go with the flow" when necessary. It was the rivers we engaged with that were the primary facilitators in that respect.

UK-based theatre practitioner and theatre studies scholar Stephen Scott-Bottoms also explores the connective and participatory capacity of performance work with rivers and other water bodies, and like *The Panarchy Projects*, his longitudinal "Multi-Story Water" project (2012 - 2017), was committed to specific local communities in his exploration of this. According to Scott-Bottoms, *Multi-Story Water*, a "community-focused arts research project" based in his native West Yorkshire,

> explored local people's connections with the water environment — the pleasures water brings, the memories it holds, the risks it poses, and our responsibilities for it. A range of concerns were explored through conversations with and among community members, and this research was then translated into creative activities that could be shared with residents in a kind of continuing 'feedback loop.'[17]

This articulation of a feedback loop working between residents, artists, researchers and rivers resonates with the thinking of The Performic Cycle,

[17] From http://multi-story-shipley.co.uk,

despite being very different in its dramatrugical approach (see below) and Scott-Bottoms' iteration of it brings Fischer-Lichte's autopoietic feedback loop to mind. Scott-Bottoms has developed his participatory Yorkshire-based water work in partnership with a wider UK study into the possibilities of nurturing "hydrocitizenship" through arts processes.[18] Scott-Bottoms' work focusses on dialogic (or what he alternately calls relational) arts processes (Scott-Bottoms & Roe, 2020). His playful research into hydrocitizenship resonates with Donald & Millar's discursive *Guddling About* practice as well as my own work with *The Panarchy Projects*, in particular the *Panarchy 4* project (see Chapter 3.4). While I have not experienced any of Scott-Bottoms' (or Irland's) work live, and am therefore basing my analysis of their work on their writings and on a variety of printed, digital and media documentation, I perceive a number of important differences between Scott-Bottoms' practice and my own. Firstly, Scott-Bottoms' "experts," like those of both Irland and Donald & Millar, are primarily "water professionals" and theatre/arts professionals, rather than residents. Secondly, he seems to shy away from committing to any direct social action or socio-political analysis. Unlike Irland or Donald & Millar (but like myself), he explicitly refers to using a participatory action research (PAR) methodology with the group of water professionals he worked with in the hydrocitizenship project. However, Scott-Bottoms qualifies this by saying "the version of PAR that underpinned the group's conversations was one which laid aside the identification of particular objectives, in favour of a process of ongoing responsivity to each other and to the shifting conversational context" (Scott-Bottoms & Roe, 2020, Section 3.1). This "laying aside" of shared objectives was for pragmatic reasons, but could also be understood with regard to power differentials. Whereas the participants in Scott-Bottoms' study were in a

[18] From https://www.hydrocitizenship.com

position of power with regard to dominant hydro-discourses, the participants of *The Panarchy Projects* were largely in an outsider position of relative powerlessness with regard to hydro-discourses, at least at the outset of the projects. What was similar in the two projects was a commitment to "rehearse alternative perspectives" in the interests of "cultural change" (ibid, Section 5). The third significant difference I perceive between Scott-Bottoms' work and my own is with regard to his reference to feedback loops in his "Multi-Story Water" work (see above). In *The Panarchy Projects* the feedback loop in both its positive and negative incarnations, is explored panarchically, aesthetically and conceptually *within the art-work itself* (see Chapters 3 and 4) and through the relationship between human performers and rivers, as well as in the theorising of the art-works and the relationship between performers and audiences. Furthermore, The Performic Cycle model which emerged from *The Panarchy Projects* is interested in transitions *across and out of* loops, as well as in the positive and negative dynamics of loops themselves as they operate across human and nonhuman dimensions. In exploring *transitions*, as well as loops, The Performic Cycle supports explorations of resistance, change and adaptation as well as of resilience and human/nonhuman responsibility/responsivity. It is the neurodivergent performers and artists, in connection with the rivers they live by, or water landscapes they identify, that drive these explorations, and this is also a crucial component of The Performic Cycle. The Performic Cycle, as a dramaturgy, does not just operate across the social, the aesthetic and the hydrological. It also works across the neurological. The diversity that *The Panarchy Projects* sought to celebrate and nurture was not just social diversity, geodiversity or biodiversity, but also neurodiversity.

2.3 THE INFINITE CYCLE OF NEURODIVERSITY

The symbol adopted by the neurodiversity movement is, like the panarchic adaptive cycle symbol developed by Gunderson & Holling, and the social drama symbol developed by Schechner, an infinity loop, an "8," a rainbow-coloured celebration of the life-enhancing force of diversity. It was first claimed by autistic activists who were resisting the ableist symbol of the jigsaw puzzle, which was used (mostly by non-autistic people and organisations) to denote that autistic people were "puzzling" or "had a piece missing."

Figure 7: The neurodiversity rainbow infinity sign
From the Autism Wiki, *https://autism.wikia.org/wiki/Neurodiversity* accessed 29th June, 2020

As detailed above, diversity is understood to be essential in ecological and panarchic thinking about sustainability. Too much focus on the Growth and Conservation phases of the life cycle, something that typifies most human capitalist systems, and capitalist conservation discourses, occurs at the expense of the Release and Reorganisation phases which are essential to the nurturing of diversity. Diversity is essential to ensuring resilient and sustainable ecosystems. Diversity is also, clearly, essential to neurodiversity thinking. Given that our neurologies are a complex imbricated part of the human/nonhuman, biotic/abiotic, fluid/solid mix that makes up life (Haraway, 2016), it would follow that neurological diversity is as important as any other form of diversity in maintaining ecosystem resilience.

2.3.1 Neurodiversity as a political category

The term neurodiversity is attributed to Australian writer and activist Judith Singer, who first explored it in her PhD thesis, presented in 1998. On the back of her PhD, and reflecting on her own personal experience, Singer wrote an essay "'Why can't you be normal for once in your life?' From a 'problem with no name' to the emergence of a new category of difference" (Singer, 1999). In this essay, Singer charts her journey from internalized ableism to affirmation of difference, positioning her "personal struggles in the middle of three generations of women 'on the spectrum'" as "part of the birth throes of a new category of human difference coming to awareness, a new way of perceiving" (ibid, p 63). Singer calls this category of human difference neurodiversity.

Singer's essay was published in *Disability Discourse,* a book edited by disability scholars Mairian Corker and Sally French (Corker & French, 1999). *Disability Discourse* came from Corker and French's "uneasiness" with the failure of disability theory to "conceptualize a mutually constitutive relationship between impairment and disability which is both materially and discursively (socially) produced" (Corker & French, 1999, p6). Their book was a conscious attempt to platform voices, experiences and understandings that were not being heard in the usually male and physical disability-dominated material analyses of disability that were dominant at the time. They wanted to add a "body of 'new' knowledges to disability studies, along with alternative ways of theorizing disability and being disabled which will increase the repertoire of resources that disabled people can draw upon in challenging disability oppression" (ibid, p11). *Disability Discourse* was a crucial text in a new wave of disability studies scholarship now defined by what Tom Shakespeare and Nick Watson have

called “critical realism” (Shakespeare & Watson, 2001) and by what Carol Thomas has called “psycho-emotional disablism.” (Thomas, 1999). Critical realism is a disability studies paradigm generally aligned with the social model of disability, which was founded by activists Paul Hunt and Vic Finkelstein of the Union of the Physically Impaired Against Segregation (founded in 1972) and built on theoretically by scholar Michael Oliver (1990) among others. The social model argues that the oppression of disabled people is linked with the material changes associated with capitalism, and is “culturally produced through the relationship between the mode of production and the central values of society” (Riddell & Watson, 2003, p6). Critical realism challenges the basic social model tenet that disability is only materially produced, and it does so by bringing in cultural studies thinking and philosophical (including interactionist and phenomenological) thinking from medical sociology, and by arguing that impairment effects and related human suffering can exist outside the cultural/material production of disability. Thomas’s psycho-emotional disablism is similarly aligned with the social model of disability, but is rooted in feminist theory, and informed by social psychology, postmodernism, poststructuralism and cultural studies. Thomas argues, crucially, that disability can be invisible as well as visible, it can be psychological and emotional as well as physical. Her challenge is essentially to the *separation* of disability and impairment that characterizes both social model and critical realist thinking:

> by relegating psycho-emotional consequences of living in a disabling world to the realms of ‘private life’ or ‘the personal restrictions of impairment’ (Oliver 1996: 48), key dimensions of disability are ignored. The manifestations of disability are thus mistaken for the psychological angst of ‘personal troubles’ (Thomas 2004).

It is in this context of a feminist and critical realist reworking of the social model of disability, that the political and theoretical category of neurodiversity emerged, and which I would argue defines neurodiversity both theoretically and politically. Singer positions this "politics of neurological diversity," or "neurodiversity," as "a new addition to the familiar political categories of class/gender/race" and as one which "will augment the insights of the social model of disability" (Singer, 1999, p64). She references Donna Williams' (1992) autistic autobiography and Oliver Sack's (1995) account of autistic scientist Temple Grandin as being particularly influential in her thinking about neurodiversity because of their debunking of the cultural stereotypes of autism. Singer realised that "you didn't have to have learning disabilities or lack emotional awareness to be autistic" (Singer, 1999, p 62) and that autism was a vast spectrum with many different iterations, and many strengths. At the end of her essay, Singer calls for an affirmative understanding of autism and neurodiversity, for "the voices of the neurologically different" to be "heard more loudly," in the hope that this might lead to "a more ecological view of society […]: one that is more relaxed about different styles of being, that will be content to let each individual find her/his own niche" (ibid, p67).

Since the publication of this article, neurodiversity has grown exponentially as a field of study, with critical autism scholars such as Damian Milton (2013; 2017) and melanie yergeau (2018) deepening critical realist and social model analyses of autism, and writers such as Nick Walker, Steve Silberman (2015) and Thomas Armstrong (2011) deepening Singer's affirmative and intersectional understanding of neurodiversity, and opening neurodiversity as a concept out to include learning disabilities and a variety of other neurological differences including dyspraxia, dyslexia, ADHD, mental health conditions and epilepsy. This broad understanding of neurodiversity is contested by some

scholars (Jaarsma & Welin, 2012) who believe neurodiversity should only be understood as being about "high functioning" autism, but it is *generally* understood (Chapman, 2020) to encompass a vast range of neurological differences. As a *movement*, neurodiversity has come to symbolise solidarity between people of all different kinds who are discriminated against, disadvantaged or stigmatised (in whatever way) on account of being neurologically different from the norm. Twenty years after the publication of Singer's groundbreaking essay, neurodiversity is finally claiming its place as "a new critical paradigm" (Bertilsdotter Rosqvist, Chown & Stenning, 2020). Within this paradigm, and in part informing it, is a rapidly evolving, if still very emergent field of "neurodiversity arts." *The Panarchy Projects* can be understood as contributing to this emergent field, specifically from an ecological perspective.

2.3.2 Autistic autobiographies

The Panarchy Projects were all neurodivergent led, with a focus on the neurodivergences of learning disability and autism. Critical autism scholar melanie yergeau suggests that autism is "a constellation of stories - stories about humanity and hierarchy, stories about diagnosis and detection and prevention" (yergeau, 2018, p20). "The autistic subject," she claims, "queer in motion and being, has been clinically crafted as a subject in need of disciplining and normalization" (ibid, p26). She identifies that the ABA behavioural programme designed to "treat" autistic people (in the USA) is the same oppressive therapeutic model that was used in gay conversion therapies in the 1960's and 1970's. She proposes the neurologically queer, or "neuroqueer" identity, as one

which resists the "compulsory sociality" (ibid, p27) of heteronormativity and ableism.

If we build on yergeau's premise, that one of the strengths of neurodiversity is its innate *refusal* of the compulsory sociality that defines neuronormativity, then we can understand theoretically how a neurodivergent-led performance practice might be able to challenge, "queer" and reconceptualise the "social drama" model proposed first by Schechner in the 1970's, and built on by Fischer-Lichte and others in the early twenty-first century. Schechner's "social drama" relies on a set of assumptions based on human normativity, on some things being visible, for example, and other things being invisible. It is arguably this set of agreed assumptions that enables the "positive feedback loop" dynamic. When this set of assumptions is "innately refused" however (and yergeau's analysis suggests that the refusal is not necessarily chosen by neurodivergent people, it is innate to our being) then the positive feedback loop is "queered," and this opens out the possibility of *other* energetic or looped dynamics entering the performance dynamics, including riverine dynamics. This will clearly change the aesthetic of the work, and lead to innovations of both form and content, whether these innovations are appreciated by the dominant social structure and performance world or not. It will also introduce new ways of communicating (about) the work, none of which will be the same as each other. O'Dell et al (2016) understand neurodiversity (with a focus on autism) with reference to Hacking's (1995, 2002) ideas of looping, and are critical of both medical/deficit-driven understandings of autism and rigid identity-driven understandings of autism. "It is imperative," they argue, "that critical autism approaches account for the experience of people with autism who reject identity categorisations outright, or who think about their identities in fluid ways that defy rigid constructions of identity that might be advanced by more

conventional accounts in disability scholarship" (O'Dell et al, 2016, p175). The work of *The Panarchy Projects* would back this up (see Chapter 4) and working with river dynamics certainly helped us to keep thinking "in fluid ways that defy rigid constructions of identity" (ibid). This "fluid" river thinking does not deny, but rather reaffirms the importance, indeed the imperative, of both diversity and solidarity. River dynamics are, after all, a complex ever-changing interaction of force and resistance, sediment and flow.

yergeau argues that the "environmental" or social model of disability has been (and remains) a crucial force to all those who are neurologically different and oppressed as a result of that difference. However, she argues, following Thomas (1999; 2004; 2007), that the phenomenological and psycho-emotional aspects of autistic experience also demand to be taken into account. Indeed, it is to a large extent the "contradictoriness" of autism, "the tendrils of sensation and interrelation that invent knowledge and mediate autistic experience" (yergeau, 2018, p116) that yergeau is interested in.

Exploring and expressing these "tendrils of sensation and interrelation" (ibid) is something that is at the heart of the Bodyworlding and "riverworlding" practices in The Performic Cycle dramaturgy, as introduced above with reference to the work of dance practitioner and scholar Erin Manning, and autistic blogger Amanda Baggs. Autistic cultural geographer Sara Judge (2018) develops this idea of autistic "bodyworlding" from a "non-representational" cultural geography perspective. She develops it from being a form of expression (Manning, 2012) and communication (Baggs, 2007) with the world to being a form of *knowledge production* (yergeau, 2018) in the world. Judge feels particularly connected to water, and in a way that brings the hydrofeminist work

of Neimanis as much as the autistic work of Manning, Baggs and yergeau to mind, she argues that:

> understanding waterways as communicative entities is an inherent part of how I think about them, largely because of the synesthetic (Robertson and Sagiv, 2004) way that my brain processes auditory information, eliciting visual, proprioceptive and tactile accompaniments. The sound of water looks and feels similar to human and non-human voices according to my senses, it has never occurred to me that a river is any less communicative than a bird or a human (Judge, 2018, p1111).

Citing Haraway (1988), Judge argues that her experiences "can constitute data as 'a view from somewhere'" (ibid) and she is interested in challenging "notions of the autistic and non-human as socially or communicatively deficit, whilst simultaneously enriching work around water as an autonomous entity" (ibid). But to do this, she argues, she needs "to be able to express" (ibid) her experiences. Judge refers to the "autistic autobiographies" work of cultural geographer Joyce Davidson (2009; 2010) as one possible means of expression, and as an important precedent in validating the knowledge created in autistic accounts of experience.

The Panarchy Projects supported participating performers to find ways of expressing their lived experiences and living connections with rivers and estuaries. The projects supported a variety of neurodivergent performers to express these experiences in the ways that they wanted – whether this was through autobiographical performances, through engagements with materials and materiality, through hydro/eco discourses or through movement,

mythology, poetry, film or sound. The work of *The Panarchy Projects* was concerned with finding different ways to express the "tendrils of sensation and interrelation" (yergeau, 2018, p116) that make up our experiences in relationship with rivers, with a focus on learning disabled and autistic people's experiences.

2.3.3 Autistic flow states

There is a growing body of environmental humanities and disability studies scholarship which is interested in how disabled people have traditionally been "othered" in environmental discourses in the Western capitalist world (Ray, 2013; Kafer, 2013; Fenney, 2017; Ray & Sibara, 2017; Mitchell & Snyder, 2017; Clare, 2017), and with how "nonnormative bodies and minds can reframe what it means to be an environmentalist" (Mitchell & Snyder, 2017, p 553). For example, Mitchell & Snyder argue that "crip and queer lives explicated through nonnormative positivism are those that believe another world is possible" and that "such worlds will not come into existence unless we "vigilantly attend to more visceral engagements with the nuances of disabled lives as viable alternatives" (ibid, p570).

One of the many nuances of neurodivergent experience which emerged repeatedly in the neurodivergent and river-led *Panarchy Projects* is what critical autism scholar Damian Milton calls "autistic flow states." According to Milton (2017) the ability of – and sometimes necessity for –autistic people to access "flow states" can be understood as a defining autistic behaviour. The ability to enter flow states, for example to become completely immersed in an activity, or to become "lost" in a world of one's own, can be soothing and stabilising for

people on the autism spectrum. “Disruptions to this flow,” Milton argues “can lead to a fragmented perception of incoming stimuli, feelings of unwanted invasion, and reactions of meltdown, shutdown, and panic attacks” (Milton, 2017, p15). Milton goes on to discuss Kahneman’s (2011) ideas of fast (instinctive, unconscious) and slow (logical, conscious) thinking systems in the brain with reference to autistic flow states and he argues that an autistic perception can be regarded as a kind of “slow processing, often exacting and precise in nature, and not relying on previous biases or schema” (ibid, p20).

Flow states, Milton argues, are generative of new ideas, and they are also “a necessary coping strategy for people and not behaviours to be controlled or regulated (McDonnell & Milton, 2014)” (Milton, 2017, p29). If we open out thinking about autistic flow states to ecological thinking about river flow states, especially river states such as flooding, then it is possible to make some useful and interesting comparisons. “Slowing the flow” is one of the imperatives of natural flood risk management, and having the space to flood is understood by many ecologists as being as necessary to rivers as flow states are to autistic self-regulation. Indeed, the comparison between Milton’s (2017) autistic flow states and Biron et al’s (2014) “Freedom space for rivers” thinking, is remarkable.

“Freedom space for rivers” is a way of thinking about flood risk management that argues that rivers need space to flood and to find themselves after a flood. This is not a temporary fix but a long-term approach to flood management that also has significant diversity benefits. If rivers prone to flooding have space to flood, they will, in the process, nurture whole new ecosystems in the flood plains that they run through. As already noted, diverse ecosystems are vital to the continuation of the life cycle and to building resilience (Gunderson & Holling, 2002). “Freedom space for rivers” thinking contrasts with hard geoengineering approaches that attempt to control rivers through human intervention just as

“autistic flow” thinking contrasts with behavioural management approaches (such as the American ABA system documented by yergeau) which attempt to control or eradicate neurodivergent traits such as stimming, rocking, flapping, melting down or shutting down. Neither natural flood risk management specialists (Lane, 2017; Barlow et al, 2014; Pitt, 2008) nor autism scholars who advocate “positive behaviour support” (Simplican, 2019; Grey, Lydon & Healy, 2016; Price, 2015) deny that there are times when intervention or restraint can be necessary in order to prevent harm to life. However, both would suggest they are used with great care, in a regulated manner and only when necessary. This is not least because the longer-term effects of careless intervention and unnecessary restraint on living systems can be unpredictable and undesirable.

For example, Gunderson & Holling (2002) and Moritz et al (2019) have analysed changing human/ river ecosystems across the world, including “flood control and irrigation developments,” which “have created large ecological and economic costs and increasing vulnerability” (Gunderson & Holling, 2002, p6). They chart how effective human-implemented flood control measures can lead to property development in former flood plains. Although the flood control might seem effective at first however, it can lead to unpredicted and often unpredictable changes in the morphology of the river over time. When “managed” and built-up flood plain areas are eventually overwhelmed again by floods, it can be in very different ways to the original flooding patterns and the result can be catastrophic for people (and other creatures or organisms) now living there. “The result is often a dramatic reconfiguration of the social and economic landscape along the river” (ibid, px).

Natural flood risk management advocates freedom space for rivers thinking and slowing the flow practices. It counsels against ever building on flood plains and

argues that “building with nature” or “working with natural processes” (Lane, 2017; Barlow et al, 2014) can help to

> improve the environmental condition of rivers, wetlands and coastal areas, both urban and rural, generating wider benefits for local communities and the economy. It also provides the opportunity to help society mitigate and adapt to the impacts of climate change such as sea level rise, more extreme weather events and changes in land use (Barlow et al, 2014, p3).

The Panarchy Projects worked with and promoted the understanding that neurodivergent behaviours, like different river behaviours, are not defects or problems to be controlled, disciplined or eradicated, but are natural differences which engage in processes that can self-regulate, that can nurture new life, that can suggest different ways of doing things that are valuable to all, whether neurodivergent or not. Autistic flow states, for example, can remind us that we need to take (and give each other) the space and time to process stimuli and *to be with the world*, and that an over-emphasis on consumption and production can be overwhelming and destabilising. Taking (and/or giving) space and time to process stimuli and information, and to be with the world should not be viewed either as a luxury/privilege, or as a problem/defect but as a practical and judgement-free necessity. It is necessary to take (and give) this time for the stability of both the individual and the whole. For autistic people, as articulated so clearly by Milton (2017), not taking, or being given this time can lead to meltdown, shutdown or distress.

Perhaps autistic flow states, like river systems, work through a negative feedback dynamic, a necessary stabilising dynamic? Perhaps “flow states” point to the need for humanity to slow down and shift its focus out of the relentless front loop of Growth and exploitation, endless consumerism and stimulation into an equal appreciation of the back loop of Release and Reorganisation?

I am aware that there is no unified autistic understanding, or way of experiencing, understanding or expressing flow, and that there is a danger of dehumanising or objectifying autistic behaviours by generalising about them and by comparing them to nonhuman/riverine processes. Both flow and overwhelm are experienced very differently by different autistic people, and by different neurodivergent and learning-disabled people, just as they are by different river systems and networks. Working with flow, however, is a generative way of working across the human and riverine from neurodivergent as well as across social, economic and ecological perspectives, and I believe that many neurodivergent and learning-disabled people have important understandings about flow that can help to remind humanity of our need to respect our interdependence with the natural world. I return both to autistic flow states and freedom space for rivers thinking with specific reference to *The Panarchy Projects* performance processes in Chapters 3 and 4 below.

2.3.4 Learning-disabled and neurodivergent-led performance practice

Where questions of flow, agency, behavioural/medical management approaches and autistic autobiography have dominated some critical autism discourses in recent years, questions of pride, autonomy, affirmation of difference and aesthetics have dominated neurodiversity arts discourses. This echoes developments in disability theatre and performance discourses more generally, in which disabled leadership in aesthetic as well as cultural production processes has come to be understood as a potent way of resisting ableism, cultural appropriation and disability discrimination.

Disability studies scholar Tobin Siebers claims in *Disability Aesthetics* (2010), that disability "enlarges our vision of human variation and difference, and puts

forward perspectives that test presuppositions dear to the history of aesthetics" (Siebers, 2010, p3). For Siebers this revolves around presuppositions of what beauty is, and he makes the point that explorations of the beauty that exists in "brokenness" in some ways epitomise Modern Art. Theatre studies scholar Matt Hargrave in *Theatres of Learning Disability: Good, Bad, or Plain Ugly?* (2015) expresses aesthetics in the field of learning-disabled theatre as a "*poetics* of the theatres of learning disability" (my italics) (Hargrave, 2015, p14). For Hargrave, this poetics is not "a retreat from social realities – oppression, indifference, plain cruelty – but […] a way of bringing focused attention to the *craft* of theatre: that which materialises through a complex intersection of techniques, sensitivities and affects" (ibid). Theatre studies scholars Tony McCaffrey (2019a; 2019b), Dave Calvert (2019) and Matthew Reason (2019) all build explicitly on Hargrave's interest in the *craft* of learning-disabled theatre practices. McCaffrey, like Fran Leighton did in 2009 (see Chapter 1) also points to the need to interrogate the "sedimented hierarchies" (McCaffrey, 2019a, p192) and structures of power in learning-disabled theatre contexts, something that is especially important given the fact that most learning-disabled theatre practices continue to be administrated, managed, produced and directed by non-learning-disabled practitioners.

Tony McCaffrey, in his monograph *Incapacity and Theatricality: Politics and Aesthetics in Theatre involving actors with Intellectual Disabilities* (McCaffrey, 2019b) suggests that "Even those contemporary theatrical practices that seek to emancipate or give autonomy to people with intellectual disabilities by means of performance are […] forced to confront the complex nexus of intersubjectivity that characterizes the relationships between people with and without intellectual disabilities" (McCaffrey, 2019b, p2). Learning-disabled

theatre companies such as Mind the Gap Theatre Company[19] in Bradford, Hi-Jinx[20] in Cardiff and The Lawnmowers Independent Theatre Company[21] in Newcastle have all wrestled with this "complex nexus of intersubjectivity" in different ways over recent years.

In her editorial to a special "Aesthetics and Participation" themed issue of the journal *Research in Drama Education* (2015), theatre scholar Colette Conroy discusses a performance of *Faustus* by Firebird Theatre Company in Bristol,[22] claiming that the company's "ability to 'play' the audience, to subvert the habitual expectations of audience and performer was the crucial element of the performance" (Conroy, 2015, p9). This ability to play the audience was, Conroy argues, informed by "the knowledge of all the assumptions and prejudices they had experienced as learning disabled people" (ibid), assumptions which the (presumably largely non-learning-disabled?) audience also brought with them to the performance. This subversive ability enabled cultural transgression to emerge "as an aesthetic goal, as an artistic outcome and also, importantly, as the foundation and the means of enacting the political" (ibid, p10). This subversion speaks to the subversion or "queering" of "normative" performance practices that The Performic Cycle is interested in (see sections 2.1 and 2.2 above). It also speaks to the more overtly political work of companies such as Mind the Gap.

Mind the Gap's *Daughters of Fortune*[23] project (2015 – ongoing) has, in the last five years, been exploring questions of learning-disabled parenthood,

[19] https://www.mind-the-gap.org.uk

[20] https://www.hijinx.org.uk

[21] http://lawnmowerstheatre.com

[22] https://firebird-theatre.co.uk

[23] https://www.mind-the-gap.org.uk/projects/daughters-of-fortune/

intervening in discourses which presume that learning-disabled people are incapable of parenting. It has been doing this through a series of ambitious performances, including, most recently, the large scale multi-locational outdoor performance project *Zara. Zara* is a co-production with Walk the Plank, in association with Emergency Exit Arts. The piece was conceived, directed and co-produced by an experienced team of non-learning-disabled professionals from three different organisations in collaboration/consultation with learning-disabled performers, learning-disabled parents, community groups and choirs, advocacy groups and advocates, medical experts, geneticists, social workers and council officers from across Yorkshire and London. It charts the story of a young learning-disabled woman who is fighting for custody of her baby. The baby is represented by a massive puppet, created by Francis Morgan, a puppet so big that it requires many people to manipulate it, something which foregrounds questions of care and control, capacity and incapacity. The piece speaks to McCaffrey's suggestion that learning disabled theatres that put incapacity and theatricality in conversation with each other, as "part of an assemblage," can avoid "the danger of a merely binary distinction between the two terms, favouring fluidity, exchangeability and multiple functionalities and interconnections" (McCaffrey, 2019b, p20). *Zara* is clearly interested in the aesthetic "assemblage" that is incapacity and theatricality. It is also clearly interested in the "social realities" (Hargrave, 2015) of learning-disabled people, in particular of learning-disabled parents. It is a huge, ambitious, spectacular piece of inclusive theatre, which effectively engages diverse audiences with complex questions and discourses about learning-disabled realities, advocacy, community and civic responsibility. In terms of the "craft" or "aesthetics" of the piece, however, I would argue that it is not "learning -disabled led" and I wonder if the huge scale and complex administration involved across multiple non-learning-disabled led organisations, while impressive, perhaps also prevents a

materialising of learning-disabled leadership, and of the emergence therefore of a more open exploration of what might be called learning-disabled aesthetics?

The Performic Cycle, by working at a much smaller scale and by bringing the adaptive cycle, the hydrological cycle and the neuroqueer into the frame, introduces a new perspective on learning disabled capacity, leadership and aesthetics, and raises an important question in the process. What if theatrical capacity was defined not in terms of an ability to navigate the dominant processes of Growth and Conservation and "make it in the mainstream," but in terms of an ability to navigate processes of Release and Reorganisation, and to find different ways of doing things, interdependently and intersubjectively? What if theatrical capacity was defined as the ability to subvert normativity and bring attention to the complex interconnected networks and socio-cultural relationships that make up life? What if expertise in intersubjectivity and interdependence, something many learning-disabled performers possess in abundance as a result of a lifetime of navigating multiple support networks and agencies, was understood and appreciated as the strength it is, rather than perceived as a deficit?

I would argue, building on the work of David Abbott & Sue Porter (2013) that the expertise that many learning-disabled people have in living interdependently is one of the key skills that we are going to need if we are going to be able to adapt together to a dramatically changing climate and increasingly precarious state of existence. My question with regard to learning-disabled performance practice would be not so much how to bring theatricality into conversation with incapacity, but rather how to bring theatricality into conversation with learning-disabled *capacity* by "enlarging our vision" (Siebers, 2010) and working across

the *four* phases of the (Performic) (Adaptive) (Life) Cycle, rather than just the first two?

Glasgow-based contemporary performance company 21Common went some way towards exploring this possibility in their piece *Dancer*[24] (2014-2018), a collaboration between learning-disabled performer Ian Johnston and non-learning-disabled performance artist Gary Gardiner (and early in the process with performance artist Adrian Howell). The piece, which was variously supported by Unlimited, Made in Scotland (Creative Scotland) and the Arts Council of England, among others, performs carefully edited details about Ian and Gary's lives/likes as performers and people, and explores some of the physical and emotional aspects of their relationship as co-performers. The piece tenderly explores how dance enables them to "release," to access a freer imaginary, and embody a more liberated and joyful physical being, both in relationship with each other and separately. Ian is clearly the more proficient at this in the piece, with much to teach Gary, although Gary supports and frames Ian's performance structurally. Gary, on the other hand, is clearly the more proficient in navigating/communicating with the professional non-learning-disabled theatre and performance context within which the piece was staged; the show toured internationally over a number of years to critical acclaim, and to largely "mainstream" and non-learning-disabled audiences.

The question of audience is an important one in "learning disability theatre." Mathew Reason (2019) has written of the importance of learning-disabled audiences in developing learning-disabled (led) aesthetics, but within the "mainstream" theatre industry, learning-disabled audiences are still not

[24] https://21common.org/dancer

generally seen as being important audiences to be engaged with, and this can be problematic for work which "mainstreams" learning-disabled performers, especially for work which explores and performs learning-disabled people's life experiences. While developing professional performance opportunities for learning-disabled performers can only be a good thing, I would argue that until the over-riding culture is not one that is discriminatory and ableist, there need to be more opportunities for learning-disabled performers to lead creatively and to build community/solidarity, *as well as* to perform professionally. This is something I consciously tried to support in *Panarchies 3-5* (See Chapter 3.3, 3.4 and Chapter 4). It is also something that 21Common, which neither pretends nor aspires to be a learning-disabled arts organisation, far less a learning-disabled led one, is now attempting to support Ian Johnston with, in collaboration with the National Theatre of Scotland.

More established and dedicated learning-disabled theatre companies in Scotland, like Indepen-dance[25] in Glasgow or Lung Ha[26] in Edinburgh have approached the "complex nexus of intersubjectivity" (McCaffrey, 2019b, p2) that characterises learning disability performance from an ensemble and community-building perspective. Both companies have successfully fought to retain their core funding from Creative Scotland, despite this being threatened at various times, and to keep staging the large (and expensive) ensemble pieces which are so important to the cultural lifeblood of the wider learning-disabled communities they serve. Unlike most contemporary (non-learning-disabled) professional companies, and more like traditional rep companies, they tend to work with the same (learning-disabled) performers over long periods of time, something that can enhance skills and expertise in navigating intersubjectivity.

[25] https://www.indepen-dance.org.uk

[26] http://lungha.com

However, performers in these companies, despite making work which is billed as professional, do not tend to lead creative processes, and do not tend to get paid. This is for a number of practical reasons, some of which I also encountered in *The Panarchy Projects* (see Chapter 1 and Conclusion) and which reveal the systemic inequalities facing learning-disabled performers and artists. Both Indepen-dance and Lung Ha are keen to find ways around this impasse, and both have supported a number of important and interesting creative "offshoot" activities, in which learning-disabled artists lead creative processes and gain experience of working professionally, while remaining connected to a wider learning disability community.

Learning-disabled dancers Neil Price and Adam Sloan from Indepen-dance for example, have, with two non-learning-disabled dancers, and the backing of Indepen-dance's artistic director Karen Anderson, set up Indepen-dance 4, a small-scale touring ensemble. The ensemble performs professionally and tours work such as *Four Go Wild in Wellies*[27] (2017 – ongoing), a physical theatre/dance piece especially created for young audiences. Similarly, a number of learning-disabled and autistic performers who first met at Lung Ha Theatre Company in Edinburgh have created Reluctant Penguin Productions, a video production collective, as an offshoot from their parent company. Reluctant Penguin Productions members perform, script, direct and produce their own work, publishing it on a dedicated youtube channel[28] and exploring their own brand of "neurodivergent aesthetics" in the process.

One of the autistic founders of Reluctant Penguin Productions is Emma McCaffrey. Emma, in her capacity as independent video artist and editor,

[27] https://www.madeinscotlandshowcase.com/shows/four-go-wild-in-wellies/

[28] https://www.youtube.com/channel/UCGyo9oeGCuRx_pIFZn6aNBg

engaged with the *Panarchy 4* project (see Chapter 3.4) with Green Routes and the River Forth in Stirlingshire. She supported some of the learning-disabled and autistic performers in that project to shoot their own footage and direct their own performance interventions. This helped us to "intervene in the sedimented hierarchies" of the Green Routes organisation and make sure early on that the vision in the project was a neurodivergent-led one. Emma also reviewed the final *Panarchy Project, not panicky,* in her capacity as a reviewer for Lung Ha. Link to McCaffrey review of not panicky As well as being a prolific film-maker and reviewer, Emma is a leading autistic and learning-disabled performer in Scotland who has worked, with the support of Lung Ha's artistic director, Maria Oller, with both Catherine Wheels' Theatre Company for Children and Young People (*Emma and Gill,* 2018 – ongoing)[29] and the National Theatre of Scotland (NTS) (*The Reason I Jump,* 2018 – ongoing).[30]

The Reason I Jump, a large-scale collaboration between NTS and Scottish Autism as part of NTS's Limitless programme,[31] was based on four autistic performers' responses to young Japanese writer Naoki Higashida's (2013) book of the same name. It was a "relaxed" promenade event, that took place in the North Kelvin Children's meadow, a reclaimed piece of land in Glasgow. A giant maze was constructed on the site which audience members were invited to navigate in their own way and at their own pace. Although the piece was not a response to the site itself, the site did perform in the piece. Michael Dawson, one of the performers in the piece, performed explicitly with the site, picking up on the part of Higashida's book in which he talks of his love of nature, and of the fact that he feels as if "nature is a friend" (Higashida, 2013, p124).

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[29] https://www.catherinewheels.co.uk/productions/emma-gill

[30] https://www.nationaltheatrescotland.com/past-performances/the-reason-i-jump

[31] http://www.limitlesspilot.co.uk

Where expressing/performing human connection with nature was a small but important part of the NTS production, it was the driving force of *The Panarchy Projects*, and is at the heart of The Performic Cycle. I am hopeful that a developing community of neurodivergent performers in Scotland, a community of which *The Panarchy Projects* performers are a part, might together inform and support what I believe is an incipient *intersectional, interdependent* and *ecological* moment not just of Disability Arts in the UK (see Chapter 3) but also in the arts world more generally.

Conclusion

In this chapter, I have contextualised *The Panarchy Projects*, the practice through which The Performic Cycle has emerged, in the contemporary fields of "ecological," site specific and learning-disabled/autistic/neurodivergent (led) theatre and performance practices. I have argued that *The Panarchy Projects* both build on and address important gaps in practice in all of these fields.

I have outlined how The Performic Cycle has evolved as a dramaturgy through engaging Gunderson & Holling's adaptive cycle thinking with the cyclical thinking of Schechner's "social drama," Fischer-Lichte's "autopoietic feedback loop," Pearsons's ideas of site, Strang's ideas of hydrofeminism, yergeua's ideas about autistic autobiography, Milton's critical autism ideas of flow, and McCaffrey's ideas about learning disabled (in)capacity.

I have explored how the negative feedback dynamics of rivers (and possibly of autistic "flow states") appear to contradict positive feedback loops as conceptualised in many normative human cyclical systems, and proposed that understanding this might help us to work with the unresolved tension, or "paradox" that characterises much contemporary ecological performance practice. I have argued that the practice through which The Performic Cycle has evolved, by being neurodivergent and river-led, can queer, decentre and subvert established anthropocentric and ableist dramaturgical dynamics and explore alternative relational dynamics and expressive possibilities across both human and nonhuman dimensions. Furthermore, I have suggested that the insights and understandings generated as a result of *The Panarchy Projects* explorations are contributing to a developing field of environmentally engaged disability-led performance practice, a practice which is particularly important in the

contemporary context of ever-increasing social inequality and ever-intensifying environmental crisis.

I will now go on to outline and discuss the processes and findings of *The Panarchy Projects* themselves, in relation to these claims. In Chapter 3, I will discuss the processes and findings of *Panarchy Projects 1-4*, and show how they informed the development of the adaptive Performic Cycle model. In Chapter 4 I will explicate the final *Panarchy Project,* "not panicky," which tested out the adaptive Performic Cycle model in the very immediate environmental crisis of the COVID-19 pandemic.

Chapter 3

THE PANARCHY PROJECTS

Introduction

Building on Conroy's analysis of the UK Disability Arts Scene in three historical moments (Conroy, 2009), I propose that we are now in a fourth moment of disability arts, one that could be called "Intersectional Disability Arts." In this moment there is an increased interest in how disability politics intersect with questions of race, ethnicity, class, sexuality, gender, environment and neurology. It is a moment arising from an increased awareness of our shared vulnerabilities across human/nonhuman dimensions and across diverse geographies. It appears to be characterised by discourses of postcolonialism, posthumanism, climate justice, solidarity, diversity and radical interdependence. It is a moment which is emerging with other global movements committed to solidarity in the face of systemic oppression and abuses of power, movements such as Black Lives Matter, Extinction Rebellion, #MeToo, the LGBTQ+ movement, the Trans movement and The Youth Climate Strike movement (inspired and led by neurodivergent activist Greta Thunberg).

In this moment, as climate breakdown accelerates, global events such as the coronavirus pandemic are forcing us to re-evaluate the ways we live together and rely on each other. In this moment I propose that the disability movement will, as a matter of necessity, increasingly challenge and inform the environmental movement (Fenney, 2017), and the potential for both disability and environmental discourses to redefine themselves will emerge as a result. As

discussed above, my hope is that the practice-based research of this PhD might contribute to this process.

Sarah Jacquette Ray, in her essay "Risking Bodies in the Wild: The 'Corporeal Unconscious' of American Adventure Culture," (2009) argues that mainstream environmental movements, including wilderness movements and risk cultures, possess a 'corporeal unconscious' that idealises the physically fit, white, masculine body, and as a result defines the disabled body as contradictory and undesirable/unharmonious. She develops this thinking in her monograph, *The Ecological Other: Environmental Exclusion in American Culture* (2013) in which she argues that disabled people are "othered" in mainstream American environmental discourses. Ray extends this "othering", through the theoretical frameworks of cultural studies, eco-criticism and critical human geography, to immigrants and Native Americans. She argues that by privileging individualist, wilderness and adventure discourses over social justice, American environmental justice is compromised; "Environmental justice is concerned with the interconnections between human justice and environmental degradation. […] Privileging wilderness protection over social justice explains why environmentalism often fails to build coalitions across lines of class, race, gender, and even nation and ability" (Ray, 2013, p19).

Just as theatre scholars Conroy (2009; 2015) and Hadley (2014; 2019) argue (albeit in different ways) that "the work of disabled people has the potential to shift the paradigms of reception and production, politics and aesthetics, mainstream and margins" (Conroy, 2009, p12/13), Ray suggests in *The Ecological Other,* that "othered perspectives" (including disabled perspectives) have the capacity to "revise mainstream environmentalism entirely and challenge assumptions of what 'environmentalism' means" (Ray, 2013, p180).

Since publishing *The Ecological Other,* Ray has co-edited a collection of essays and writings entitled *Disability Studies and the Environmental Humanities: Toward an Eco-Crip Theory* (Ray & Sibara, 2017). This collection explores more thoroughly how disabled and disability perspectives might challenge these mainstream environmental assumptions. Ray & Sibara seek to prompt a "shift" in readers, and for them this shift is encapsulated by Elizabeth Wheeler's question in the final essay of the book, "How can the vulnerability of disabled people be perceived as part of our shared vulnerability on the planet?" (Wheeler, 2017, p595). Eco-critics and artists Allen & Preece suggest that "ecological thought in and of itself has the makings of an exemplary ethical system" (Allen & Preece, 2014, p6). They question whether "ecological performance practices" might "move us to act ethically and eco-logically?" (Allen & Preece, 2014, p11). Their work, like the work of performance scholar Petra Kuppers (2003, 2007, 2013, 2014) points towards the radical potential of disabled-led eco practices to effect change by creating and exploring alternative *ways of working with each other*. In some respects, *The Panarchy Projects* were a practical attempt to do just that, to explore alternative aesthetic structures, alternative ways of working with each other, in connection with rivers.

In this chapter I will, with reference to selected performance and practice documentation, as well as to the ideas shared in Chapters 1 and 2, chart how the performers and performance work of the first four *Panarchy Projects* informed the evolution of The Performic Cycle. I will introduce the performers and the performance context of each project, and the experimental methods that were explored. I will show how each project led on to/intersected with the next, through cyclical processes of exploration, storying, performing and questioning, in connection with a variety of rivers and audiences.

As discussed in Chapter 1, semi-structured and teller-focussed interviews in the first phase of each *Panarchy Project* clarified the main concerns of the participating artists with regard to broad themes extracted from the original PhD brief and/or inherited from previous *Panarchy Projects*. These interviews were then transcribed and analysed and recurring "real-world problems" were identified. The three recurring "real world problems" identified by participants across *Panarchy Projects 1-4* are summarised in Figure 8 below.

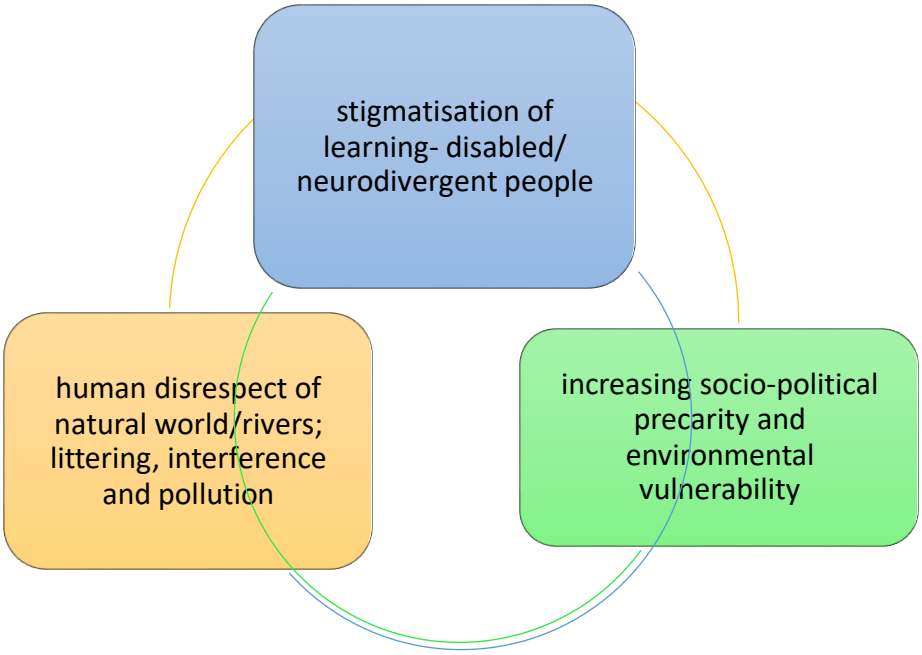

Figure 8: The "real-world problems" identified by participants

Collaborative and experimental performance and creative learning practices then deepened the explorations of these problems, nurturing a shared language, a rich creative world and a supportive community of peers. A number of common feelings and desires, stories and competencies emerged. These are illustrated in Figure 9 below.

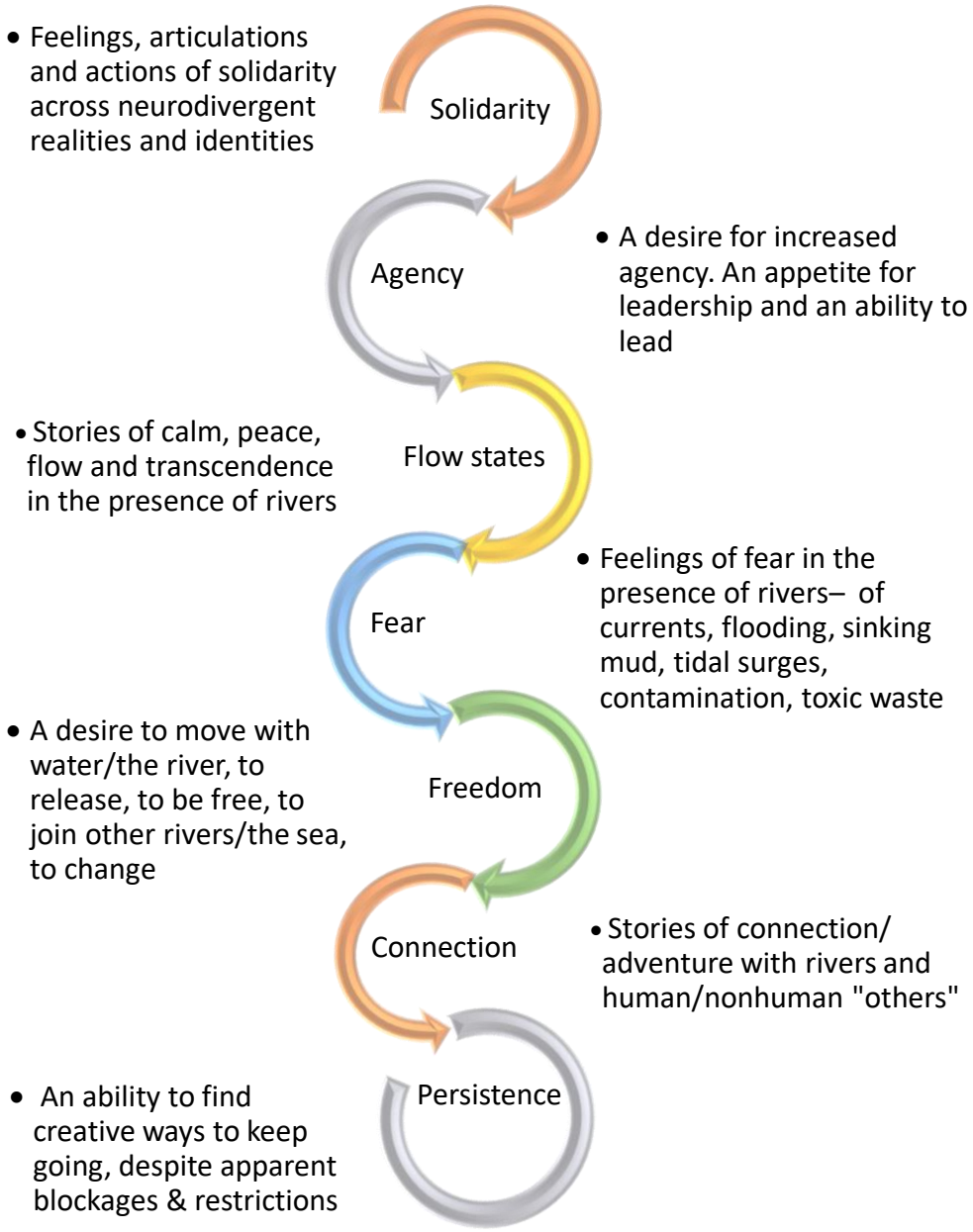

Figure 9: Common feelings, desires, stories and competencies emerging through the projects.

Questions also emerged through the creative explorations of the "real-world" problems and through the identification of common feelings, stories, desires and competencies in relation to lived connections with rivers. These questions became the through line of the research enquiry; they were handed on from project to project, evolving and changing in the process. Each *Panarchy Project* (apart from *Panarchy 1,* which started with questions extracted from the original PhD brief) started with questions inherited from the previous project(s) and increasingly, as *The Panarchy Projects* evolved, individual collaborating artists began developing questions of their own, questions or practices that they wanted to explore with each other and with audiences. In *Panarchy 4* and the final project, *not panicky,* these questions became not just the framing structure of the dialogical performance piece, but the central questions of the research itself.

As outlined in Chapter 1, each project also went through a four phase "Performic Cycle" (see Figure 3, p45) which corresponded with the four phases of the adaptive cycle as defined by Gunderson & Holling (2002). The first Growth phase of each project involved processes of exploring, mapping and Bodyworlding, identifying the questions and making the first performative connections with the river or river network in question. The second Conservation phase involved processes of scripting, filming, audio recording and Vital Materialist Storying, deepening the questions and the connections with the river. The third Release phase involved performances and performance interventions, sharing the stories and artworks with publics, and discussing the questions with diverse audiences. The final Reorganisation phase involved processes of critical reflection, writing, dissemination of findings and identifying changes or next steps (if relevant) (See Figure 3/p45). Sometimes each *phase* of this cycle went through its own Performic Cycle, and sometimes this was nested even further – with multiple cycles embedded in each phase.

3.1 *PANARCHY 1: RIVERINGS* – Staying with the Trouble

(2017/2018)

Panarchy 1: Riverings was a collaboration with performers Euan Hayton and Krissy Neilson, musician Andrew Lamb, film artist Stray Seal, dancer Paul Michael Henry and voice specialist/dramaturg Susan Worsfold. It was created in connection with the tributary rivers of the tidal part of the River Clyde, with a performance focus on the River Cart. The project started in spring 2017, culminated at a theatre event in the James Arnott Theatre at the University of Glasgow in January 2018, and ended in spring 2018.

Panarchy 1: Riverings, as the first *Panarchy Project*, mapped out the questions of the practice research, introduced the performance practices and identified the adaptive cycle/panarchy as the central structure that would frame the work. It started, as all the projects did, with a one-to-one semi-structured and teller-focussed interviewing process with participating performers. In *Panarchy 1: Riverings* this was with performers Euan Hayton and Krissy Neilson, both of whom I had worked with previously, at the Citizens' Theatre and Tramway, but neither of whom had previously worked with each other. The interviews were shaped loosely around the following themes, drawn from the original PhD brief: :

- access to wild landscapes
- experiences of being in wild landscapes
- lived/living relationships with landscape forms and processes
- lived/living experiences of disability/neurodiversity relating to the above themes

The interviews identified rivers as the landscape forms with which both Hayton and Neilson had the closest relationships. As a result of these first interviews, human connections and interdependencies with rivers and estuaries went on to define the geo focus of all of the subsequent *Panarchy Projects*.

Panarchy 1: Riverings focussed on Hayton's living relationship with the River Gryffe in Renfrewshire (see Figure 10) and Neilson's living relationship with the White Cart Water in South Glasgow (see Figure 11).

Figure 10: Hayton with the River Gryffe

Figure 11: Neilson with the White Cart Water

We discovered, in exploring these connections together, that the River Gryffe goes on to join the Black Cart Water which meets the White Cart Water near Glasgow Airport. The Black Cart and White Cart together form the River Cart. The Cart, even as it is forming, meets the River Clyde, which is itself, at this point, meeting the sea. The project thus explored, as a matter of river course, not just Neilson and Hayton's relationships with rivers, and with each other, but

their rivers' relationships with each other, and with a wider world. Human relational dynamics, river dynamics of confluence, and the ways the two can intersect performatively became key areas of exploration in all of the subsequent *Panarchy Projects.*

In Phase 1 of the Performic Cycle process (Bodyworlding – Growth) Hayton, Neilson and myself engaged in a series of intensive "bodyworlding" weeks. We started with a series of witnessing and deep listening practices, introducing each other to some of the riverscapes we are connected to, and inviting each other in to our own inner landscapes, before focussing on how the rivers move and connect with each other, and how we might want to move/connect performatively with them (and with each other). In doing this I shared my understanding of Gunderson & Holling's adaptive cycle with both Neilson and Hayton. This led to us playing with "the 8," as we called it in shorthand, as both a movement and a concept. Playing with the 8 was, again, something that went on to define all of *The Panarchy Projects*, and it allowed us to work with the complexities and contradictions we encountered as well as with the confluences we were exploring.

In Phase 2 of The Performic Cycle process (Vital Materialist Storying - Conservation) we invited dance specialist Paul Michael Henry, video artist Stray Seal and musician/composer Andrew Lamb to explore some of these practices and ideas with us, and in some cases to teach us skills we could use ourselves to develop this work aesthetically. We created a rough script from our processes, which itself performed an adaptive cycle, and which we later invited the various specialist artists to contribute to. Given the extremely sensitive nature of some of the experiences we were sharing, the script worked "geomythologically" and poetically, through the mythology of Isis and Osiris

and their violent brother Set. This enabled us to create a shared imaginary within which we could safely acknowledge and explore some of the darker aspects of "the trouble" we were (and are) all in (Haraway, 2016), and from which we could communicate to audiences the depth and complexity of our work without exposing anyone personally (Baim, 2020).

In Phase 3 of the Performic Cycle process (Release – Performance) we worked out how exactly we might want to "release" the work to others, what we might want to share (and why) with audiences. Due to factors that had nothing to do with the performance process, Neilson was not sure she would be able/want to perform live for/with an audience. She wanted to remain a key part of the project, but in a way that didn't put any pressure or performance expectation on her. However, she also wanted the option of performing live kept open. Hayton, on the other hand, was keen to perform live. During this phase our relationships with each other deepened, and got more "real." We were in effect nurturing what theatre scholar Bree Hadley refers to as an "interdependent, shared, situated, collaborative, and creative research practice" (Hadley et al, 2019), one which involved us "staying with the trouble" we were all in and "making kin" (Haraway, 2016) with each other and the rivers we live with. This, combined with the need to create an open, flexible performance structure was in fact what gave birth to The Performic Cycle as an *adaptive* dramaturgy (see Chapter 1). Some of the ways we kept the performance structure open, flexible and adaptive were through video, audio, music and lighting design. We filmed scenes from the script and recorded audio of Neilson and Hayton reading it. We then edited a video version of the script, and embedded the audio into one version of the video, but not another. We invited musician Andrew Lamb to play live with us, to help us mediate the live and digital dynamics of the piece. Lamb had composed a score which went with the script and the video, and playing this

score live meant that he would be able to adapt to whatever happened, and to whoever was performing, on the night. Finally, we created, with lighting designer and theatre technician Tony Sweeten, a lighting design which could allow another performer to hold open a "ghost" presence of Neilson, even if she wasn't physically on the stage. Figure 12 shares a drawing which shares some of this design process, and shows how it was intersecting with the adaptive cycle structure.

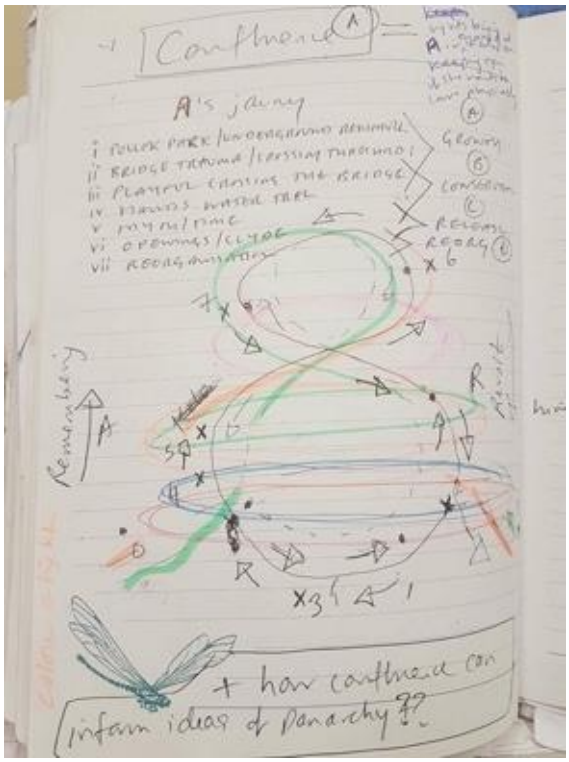

Figure 12: Working out Neilson's "ghost light"

In the end, Hayton led the live performance, and Neilson did not perform live, although she did come to the performance and join the post show discussion, and she was on stage via video, audio and light, as well as through her energetic presence in the audience. I stood in for Neilson in the live performance, and the

live action involved Hayton performing the course of the river Gryffe, and me, along with Neilson's "ghost light" performing the course of the White Cart, through the adaptive cycle. The two performance cycles, like the rivers themselves, appeared at first to oppose each other directionally, but as the rivers met and the cycles interacted through a series of confluences, they began to synthesise, and connect, at times moving in the same direction, at times crossing each other, before dispersing into the Clyde (the audience). Figure 13 shows how the river courses and confluences, as we imagined them through the adaptive cycle, were mapped onto the stage-floor, creating the set of *Panarchy 1*.

Figure 13: The set of *Panarchy 1*, with "vital materials"

Keeping the performance structure open led to creative experimentation and new insights. Hayton articulated this live, at a climactic moment in the *Panarchy*

1 performance (at the Release stage of the Performic Cycle that we were enacting) as a personal desire to trust his own "flow" more and to learn to move *with* this flow. This idea of "flow" emerged, as outlined in Chapter 2.3, as a key aspect of all five of *The Panarchy Projects*, especially as it intersected with ideas of "autistic flow" (Milton, 2017) and processes of adaptation. After the performance we edited the music and the rest of the script into the video that we had created from the script.

I suggest watching that video now: ***Link to Panarchy 1- Riverings video*** Please note, although this video documents many of our performance processes, it does not document the theatre event itself.

In the final, fourth phase of the *Panarchy 1* Performic Cycle (Reorganisation – Critical Reflection) I sought feedback from audience members as well as from Hayton, Neilson and the other contributing artists, through a mixture of email correspondences and face to face meetings. Some audience members reported being moved by the piece emotionally, while others fed back that they had found it calming and soothing, allowing them space to breathe and access their own imaginaries. Some liked the "layers" of the piece, and the fact that they could access it in a variety of ways. Some wanted more "poetry" and "space" –others wanted more materiality. Neilson reflected on what performance means for her at this stage in her creative life, and on how she wants to engage with it. Hayton identified an interest in autistic autobiography and poetry as well as a desire to get more involved in climate activism. He went on to develop, and in some instances to lead on these interests in subsequent *Panarchy Projects*: in *Panarchy 3* as performance mentor and workshop assistant (see 3.3), and in the final *not panicky* project as co-creator and performer (see Chapter 4). For me, the project generated personal and interpersonal insights about autism and

mental distress that coincided with a deepening of understanding of processes of disablement and stigmatization. This, along with Neilson's incisive questioning, forced me to re-evaluate my positioning in the research completely (see 1.2), which in turn led to the reflexive *Panarchy 2* project (see 3.2).

Neilson, Hayton and I presented our work together at a postgraduate theatre symposium at the University of Glasgow, where we discussed the project with a peer group of artists and students. I later distilled this reflection in various other academic presentations, which I shared at the launch of the Ecohub at Glasgow University, and at an Ecofeminism conference at the Glasgow Women's Library. This critical reflection clarified a number of questions that were emerging through the project, and firmly located the research within feminist as well as performance, disability and ecological discourses. I summarise the questions that emerged in this phase below:

Research Questions at the end of *Panarchy 1*

Question 1: How can we make and share performance work in connection with rivers and estuaries?

Question 2: What are our responsibilities to ourselves, to each other, and to the natural world when we work with rivers and estuaries?

Question 3: How might nurturing and performing our relationships with rivers and estuaries empower us to challenge stigma and oppression, of both humans and rivers?

Question 4: How might performing with rivers and estuarine systems enhance understandings of neurology-geomorphology interactions in a time of global environmental change?

These emerging questions were taken into *Panarchy 2*: *Rivearthings.*

3.2 *PANARCHY 2: RIVEARTHINGS* – A Reflexive Practice

(2018)

Panarchy 2: Rivearthings was a very different kind of performance project than *Panarchy 1*. My main collaborators were my dog companion Rory and the distinctive earth and fluvial dynamics of the River Severn. It was an autoethnographic research project which responded to some of the questions the *Panarchy 1* project had raised about lived experiences of vulnerability and resistance (Custer, 2014; Butler et al, 2016), force and flow (Milton, 2013; 2017). It was the project in which I first engaged with the hydrofeminist work of Astrida Neimanis (2012; 2017) and Veronica Strang (2014).

I had become aware in *Panarchy 1* that I had been internalising disabling normative attitudes with regard to my own neurodivergences (Singer, 1999) for a very long time, and I was concerned that I might perpetuate ableism in my work with others, if I wasn't able to openly address this in myself first. Added to this, a traumatic incident that had occurred in SW England after the end of the *Panarchy 1* project, in my personal life, had reminded me of how easily systemic stigmatisation and sexism can result in unreasonable force being exercised over women and those deemed "other" through discourses of risk and security. It also reminded me of how psychologically and emotionally debilitating such experiences of stigmatisation and control can be, and of how important it is to resist this debilitation (Thomas, 1999; 2007). I decided to take three months to interrogate my own neurodivergent and feminist positioning in the research., and to explore the questions that had emerged from *Panarchy 1* with a particular focus on the question "How might nurturing and performing our relationships with rivers and estuaries empower us to challenge stigma and

resist oppression, both of humans and rivers?" I was concerned that *not* exploring this question as it related to my own life at that time would risk the integrity of the research. I took the question to the major confluences of the River Severn, the largest river in the UK, because it is a river I have a lived connection with from my own past, and is one of the rivers that flows between my home in Scotland and the location of the traumatising incident I had experienced in SW England.

Exploring fluvial geomorphology as part of the *Panarchy 1* project had revealed to me that one of "the secrets" to understanding rivers was "in the mix" between "sediment and flow" (*Panarchy 1*; Coleman & Smart, 2011; Brown & Quine, 1999; Morisawa, 1985). With the *Panarchy 2* project I wanted to explore performing with sediment as well as with flow, thus developing the Bodyworlding and Vital Materialist Storying practices that Hayton, Neilson and I had started exploring in *Panarchy 1,* while also testing out some new ones. Part of my process involved engaging in a series of "autotopographical" (Heddon, 2008) and autoethnographical (Jones, 2015) practices at key confluences (with the Vyrnwy, the Stour, the Avon and the Wye). I "performed questions" in the river itself, chalked questions on riverbanks, and wrote questions on my body with the river earth from each confluence. In doing this I affirmed my right to be, and to be there, my right to ask questions, my ability to connect, to be vulnerable and response-able with and to the river/earth (Neimanis, 2017; Butler et al, 2016; Barad, 2007). I performed, again and again, my connection with both "sediment and flow," moving with the river and the earth as it moved downstream. In doing this I was quietly refusing to be defined and/or confined by discourses which attempt to demonise and control any kind of neurological or cultural difference, and was deepening my understanding of and relationship with the river instead. Sometimes I left temporary performance

traces, and questions behind me, for anyone that might come across them, before the next tide or rainfall washed them away.

I realised during the project that the River Severn forms the shape of a giant loop – a loop that can also be read as a question mark. The loop, or the body of the question mark, starts in Midwest Wales, goes northeast til it reaches Shropshire, where it turns round on itself to flow south and then southwest where it meets the Bristol Channel. The "front loop," the visible loop of the river itself, ended for me on the Cardiff Barrage, a massive geoengineering flood defence which effectively blocks the confluence of the River Taff with the Severn. I invited two artist friends, Ben Marriott (performer and trans activist) and Tracey Paddison (photographer) to collaborate with me in a "Performic Cycle" performance intervention with the barrage, at the "blocked" confluence of the Severn with the Taff. Marriott has lived all his life in the vicinity of the River Taff, and knows both it and the Severn intimately. Paddison grew up in the area of the barrage and has watched Cardiff Bay emerge from the very different Tiger Bay she lived near as a child. Paddison told me that the barrage, by separating river from sea, has cleaned up the mud that used to define Tiger Bay, and that the gentrification and commercialisation of the area has displaced many local people, who can no longer afford to live there.

In the durational performance intervention, Marriott and I, over the time period of a tidal cycle, performed the meeting of Taff and Severn with actual water and earth from the two rivers, reuniting them through touch and movement. Marriott performed the 8 of the Taff, and I the 8 of the Severn.

I suggest watching an edited video of that piece now: Link to edited video of Panarchy 2 - Rivearthings performance intervention.

The intervention questioned the anthropocentric narrative of the power of the human to control the river and exploit its resources, as expressed through the imposing mechanics of the barrage and the roaring trade of Cardiff Bay. On a more personal level, Marriott and I performed the "confluence" of our human differences and various life transitions, and in this respect, the intervention explored not just human performances with rivers, but also practices of neurodivergent/neuroqueer, feminist and trans solidarity. Figure 14 shows Marriot and myself on the barrage, looking towards the Severn, with the sediment from both Severn and Taff drying on our outstretched arms.

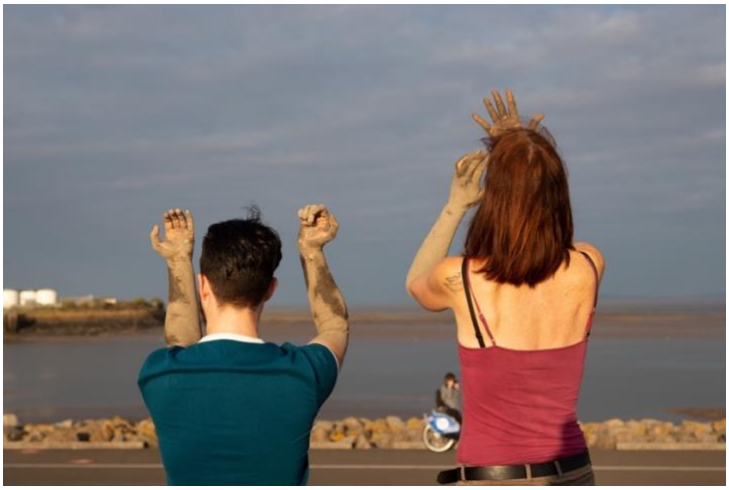

Figure 14: Performance intervention with Ben Marriott on the Cardiff barrage

Image credit: Tracey Paddison

The *Panarchy 2* project enabled me to test out some "riskier" Bodyworlding and Vital Materialist Storying practices. It gave me the opportunity to embrace my own neurodivergence, and to resist internalizing the stigmatization that I had experienced in my own life on account of my neurodivergence. It clarified to me both the extent of my privilege as a relatively mobile, white PhD researcher, and the vulnerability and risks involved in "coming aut" in the research as a neurodivergent researcher. Crucially, it also led me to establish a wider project

focus on allyship and intersectional solidarity. Reflecting on the project led me to develop the questions that had been raised in *Panarchy 1*, and to identify "freedom space for rivers" thinking (Biron et al, 2014) as thinking which could work productively and panarchically across both neurology and geomorphology (Clive, 2018). I summarise the evolution of the research questions across the first two projects below:

Questions at the end of *Panarchy 1*	**Questions at the end of *Panarchy 2***
How can we perform with rivers & estuaries?	Do performances with rivers require audiences? What happens to "the 8" in the meeting of river with sea?
What are our responsibilities to ourselves/each other and the natural world when we perform with rivers?	What constitutes risk and vulnerability with regard to both humans and rivers?
How might performing with rivers empower us to challenge stigma/ oppression of humans & rivers?	How can we explore and perform intersectional solidarity in connection with rivers? How might sediment as well as flow help with this?
How enhance understandings of neurology-geomorphology interactions in a time of global environmental change?	How might ideas of freedom space be understood across flood risk management/neurodiversity discourses?

3.3 *PANARCHY 3: RIVER OF THE SEA* – Performing Solidarity (2018/19)

In *Panarchy 3* I returned to the River Clyde, and to Glasgow. I approached the Citizens' Theatre (Citz) Friday Club, a group of fifteen adult learning-disabled performers who meet once a week to make theatre work together, as part of the Citizens' Theatre creative learning programme. I asked the group if they would be interested in a performance-based research project with me, engaging in interviews and discussions, and exploring our living relationships with the River Clyde in experimental, performative ways. The Friday Club was a group I had co-founded with Citizens' Theatre Learning officer Louise Brown some six or seven years previously, as a much-needed theatre pathway for learning-disabled performers serious about their craft. I had not worked with the group for several years, and was delighted that they were interested in engaging with the project. Euan Hayton from the *Panarchy 1* project, himself a former member of the Friday Club, wanted to stay involved with *The Panarchy Projects* practice, so he joined the project as performance mentor and trainee facilitator. We were also joined by Bel Pye, a Royal Conservatoire of Scotland (RCS) graduate and neurodivergent artist who had approached the Citz looking for work experience. Bel also had an interest in/commitment to environmental activism.

Disability studies researchers Burns, Paterson & Watson (2009; 2013) have identified that learning-disabled people are structurally discriminated against in terms of *access* to "natural" or "wild" environments and that their *experiences* are controlled through discourses of risk and safety. The individual interviews I conducted with Friday Club performers at the start of the project reinforced Burns, Paterson & Watson's findings, revealing that many of the performers did not have a sense of living connection with either "wild" spaces or with the River

Clyde, and that some had been warned off the River Clyde completely (see Clive, 2021). The Friday Club performers thus troubled the ongoing *Panarchy Project* research question, "What constitutes risk and vulnerability when we work performatively with rivers?" from a uniquely learning-disabled perspective.

The performance practices of the first two *Panarchy Projects* had established confluence and "the 8" as key dramaturgical structures, able to work both metaphorically and energetically with questions of flow, contradiction, difference, multiplicity and complexity. *Panarchy 3* tested out these structures through exploring the question developed in *Panarchy 2,* "What happens to 'the 8' in the meeting of the river with the sea?" It did this in connection with the "ecotone" of the Clyde estuary. Hydrofeminist Astrida Neimanis understands ecotones as "transition areas between two adjacent but different ecosystems," as "liminal spaces where two complex systems meet, embrace, clash, and transform each other" (Neimanis, 2012, p107). Estuaries are perhaps the ultimate "ecotones," or "transition areas," and the Clyde is a particularly complex estuary geopolitically, given that the river mouth embraces not just the sea, but also the Gare Loch, with HMNB Clyde, a major UK naval base, situated at the side of this loch, in Faslane.

The *Panarchy 3* project started at a time when the Friday Club itself was in a "liminal" space of transition. The group was having to "transition" from the iconic Citizens' theatre building in the Gorbals, to a temporary home at the Scotland Street School Museum (SSSM), as the Citizens' Theatre building was undergoing a major reconstruction. This move, along with the ongoing precarity of learning disability services across the sector, and questions over the future of the Friday Club itself, was understandably causing the group some anxiety. The

Panarchy 3 project set out to support the performers' transition from the Citizens' Theatre building in the Gorbals to the SSSM building in Kingston, and to do this in relationship with the River Clyde.

Panarchy 3 was the project which crystallised The Performic Cycle model. It took place over two "blocks" of 12 workshops, with a very different kind of performance at the end of each of the two blocks. The first block of workshops (*Panarchy 3A*) built on the insights of the initial one-to-one interviews by first accessing and secondly connecting with the Clyde through a series of Bodyworlding practices. The second "block" of workshops (*Panarchy 3B*) then built on the connections established in *Panarchy 3A* through a series of Vital Materialist Storying practices, including geomythological and autobiographical practices (see Clive, 2021). The first project was a self-contained project, which went through its own Performic Cycle, but it also fed into the second project, thus becoming a "nested cycle" within a larger Performic Cycle. I illustrate this in Figure 15 below.

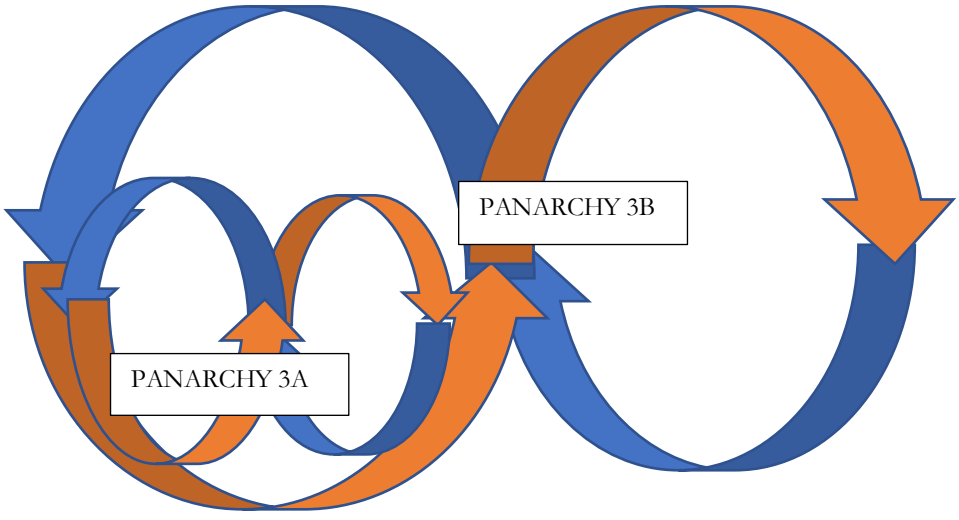

Figure 15: The *Panarchy 3* Performic Cycle

Below, I focus on how the *Panarchy 3* project distilled the overarching research questions that had emerged in the first two *Panarchy Projects*, and established The Performic Cycle as a working model.

3.3.1 *Panarchy 3A*: RIVER/TIDE

In exploring the question "What happens to 'the 8' in the meeting of the river with the sea?" *Panarchy 3* developed movement practices which explored new forms and understandings of revolving leadership through wave and tidal dynamics (Jones, 2011; Helmreich, 2017) and flow (Milton, 2017). It culminated with a performance "intervention," a movement piece with music and recorded voice, which took place at the riverside at Springfield Quay, in relationship with the Clyde, around the time of the winter solstice of 2018.

I suggest watching a video of edited footage of that piece now. Link to edited footage of Panarchy 3A performance intervention at Springfield Quay.

This performance explored the liminal transition zone of the estuary (Neimanis, 2012; Jones, 2011), as well as the liminal transition of the Friday Club as it migrated downriver from the Citizens' Theatre to Scotland Street. There was no invited audience for the *Panarchy 3A* performance intervention, something which deepened the exploration of the question, "Do performances with rivers require audiences and who/what can be considered an audience if so?" The "audience" of the piece was human and nonhuman, whoever or whatever happened to be around or in the river, while we were there. At the end of the performance we had a celebration in a restaurant at Springfield Quay, and the performers fed back their feelings about the performance. Some people fed back

that they had found it a challenging but interesting process; challenging because it was outside and cold, and by/with/for the river instead of inside a theatre for an invited human audience. Most performers described feeling proud, brave, liberated, strong as a group and connected with the river. A few people even described feeling "a part of the river." Figure 16 shows the Friday Club performing "the meeting of the 8's" as the river Clyde met the high tide at Springfield Quay.

Figure 16: The Friday Club performing at Springfield Quay, December 2018
Image credit: Lindsay Brown

3.3.2 *Panarchy 3B:* CLOTA

The second part of the *Panarchy 3* project, *Clota,* was most concerned with the final question raised in *Panarchy 1* and developed in *Panarchy 2*; "How can we perform intersectional solidarity in connection with rivers and estuaries?" This

question speaks not just to learning disability and neurodiversity scholarship (Leighton, 2009; Hadley, 2019; yergeau, 2018) but also in the context of the River Clyde to the cultural heritage work of Olden (2017), t.s.beall and the Galgael Trust (see Chapter 2.2 above). In working with questions of solidarity, *Clota* focussed on performers *material lived experiences* with the Clyde. It developed performance practices during field trips to the different points along the river which performers had identified collectively in *Panarchy 3A* as being important to them, places such as the Falls of Clyde, Glasgow Green and Largs. Figure 17 shows some of the performers during a field trip to the Falls of Clyde.

Figure 17: Adnan Mohammad, Laraine McLeish, "Andrew" and Chloe Maxwell observing the Falls of Clyde, January 2019

Throughout the project, we shared everyday stories of our connections with the environment - stories of community, family, work, love, loss and pleasure. Some performers also shared stories about stigmatisation and discrimination on account of being learning-disabled. In response to these stories the group created a collective story of resisting stigma through sharing experiences, standing up for each other and protesting against injustice. Performers Karen Stewart, Hughie McIntrye and Adnan Mohammed led this work. Figure 18 shows one of the group's "performances of solidarity" in the studio, with Karen Stewart surrounded by her co-performers, who are creating a web of support around her.

Figure 18: Karen Stewart with the Friday Club group, "performing solidarity" March 2019
Image credit: Lindsay Brown

At the same time, workshop assistant and performer Euan Hayton, supported by Bel Pye, shared his concerns about climate change and his desire to do something about this. Inspired by Greta Thunberg, who was just rising to prominence at the time, he suggested an optional trip, outside the usual Friday Club workshop time, to a Youth Climate Strike demonstration in George

Square, in the centre of Glasgow. Four of us joined him for this. Figure 19 shows Hayton and Pye at this rally.

Figure 19: Euan Hayton & Bel Pye at The Youth Climate Strike Rally, George Square, Feb. 2019

Collaborators were identifying "real world problems" through the performance processes, in connection with the Clyde, and were exploring these performatively, and collectively.

As in *Panarchy 1*, mythology helped us to keep the sharing of emotions safe, and enabled us to talk about difficult experiences through a fictional character, when this was required (Baim, 2020). We played with the idea of "Clota," mythological goddess of the River Clyde. The group decided, collectively, that Clota "the strongly flowing one," was a powerful, unpredictable, changeable goddess; she could be both serene and mischievous, calm and angry. This contradictory understanding of Clota opened up a different kind of exploration of the contradictory human/nonhuman positive/negative feedback loop dynamic

than that explored in the other *Panarchy Projects* – and a more playful exploration of climate change. One of the Friday Club performers, Nikki Frew, wrote a poem about Clota, which informed our ongoing work.

The Changing River by Nikki Frew (written 21st February 2019)[32]

The sound of the river flowing out – all the way to the sea,
On a hot and humid summers day is peaceful and calming to me.
As I walk along beside her, I know that I am walking with a friend,
She has such a calming manner – quiet and carefree,
And this is why I thought that she'd be there for me.
But as the clouds turn to dark and heavy shaded gray,
I see another side of her that makes me want to turn away.
There are two sides to Clota, goddess of the Clyde
But I can't forget how I used to walk along her side

The group decided they wanted to share their work with an invited human audience this time, at the Scotland Street School Museum, and to ask this audience to think about their own relationship with the Clyde. Performers chose three of the many questions we had been asking each other in our processes to ask of their audience.

1.What is a secret that the River Clyde carries?

2.Which part of the Clyde do you feel most personally connected to?

3. If the River Clyde had rights then who do you think would be the best spokesperson for the river?

[32] Shared with Nikki Frew's permission

Asking these questions brought in a dialogical (Kester, 2004) and relational (Bourriaud, 2002) element to the performance. The mixed learning disabled and non-learning-disabled audience in *Clota* was invited on arrival to think about their connection with the Clyde, to identify where and how they would position themselves in the "watery commons" (Neimanis, 2014) of the greater Clyde area. However, they were also being invited, throughout the performance, to think about where and how they would position themselves in relation to learning disability activism. The learning-disabled performers had claimed *a central* position in the watery commons. Their voices and stories were central. Their relationships with the river were, for once, central. This "de-centring" of normative, ableist and anthropocentric dynamics, led to the learning-disabled performers creating an alternative world in which relational dynamics could be explored and expressed differently, on their terms (see Clive, 2021).

One of the most striking features of the *Clota* performance, and something that was commented on by a variety of audience members, was how confidently the performers "owned" the performance space as a collective. In the communitas they created through the event there could be no doubt about whose space it was, and whose work was being shared. The transition had been made, the group had adapted to the new situation and the new building, and had claimed it, confidently and collectively. I suggest now watching the edited video of the *Panarchy 3B* performance in Scotland Street School Museum. Link to Panarchy 3B performance - Clota.

The week after the performance we went on a celebratory group trip to Largs, another place that Friday Club members had identified collectively as being culturally and geographically significant. Largs is a seaside town on the Firth of Clyde, and a place which is dear to the hearts of many Glaswegians. The joy

and release the group shared during this trip was a testament to the depth and integrity of the performance piece they had created together, and the solidarity that had been nurtured in the process (See Figure 19).

Figure 20: Celebratory trip to Largs, March 2019

Reflecting critically on the *Panarchy 3* project led to a distillation of the questions as they had evolved so far through the *Panarchy 1* and *Panarchy 2* projects. This reflection, combined with the eco-activist thread brought in and led by Hayton and Pye, led to a rethink at this juncture of what the research was about, and what the point of the performance process was, not least in relation to the "real world problems" that were being identified by performance collaborators. Even although the Citizens' Theatre had thankfully attracted and secured funding during the course of the *Panarchy 3* project to keep the Friday Club group going, at least in the short term, the precarity of the group within the larger theatre and cultural infrastructure had struck me. Despite the growing leadership skills, confidence and comradeship of the performers, and their

increasing ownership over the aesthetic processes, the performers ultimately did not have much control over whether their group continued or not. I realised that the dialogical practices that we had just begun to explore in *Panarchy 3* had supported some learning-disabled performers to develop more agency in the project, and that this agency was critical in resisting stigmatisation. I took this realization into the *Panarchy 4* project. Below, I summarise the research questions as they were raised in *Panarchy 1*, developed in *Panarchy 2* and distilled in *Panarchy 3*.

Questions Raised in *Panarchy 1*	**Developing of Questions in *Panarchy 2***	**Distilling of Questions in *Panarchy 3***
How can we perform with rivers & estuaries?	Do performances with rivers require audiences?	What kinds of worlds might neurodivergent performers want to create w/ audiences?
What are our responsibilities to ourselves/each other and the natural world when we perform with rivers?	What constitutes risk and vulnerability with regard to both humans/rivers?	How can learning-disabled performers lead explorations of risk, vulnerability and interdependence in connection with rivers?
How might performing with rivers empower us to challenge oppression/ stigma of humans/rivers?	How can we explore and perform intersectional solidarity in connection with rivers?	How can neurodivergent performers resist being patronized by or absorbed into ableist discourses?
How enhance understandings of neurology/geomorphology interactions?	How might ideas of freedom space be understood across flood risk management/ neurodiversity discourses?	How might neurodivergent-led performance processes build bridges across disability and environmental discourses?

3.4 *PANARCHY 4: RIVOLVING* – Freedom Space for Rivers

(2018-2020)

Panarchy (4): Riv-Olving was a collaborative performance research project with a group of 20 neurodivergent (mostly learning disabled and/or autistic) students at Green Routes horticultural training centre in rural Central Scotland.

Green Routes "offers hands-on training in horticulture and an alternative to classroom-based education for young people with additional support needs"[33] (although in fact it works with people of all ages). It recruits students from across Stirlingshire and the River Forth catchment, a large geographical area that includes both rural and urban settlements. Green Routes offers accredited horticultural training as well as a "Routes to Work" employability programme to its students. The *Panarchy 4* "river project" was offered as a participatory art-science creative learning opportunity to any interested students, and it developed in relationship with the River Forth, and its major tributaries. The Green Routes management team was very supportive of the project, and encouraged students to get all they could from the opportunity. As a result of this, I was able to work flexibly, intensively and extensively with small groups of interested students, responding to insights and ideas as they arose. Although it describes itself primarily as a training organisation for learning-disabled people, Green Routes might more accurately call itself a training organisation for neurodivergent people, as it works with a full range of neurodivergent students and volunteers, and has significant expertise in supporting autistic, ADHD and mentally distressed students as well as learning-disabled students.

[33] https://greenroutes.org.uk

At the start of the rural *Panarchy 4* project, each of the twenty Green Routes students I interviewed articulated a clear and strong sense of their connection with the River Forth, or one of its tributaries. This was in marked contrast to the project with the urban Citizens' Theatre, in which only a few of the Friday Club members articulated a strong *personal* connection with the River Clyde in the initial interview stage of the project. Many Green Routes students had significant lived experience of the River Forth's sometimes forceful and unpredictable behaviours, and of being disrupted personally at times by these behaviours. On the other hand, only one of the Green Routes horticultural students, Sam Ridley, had, at the start of the project, any active engagement with theatre, and that was at a very basic participatory level. It was clear from the outset that this was going to be a very different project from *Panarchy 3*. The questions that had been distilled in *Panarchy 3* would need to be developed by the Green Routes students in a very different way.

The initial interviews and ongoing discussions revealed that many Green Routes horticultural students were aware of connections between flooding and climate change, and were actively concerned about this. The interviews also revealed a general understanding of the fact that life works cyclically, and a common awareness of the fact that diverse human, animal and nonhuman life all co-exist in riverine landscapes and depend upon the same earth and similar climatic conditions for shelter and sustenance. A number of people expressed a strong interest in the historical and cultural aspects of human interaction with the River Forth, and the traces of these that could still be found in the landscape.

Stigmatisation and social disablement of neurodivergent (in particular learning-disabled and autistic) people was, as with every other *Panarchy Project*, identified throughout *Panarchy 4* as a very real issue, as was frustration at this

stigmatisation. The specific ways in which stigmatisation can manifest in rural contexts have been examined in the Scottish Highland context by geographers Philo, Parr & Burns, with particular reference to Foucauldian "matters of 'space, knowledge and power' (Crampton and Elden, 2007)" (Philo, Parr & Burns, 2016, p238). Their insights about the rural specificities of the disablement of neurodivergent (especially mentally distressed) people were also evidenced by some of the Green Routes students. Many students shared accounts of frustration at geographical and social isolation, for example, as well as accounts of experiences of stigmatisation through labelling and bullying. Some students mentioned being trapped by poor public transport infrastructures and others by limited access to personal support. Where Citizens' Theatre Friday Club members in the *Panarchy 3* project had revealed barriers to learning-disabled people interested in accessing "wild" landscapes, Green Routes students in the *Panarchy 4* project revealed barriers to learning-disabled people interested in accessing cultural diversity and urban landscapes.

In the course of the project we created a number of different "teams" of people, who worked together on different ideas, observations and experiences, depending on what they had identified as being important or interesting in the initial interviews. As a result of this there was, in the *Panarchy 4* project, a distinct Performic Cycle (and performance outcome) within every phase of the overarching Cycle. Different students engaged with the work of different cycles, and could transition in and out (and across) as they wanted. Participation was entirely optional. Sometimes several cycles would be operating simultaneously, together creating a truly panarchic Performic Cycle. I will now briefly outline the four different cycles that were in operation.

3.4.1 *Panarchy 4A*: FUNNY EDIT

The long Bodyworlding phase of the project, the phase that represents Growth in Gunderson & Holling's original panarchy concept, was led by a small team of three students (Sam Ridley, Marjorie Martin and Patrick McLean - later joined by Daniel McLean), who were interested in "exploring." Sam Ridley emerged quickly as a leader in this team. Ridley has a keen interest in geography, history and mapping practices, and he wanted to follow the river Forth from its source down to the sea. Ridley is also a committed learning disability advocate. As with *Panarchy 1*, some of the most profound and far-reaching activities in this Bodyworlding/ mapping/exploring phase were the witnessing and deep listening walks, during which we shared our personal river connections with each other. Figure 20 shows Ridley "witnessing" Marjorie Martin's connection with a part of the River Teith (a major tributary of the Forth) that she is connected to.

Figure 21: Marjorie Martin & Sam Ridley on a "witnessing" walk by the River Teith, Spring 2019

As with the field trip work in the *Panarchy 3* project, these activities interrupted the established "sedimented hierarchies" of the Green Routes organisation and opened up new relational dynamics between us all, and new understandings, deepening our connections with each other as well as with different parts of the river itself. We built on the work of both *Panarchy 1* and *Panarchy 2* by tracking the major tributary rivers' confluences with the Forth, between its source in the Trossachs and its mouth in East Lothian. The three members of the "explorer team" serendipitously lived by each of the three major tributaries of the upper reaches of the River Forth – the Rivers Teith, Allan and Devon.

When we got to Edinburgh, near the mouth of the Forth, we met up with Edinburgh-based video artist and autistic/learning-disabled mentor Emma McCaffrey from Lung Ha Theatre Company/Reluctant Penguin Productions (see Chapter 2.3 above). McCaffrey led us down the Water of Leith, to its confluence with the River Forth, and on the way Ridley directed us all in several performance improvisations. At Leith Docks McCaffrey, who had been filming us throughout the day, supported Ridley and Marjorie Martin to take their own videos. McCaffrey offered to create a "Funny Edit," to document the humour and playfulness of the day, so we looked through all the footage together and selected the bits that made us laugh. You can see that video here. Link to Panarchy 4A Funny Edit.

Collectively, we made a number of different videos of our bodyworlding explorations and findings during this time, but it was the "Funny Edit" that Sam Ridley in particular kept coming back to, and which he felt encapsulated this part of the process, and his leadership of this part of the process, the most effectively.

3.4.2 *Panarchy 4B*: ENSTRANGED

The "Vital Materialist Storying" phase of the *Panarchy 4* process, which corresponds with the "Conservation" phase of Gunderson & Holling's adaptive cycle, involved earthwork, collaborative nest-making and storying activities. The group that led this work comprised Green Routes students Craig Jackson, Georgia Dullagun, Amanda Martin and Daniel McLean, with additional input from Ashley Rider, Craig Denny, Cameron Browne and John McAlpine. It was supported by Green Routes horticultural tutor Liam Kelly and recording artist David Goodall. This "nesting" group was concerned with the question inherited from *Panarchy 3*, "What kinds of worlds might learning-disabled performers want to create with audiences in performances with rivers?" This question had been informed by the work and insights of the Friday Club members in *Panarchy 3*, in dialogue with Jane Bennett's ideas about "vibrant matter" (2010), Karen Barad's ideas of "intra-agency" (2003; 2007) and Donna Haraway's ideas about "kin-making" (2016). It had also been influenced by the disabled-led arts and landscape work of Petra Kuppers (2011; 2013), by the autistic "sensing" and video work of Melanie Baggs (2007) and the autistic geographies work of Sarah Judge (2017), as discussed in Chapter 2. Haraway's understanding that "human beings are with and of the earth, and the biotic and abiotic powers of this earth are the main story" (Haraway, 2016, p55) was one that resonated strongly with many of the Green Routes collaborators, who were used to working practically with both biotic and abiotic agency.

Two of the older members of the "nesting" group, Craig Jackson and Georgia Dullagun, had a long-standing interest in birdlife and birdsong, as well as with gardening practices. Dullagun had talked in her interview about how connected she feels to birds and how she would like to build a nest in which she could live with the birds and look after them. Dullagun wanted us to think about how we

can “stop the birds and the animals from becoming extinct.” Jackson had talked in his interview about how we need to “evolve ourselves” and he wanted us to think about how we might “make a world that we can all live in safely together.” Amanda Martin, who is passionate about animal rights, and was doing a work placement at the time in a local animal refuge centre, was keen to point out that many domesticated animals, such as service dogs, in fact look after humans, and that humans need animals just as much as animals need humans. Martin’s thinking echoed that of Donna Haraway in her *Companion Species Manifesto*, in which Haraway explores theoretically “the implosion of nature and culture in the relentlessly historically specific, joint lives of dogs and people, who are bonded in significant otherness” (Haraway, 2003, p16). Led by Dullagun, Jackson and Martin, and ideas of biological/cultural/agentic “entanglement” (Tsing, 2015; Barad, 2007; 2003) we explored what a “communal nest” would need in order to be a safe and comfortable place for diverse humans and nonhumans alike. The students identified a magnificent and ancient redwood tree (see Figure 21) that they felt would be a good location for exploring ideas about communal human/nonhuman nest-making.

Figure 22: Ashleigh Rider, Amanda Martin, Georgia Dullagun & Craig Jackson working with the Redwood Tree , Summer 2019

We did some movement work with "the 8" around this tree, which became a performative hub for much of our work. The "nesting" group then invited some of the sub-groups working on different aspects of "Vital Materialist Storying" to share their ideas about what was needed to "make a world that we can all live in safely together" (Craig Jackson, *Panarchy 4*, 2019). One of these sub-groups was exploring the local mythology of Robert Kirk (1644-1692), the "fairy minister" of Aberfoyle, a real historical figure who had lived nearby. Kirk was a Gaelic scholar who was gifted with "second sight," which enabled him to commune with the faery world, something he wrote about in the now classic folklorist text, "The Secret Commonwealth of Elves, Fauns and Faeries" (Kirk, 1691). At the end of his life, after undergoing a series of devastating bereavements and taking to wandering the hills alone at night, Kirk mysteriously disappeared from his local parish. The story goes that he was spirited away by the fairies who were angry that he had betrayed their secrets by writing a book about them (Stott, 2018). Some of the Green Routes students exploring this mythology thought Kirk had gone "mad" on account of his bereavements and that this is why he saw fairies and went missing; others believed that fairies really do exist, and did spirit him away; others wondered if the fairies were really "nature," the myriad plants, animals and other nonhuman creatures who live alongside us all the time, but that we do not always notice, or cannot always see.

At the same time another "Vital Materialist Storying" sub-group, led by Daniel McLean and Cameron Browne, had become interested in the very real materialities of flooding, and in human responses to these. They researched different flood risk management strategies in the area, looking at both geoengineering strategies and natural flood risk management strategies, and focussing on the peat bog restoration project at nearby Flanders Moss. I

introduced the idea of freedom space for rivers thinking (Biron et al, 2014) (see Chapter 2 and 3.2), and we discussed whether management of river flood events could be compared to management of human "flood" events such as meltdowns, sensory overload, panic attacks, shutdowns or seizures. This led to discussion about different strategies for dealing with neurodivergent events (whether our own or those of others) as well as different flood risk management strategies. All the students who took part in these discussions felt that space to recover and compassion while doing so were essential in managing neurologically-driven events such as meltdowns, sensory overload or shutdowns. Freedom space and acceptance of difference were therefore added by these sub-groups as crucial features of any communal human/nonhuman nest.

The challenge for me at this point in the project was to find ways of supporting students who had little experience in performing to express their important insights, experiences and understandings *aesthetically* and to communicate them *performatively*. We discussed options and decided to work with movement and video, and I invited recording artist and Qi Gong movement specialist David Goodall to help us with this. Qi Gong as Goodall practices it works with an "expanded awareness of being" (Conroy, 2017; Heddon, 2017) which brings attention to the fact that we are connected energetically to all other things. This complemented the performers skills and supported the somatic movement work with "the 8," and the Vital Materialist Storying work with the Kirk mythology that we had already started. We created a video which wove many of our "nesting" and Storying processes together, which we called "Enstranged." This video was used within the performances of the Release stage.

I suggest watching the video of this second phase of the *Panarchy 4* Project now. You can watch the video here: Link to video of Panarchy 4B - Enstranged.

3.4.3 *Panarchy 4C*: RIVOLVING & RELEASING THE QUESTIONS

In the Performance phase of the *Panarchy 4* project, which corresponds to the "Release" phase of Gunderson & Holling's Adaptive Cycle, students from both the Bodyworlding and the Vital Materialist Storying team came together to form a Performance team. The Performance team comprised Sam Ridley, Craig Jackson, Georgia Dullagun, Patrick McLean, Daniel McLean and Amanda Martin, with input from Neil Ferrier and John McAlpine. The goal of this team was to explore "How might learning disabled performers invite audiences to explore connection across human/ riverine dimensions?"

Based on the exploratory Bodyworlding work of the first phase of the project, and building on Sam's interest in mapping, we asked local felt artist Ewa Kuniczak to help us make a giant interactive felt map of the River Forth. Using this map we devised a movement piece and dialogical performance structure which could incorporate both the individual questions the students had been developing and the videos we had made in the Vital Materialist storying phase. The performers tested out the performance informally with other Green Routes students in an intimate performance space in the yurt at the garden, until they felt confident enough to open it out to three different audiences at the Green Routes AGM. After positive feedback from local audiences at Green Routes, many of whom had felt engaged, and in some cases moved by the piece, Sam Ridley suggested we tour the performance down the river. Ridley approached the MacRobert Arts Centre in Stirling (where he was a member of a small participatory drama group for learning-disabled adults) and Play Alloa, a social care organization further down the river Forth that he had links with, and set up "tour dates" with them. Figure 22 shows the performance team at the MacRobert Arts Centre, in conversation with the audience.

Figure 23: On tour at the MacRobert Arts Centre, Stirling, Autumn 2019

In the dialogical performance tour, the "felt river Forth" was created by performers in each performance. Audience members, most of whom lived by the river, or in its catchment, were invited to create their own "felt piece" to add to the communal "felt river." This "felt piece" took the form of an actual felt circle on which the audience recorded their responses (written, drawn or marked with colour) to performers questions. Sam Ridley's opening question, "Which part of the river Forth are you most connected to?" invited audiences into a shared riverine world, and asked them to place themselves on the map. Craig Jackson's question, "How do we make a world that we can all live in safely together?" brought attention to the feedback loop between audience and performers, and Daniel McLean's question, "What do we do about all the flooding?" took the discussion with the audience out of the local and regional, and into the national and global. As the piece toured down the river and more audience members added their felt pieces to the felt river, it became ever more complex; both performers and audience members became more aware of other people's living connections with the river as well as their own, of other people's experiences of flooding and of the journey and properties of the river itself as it

flows downstream. People made connections with each other that they wouldn't have made otherwise, and had conversations about the river and its flooding behaviours. Throughout the performance tour I supported the students (in communication with their parents and/or support networks and Green Routes management), to travel safely and independently, via public transport, to the different performance venues. The participatory project, as well as exploring a neurodivergent and river-led dialogical performance as research practice, was also practically engaging with the twin issues of geographical and social isolation that had been identified as real-world issues by students at the outset of the project. Figure 23 shows Patrick McLean, Daniel McLean, Amanda Martin and Sam Ridley by the River Forth in Alloa, having made their ways independently to the performance venue.

Figure 24: Some of the Performance Team on tour in Alloa, Autumn 2019

Following the "sold out" performances at the AGM and the stories of the performance tour down the river, interest in the performance piece increased. Many people who hadn't yet seen the performance wanted to see it, and several new members joined the performance team. The expanded team gave a

final performance of RivOlving at the historic Gartmore House at Christmas/Winter Solstice 2019, engaging with their largest audience yet. Unfortunately we did not get a video recording of this event, due to events outwith our control. To mark the end of the project, which could otherwise have gone on indefinitely, performers ritually released their questions at the points of the River Forth (or one of its tributaries) that they were the most connected to. They did this by chalking their questions on the river bank or pavement at a place of their choice. We later edited some of the footage of these "Releases" into a short video, incorporating some of the audio footage from the initial interviews. We called this video *Releasing the Questions*. You can watch that video here: Link to Panarchy 4C video - Releasing the Questions

3.4.4 *Panarchy* 4D: FREEDOM SPACE FOR RIVERS

In the final Critical Reflection phase of the *Panarchy 4* process, which corresponded with the Reorganisation phase of Gunderson & Holling's Adaptive Cycle, we reflected on our learning and performance processes collectively, in sessions that I recorded. Reflecting with the core team of performers on the whole project was fascinating, and revealed what students felt they had learned from the process. Almost everyone mentioned learning about performance skills, about being more confident working in a team after engaging with the project, and about trusting each other more. Patrick McLean said he had learned that his and his peers' stories/experiences are important, something he hadn't realized before. He added that he had learned that "we can talk to people and that people will talk back/ tell us stuff."[34]

[34] (Recorded group discussion, Green Routes, 8th January, 2020)

A number of people mentioned working with flow. Craig Jackson, for example, said he had become more aware of "how the rivers flow through our areas and how they connect with each other and how they connect us with each other." Jackson went on to talk of how the river Forth "flows and calms down, over the rocks, and twists and turns and comes back on itself then weaves and flows down to the sea." The project had reminded Jackson that "We're all connected. We might all have different flows and meanings and rhythms and movements but we all connect up."[35]

Amanda Martin, Daniel McLean and Cameron Browne said they had enjoyed thinking about freedom space with regard to both humans and rivers. Amanda Martin felt time as well as space was necessary in dealing with both river flooding and neurological "meltdowns." Daniel McLean was more concerned about the fact that sometimes when it floods "support and help is needed." He pointed out that sometimes when the river floods humans might be hurt and might need "the fire brigade" and when people "flood" they might need "other people, kind people," as well as "time and space." McLean was particularly concerned about vulnerable and disabled people who might be trapped.[36] Cameron Browne had become very interested in natural flood risk management more generally. Browne interviewed Kate Sankey from Moss Side Farm, a local expert in peat bog restoration, and brought his findings back to the *Panarchy 4* team. He talked of the need for acceptance and respect with regard to different human and riverine dynamics. We need to "respect natural flows and dynamics," he said, and "not put pressure on natural events," because that can "cause problems that weren't there before." He also talked of the need to "be true to yourself and your own nature" because "you can't fight nature." He

[35] (Recorded group discussion, Green Routes, 8th January, 2020)

[36] (Recorded group discussion, Green Routes, January, 2020)

shared Kate Sankey's observations that you can "See where the water is held and work with that" and his understanding that you can "slow the flow upstream to avoid flooding getting worse downstream." Above all, he said, you need to "Accept that you live in a very wet place and love it." [37]

In the final stage of the *Panarchy 4* project we decided to share some of the valuable insights and findings we had generated throughout the project with audiences outside of the River Forth catchment. Sam Ridley, Cameron Browne and myself, in conversation with both Green Routes and the University of Glasgow, developed a presentation based on the wider project findings. We shared this presentation with an audience of hundreds of flood risk experts and policy-makers from across the UK at Sniffer Scotland's National Flood Risk Management Conference in January 2020.[38] The presentation had two key take home messages for attendees of the conference:

Work with local knowledge: Cameron Browne shared with the audience his insights that in thinking about flood risk management we need, as communities, to work with the earth and soil not just the water, and we need to respect the earth as a living being. He told flood risk managers that they need to seek out and listen to local knowledge about flooding. The people who live by flooding rivers, he argued, and the farmers working the land next to them, are usually those who understand the rivers the best.

Empower marginalised communities: Sam Ridley shared with the audience his strategies for engaging learning disabled and arts communities in dialogue

[37] (Recorded group discussion, Green Routes, January, 2020)

[38] Programme for the 2020 FRM conference https://www.sniffer.org.uk/news/scotlands-flood-risk-management-conference-2020-programme-launched

about flooding and flood risk management. Sam's message to the flood risk managers at the conference was to support learning disabled publics and marginalised communities to deliver their own public engagement processes and flood risk consultations through innovative creative practices.

Figure 24 shows Cameron Browne, Sam Ridley and Rachel Clive delivering findings from the *Panarchy 4* project at Sniffer Scotland's National Flood risk Management conference in Glasgow, in January 2020.

Figure 25: Delivering findings at the Flood Risk Management conference, Glasgow, Jan 2020

Conclusion

By the end of the *Panarchy 4* project The Performic Cycle had found a fully nested panarchic expression, with a "Performic Adaptive Cycle" and performance outcome in each phase of the over-arching Performic Cycle, as illustrated in Figure 25 below.

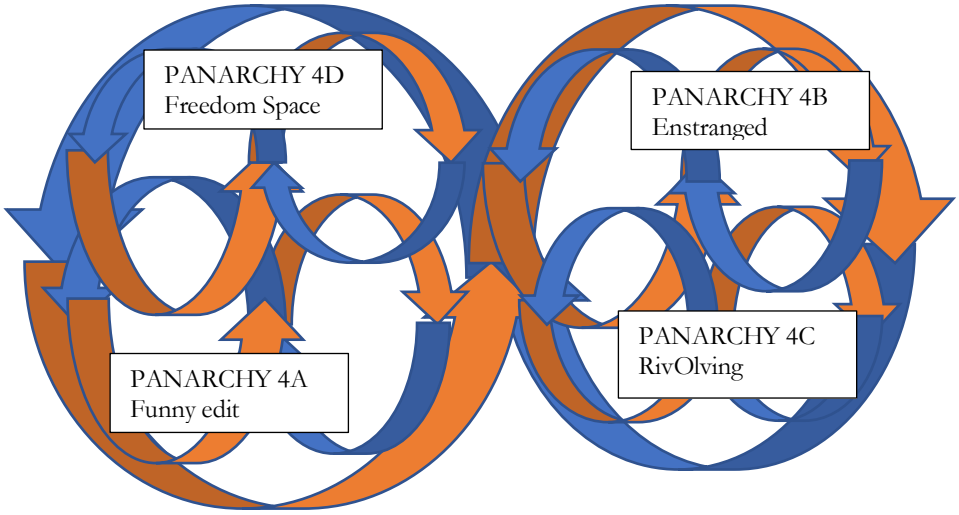

Figure 26: The *Panarchy 4* Performic Cycle

The research questions which had crystallised in the first three *Panarchy Projects* had been addressed and explored in a number of very different performance contexts. Commonly identified real-world problems had led to real-life actions and valuable findings had emerged. The Performic Cycle had proved it could be effective in supporting a variety of neurodivergent performers' interests in ecological and social contexts as well as in performance contexts, across urban and rural geographies. What is more, a loosely connected community of neurodivergent artists and their allies, working across diverse

geographical areas and socio-cultural contexts was emerging through *The Panarchy Projects*.

Some of these artists were keen to take the work forward. I invited collaborators from all of *The Panarchy Projects* to come together for a final *Panarchy Project* at the University of Glasgow. The idea was to create a culminating new dialogical performance event which could demonstrate the method that had been developed and refined across the four projects and share insights and findings that had emerged throughout the research. This final event would work with the Clyde and the Forth river networks, and the watershed between them. It would bring urban and rural performers and audiences together, in a neurodivergent-led space, to think about how we might collectively be able to do things differently. Twelve performers from across the projects selected themselves for this, and began to get to know each other. For three months I supported small teams of performers to get to the University theatre space safely and as independently as possible, by public transport. This was necessary to a sustainable practice. It was also supporting collaborators to address real world social issues identified during processes (see above). We were just starting to explore how we might want to bring our ideas and insights together and share them with audiences, when the COVID-19 global pandemic intervened. The adaptivity of the supposedly "adaptive" Performic Cycle model was about to be tested in a very real environmental crisis situation.

Chapter 4

NOT PANICKY: ADAPTATION IN PRACTICE

4.1 THE CORONAVIRUS PANDEMIC

The global coronavirus pandemic of 2020/2021 (ongoing at the time of writing) can be understood in terms of the Release phase of Gunderson & Holling's Adaptive Cycle in their ecological understanding of panarchy. The Release phase, as outlined in Chapters 1 and 2, occurs when the "Conservation" phase has reached a peak of connectivity and a corresponding trough of diversity. It can be set in motion by "natural" events such as storms, flood, drought and disease. If we look at the coronavirus pandemic from economic, social and ecological perspectives, as Gunderson & Holling's panarchy concept suggests we do, then we can see that the coronavirus pandemic has coincided *economically* with a time of advanced global capitalism, *socially* with a time of intense socio-political precarity/increasing social inequality and *ecologically* with a time of accelerating climate change and climate injustice. Indeed, whatever the original cause of the virus, it is clear that the rapidity of the *spread* of the COVID-19 virus has been enabled by global capitalism.

Furthermore, the pandemic has highlighted the systemic inequalities inherent in global capitalism, inequalities which have been exacerbated in the UK by more than ten years of an economic policy of austerity imposed by the Westminster government. These inequalities are particularly evident from a disability perspective, and there is a growing number of studies (Dickinson et al, 2020; Shakespeare et al, 2020) showing that the pandemic "has exposed and

magnified existing structural failings and inequalities and has differentially impacted on disabled people; in many cases their needs were not protected and the response of the state has compromised their human rights" (Shakespeare et al, 2021, p20 of 28).

If we apply panarchic thinking to the coronavirus pandemic, then we can assume that the "Release" currently being played out in the COVID-19 crisis will be followed by Reorganisation, which could give us the chance to address the systemic inequalities which have been laid bare by the pandemic. To date, this chance has not been taken; the dominant political response so far in Scotland, the UK and Europe, has been a reassertion of a very "normative" capitalist politics of economic growth, accompanied by an erosion of human and civil rights, including disability rights (Inclusion Scotland, 2020; Inclusion London, 2020; Inclusion Europe, 2020). This is clearly concerning on various fronts. The Glasgow Disability Alliance (GDA) advises in a 2020 briefing about the pandemic, that "**the drive towards recovery and renewal will leave disabled people even further behind, unless urgent action is taken to supercharge our meaningful involvement, with disabled people and our organisations in the lead.** Disabled people's voices and expertise will be vital to Scotland's social and economic recovery" (GDA, 2020, p3, bold in the original). This understanding of the importance of disabled people's voices and expertise in processes of recovery and renewal in the wider ecological context is the understanding from which the final *Panarchy Project, not panicky,* evolved.

Panarchies 3 and *4* had identified dialogical performance as a way in which The Performic Cycle could support autistic and learning-disabled performers and horticultural students to engage in environmental discourses without being patronized, appropriated or further stigmatised. They had also revealed that the

important questions for the participants were not so much the "academic" questions of the performance practice-based research, but the performers *own* questions that emerged *through* The Performic Cycle. These seemed like two important findings to hold on to going forward. But how would they translate in the high pressure, high risk context of a global pandemic? Would people want to keep working together in this context? What would emerge in the process if they did?

Methodologically, The Performic Cycle had evolved as a participatory and adaptive model of performance practice-based research in which connection across human and nonhuman dimensions could be nurtured, solidarity could be rehearsed, neurodivergent aesthetics could be explored, and new ideas about adaptation and survival could be discussed across traditional divides (see Chapter 1). Dramaturgically, it had evolved as a form of "socio-ecological drama" capable of bringing attention to the ways in which autopoietic feedback loops can work across nonhuman as well as human dimensions (see Chapter 2). *Panarchy Projects 1-4* had generated a variety of methods and developed the model practically. They had shown the model was capable of supporting neurodivergent leadership, new forms of dialogue, local knowledge, community empowerment and aesthetic experimentation across human/nonhuman dimensions. However, the COVID-19 crisis was bringing the whole concept of human/nonhuman "entanglement" (Sheldrake, 2020; Haraway, 2016; Bennett, 2010; Barad, 2007; Latour, 2005) into question and was foregrounding questions of precarity, contamination and risk (Clive, 2022; Butler et al, 2016; Tsing, 2015). It remained to be seen how/whether The Performic Cycle would be able to support us adapt to/make sense of this highly-charged and volatile crisis situation, or not.

4.2 THE PERFORMANCE TEAM – LOCAL, SKILLED and ENGAGED

The restrictions of the first COVID-19 lockdown, which included not being able to meet anyone outside your immediate household, either indoors or outdoors, and which prohibited travel outwith your local area, forced us to abandon the original *Final Panarchy Project*, which had been scheduled for June 2020. Many of the performers, however, remained in contact with me, and indicated that they did not want to abandon the project completely, even if we were no longer able to meet in person. In conversation with my supervisors, I asked the University whether we could extend the PhD project deadline in order to work towards an alternative final project, one that was responsive to the ever-changing COVID-19 situation and responsible within it. It was an opportunity, I argued, to test out the adaptivity of the supposedly "adaptive" Performic Cycle model. The University was supportive of this proposal, on the understanding that the project would proceed in accordance with both Scottish government and University COVID-19 guidelines as these evolved, and within the approved ethical framework.

Three factors determined which performers engaged in this final project. The first of these factors was technology. We set up various online groups (via Zoom and WhatsApp) to stay in contact in the first phase of the first lockdown. We soon discovered, however, that not everyone could access these independently, and/or had support to access them, and/or *wanted* to access them. There were clear digital inequalities from the start, and several divides emerged fairly quickly – digital literacy divides, socio-economic divides, sensory preference divides and generational divides. Not everybody could, and not everybody wanted to, communicate via digital technology.

The second factor that determined which performers engaged in the final project was geography. Some performers who lived within the Greater Glasgow area were able, once the first lockdown relaxed in July 2020, and government regulations allowed, to meet outside in small working groups. Given that I had recently moved back to Glasgow, I was able to facilitate these meetings. Not only did the Green Routes/ Stirlingshire performers live far away from each other, but they lived even further away from Glasgow. Much of the momentum we had created together for the project naturally dissipated when there was no possibility of meeting up in person. Related to the factor of geography was the factor of mobility and transport. Some of the Glasgow participants who had been part of the original *Final Panarchy Project* performance were shielding (which meant they were unable to leave their house even when restrictions eased), and others were living with family members who were shielding, and therefore were not allowed to go out, or did not have access to support to go out, in order to meet up physically.

If the pandemic shone a light generally on the structural nature of inequality, then this manifested in the context of *The Panarchy Projects*, with regard to access/lack of access to technology, access/lack of access to required personal support and access/lack of access to transport. We were clearly not able to solve these massive structural inequalities. We could, however, bring attention to them, and I do so again now, and we did find ways to keep in contact with everyone from the original project who *wanted* to keep in contact. We did this partly through employing multiple and flexible communication tools and methods, based on individuals' communication preferences.

The final factor that determined who engaged in the final project was who took the initiative to contact me, who actively sought the project out for themselves

and/or were supported by their networks to seek it out. This was particularly important in the COVID-19 situation, because of the heightened risks and anxieties that were involved in working together at this time. It was important that collaborators *chose* to engage with and commit to the revised final project because they felt doing so would support them in some key way in responding to the very "real" shared world problem of the viral pandemic. It was important that performers felt they could *gain* something they wanted from the project (whether that be support, camaraderie, distraction, a line of enquiry, an action, a skill or an aspect of performance training that interested them) and/or that they felt they had something to *share* in this moment that could be valuable to others. Whatever their reason for wanting to engage in the project, it was important that performers chose the project, and not me them. I responded to and worked with whoever made contact with me. The final project was, as with all the *Panarchy Projects*, a performance practice-based research project with a participatory action focus. It was not being proposed as a paid or professional performance opportunity, although we did hope to create performance work that was of a high standard in terms of both process and product. The performers were not "professional" performers, which was another reason why they had to want to engage in the project for their own reasons, to be in control of how they engaged with it, and to have support to engage with it if this was required, rather than be selected by me. The four performers who selected themselves for the *not panicky* project, based on all of the above criteria, were Euan Hayton, Chloe Maxwell, Alison Mackenzie and Hughie McIntyre.

Euan Hayton had been a key part of *The Panarchy Projects* from the beginning. He had co-created *Panarchy 1* and assisted with the facilitation of *Panarchy 3*. He wanted to remain a part of *The Panarchy Projects* and to continue to develop his performative connection with rivers, not least because he had moved house,

and rivers, since the first project, and hadn't yet explored this creatively. He also wanted to pursue his commitments to climate activism and autistic advocacy in this last project. Figure 26 shows Hayton in a not panicky live performance. He is standing with his hands on his hips and his eyes closed, facing the audience. A screen behind him shows two differently shaped hands touching a tree under swirls of water.

Figure 27: Euan Hayton in *not panicky* Image Credit: Jassy Earl

For Hayton, the *not panicky* project was about

> continuing this / this brilliant process that I've been a part of, from the very beginning […] telling about me moving from […] the Gryffe to […] the White Cart […] letting people know what it's been like for me, as an autistic person […] and also, to get across the point that we need to/ we need to save and protect this planet, cos it's one of the most important things that we /we have […] it's our home.[39]

[39] Interview conducted 31st January 2021.

Chloe Maxwell had led some of the movement and phenomenological work in *Panarchy 3* and was keen to develop her leadership skills as well as her performance skills in *not panicky*. In terms of the pandemic, Maxwell wanted to "connect with something […] and […] dance out what I'm feeling." She was also interested in "communication / more discussing things? Cos […] it's going to be tricky, it's not going to be easy."[40] Maxwell was frustrated in the pandemic by the fact that the rules kept changing. She told me that "I don't like them changing things the last minute it's just confusing it doesn't make sense." Figure 27 shows Maxwell in a *not panicky* live performance, her head tilted to one side and her eyes looking into the distance, thoughtfully.

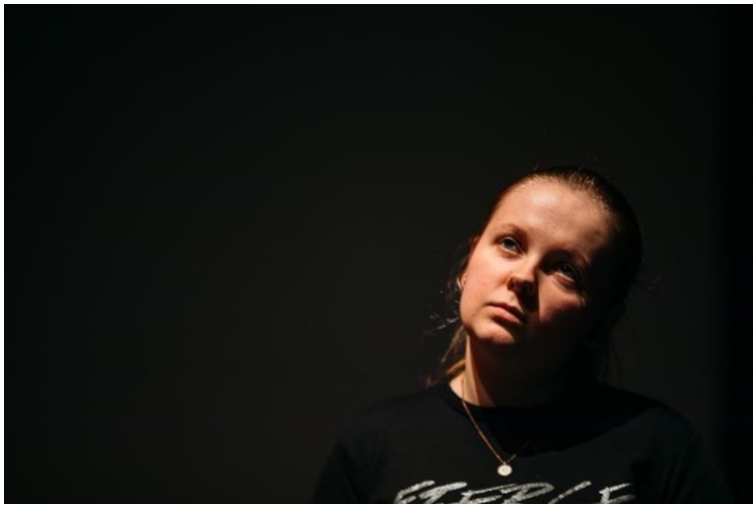

Figure 28: Chloe Maxwell in *not panicky* Image Credit: Jassy Earl

As the youngest in the performance ensemble, the *not panicky* piece felt in some ways like a coming-of-age piece for Chloe, in which she used the moment of the pandemic to take stock of where she is in her life now, as a young adult, with reference to the places that she feels have shaped her, as well as with reference

[40] Interview conducted 30th January 2021.

to her dreams for the future. Maxwell was very sure of *what* she wanted to share with audiences (and what she didn't), and for her the project was an opportunity to develop her choreographic skills as well as her performance skills, leading her to exert more control and ownership over her creative processes. "I enjoyed being in control," she told me afterwards. "Yeh/ (pause) because without being controlled I won't be so confident. But I was" (ibid).

Alison Mackenzie had been a new recruit in the original *Final Panarchy Project.* Chloe Maxwell and Hughie McIntyre had worked with her in other contexts, and she serendipitously lived very close to the part of the River Gryffe that Euan Hayton had recently moved from. Maxwell is a Special Olympics gymnastics champion, as well as a theatre performer, and had heard about the project through several different channels. Mackenzie had initially been attracted to the project because of her love of water and rivers. Figure 28 shows Mackenzie in a *not panicky* live performance, kneeling on the stage floor, a bowl of water in front of her, her head flung back and her arms outstretched.

Figure 29: Alison Mackenzie in *not panicky* Image Credit: Jassy Earl

Mackenzie had seen some videos from previous *Panarchy Projects* and liked them and was especially keen to do some filming. She was missing her friends, her job, her gymnastics and her theatre activities, and wanted to keep in contact with people, and to keep performing through the pandemic.

Hughie McIntyre is an experienced performer and a long-term collaborator of mine from both the Citizens' Theatre Friday Club and previously from the Tramway Theatre Arts Group. He is a strong advocate for learning disability rights, and he had led some of the story and solidarity work in the *Panarchy 3* project. McIntyre had talked in the early stages of the original *Final Panarchy Project* about a waterfall in the Glazert Water in the Campsie Hills that he has a connection with. He used to go to this waterfall to escape from Lennox Castle Hospital, an institution for learning-disabled people (closed in 2002) that he was a resident of for 16 years. He wanted to tell other learning-disabled people about this key part of learning disability history, and about how he survived it (see 4.3). The lockdown was reminding McIntyre of being trapped in Lennox Castle, and he found himself longing to go back to the waterfall that had helped him all those years ago, and to work with it performatively. In addition, McIntyre was looking for something to reduce the acute anxiety he was experiencing as a result of the coronavirus, and the isolation he was feeling. He described the pandemic as "like something out of a horror movie." For McIntyre, the "not panicky" performance team was "like a family […] because we look out for each other" and "when we're doing stuff outside it's like we're getting a fresh air at last, and we're not suffocating."[41] Figure 29 shows McIntyre standing by the side of the River Clyde, in front of the Kingston Bridge, looking downriver towards the sea.

[41] (interview conducted, 31st January 2021)

Figure 30: Hughie McIntyre by the River Clyde Image Credit: Jassy Earl

All four performers are serious about performance and were interested, for different reasons, in working performatively with their own stories and river/water connections in the context of the pandemic.

Although *not panicky* deepened and shared some of the work of earlier projects, it was also unlike any of the other *Panarchy Projects*. This was partly because of the coronavirus pandemic, which meant that everyone's principle shared aim was to survive and stay safe, and to find ways to support each other to survive and stay safe. This put our work into a very clear perspective. It was also because the adaptive Performic Cycle model itself had already been developed and tested by this time. The *not panicky* team was freer to work *with* this model, as well as with the river connections performers had already had a chance to explore, in order to deepen the shared enquiries and test the adaptivity of the model in the context of a real-world viral pandemic.

As alluded to above, we met first on digital platforms such as Zoom, working through initial technical problems together, and learning together as we went

along. When restrictions on meeting outdoors were eased we met in small groups, at places local to and important to us, engaging in witnessing and leading practices. Finally, there was a brief period of time between the first and second lockdowns of the pandemic, in the late summer of 2020, when restrictions on meeting indoors were eased. Postgraduate theatre studies students at the University of Glasgow who were at crucial stages of their research could, during this time, apply to access the University theatre, in very small numbers and in a very monitored fashion, as long as they adhered strictly to both government and University guidelines. We were successful in our application to do this, and it was in this period of time that we were able to crystallise the various strands of our work together and share it, in the theatre, with three small and physically distanced live audiences.

When we could finally meet up in person, the fact that we could not do anything which involved connecting through materials or through touch and had to keep a physical distance from each other at all times meant we had to abandon much of the work we had already created, and engage in some completely new aesthetic explorations. Our shared real-world aims were to some extents dictated to us by the pandemic. We wanted to reduce our anxieties, and survive the pandemic with as much humour and humanity as possible. Being constantly concerned about keeping ourselves and each other safe nurtured a very real sense of solidarity, care and shared responsibility between us all. The various skills the performers had in managing anxiety and adapting interdependently to unexpected or challenging situations, as well as our ongoing relationships with rivers and water, and each other, became our focus. The fact that our lives were so curtailed meant that we really valued and enjoyed the times we had together, *especially* when we could be together physically, but also digitally when this was our only channel of communication.

4.3 ADAPTATION IN PRACTICE: THREE KEY STRATEGIES

The *not panicky* performance developed three key neurodivergent and river-led performance strategies for "staying with the trouble" and "making kin" with human and nonhuman others (Haraway, 2016) in the time of the coronavirus pandemic. These strategies were shared with three physically distanced audiences of fifteen members each, and subsequently in a series of intimate digital performances.

The three strategies developed were:

1. care-fully working through anxieties;
2. expressing life experiences in connection with water/the negative feedback river dynamic; and
3. communicating across differences.

These three strategies were embedded into the three-part structure of the event. The first part was a participatory performer-led "Warm-Up," the second a performance of four connected but very "Different Journeys," and the third a performer-led "Discussion" with the audience. I will now share some of the findings and insights which emerged through the development of these three strategies, as they relate to and can be observed in the three parts of the performance structure.

4.3.1 Care-fully working through anxieties - The Warm-Up

One of the first things we did as a small performance team, even before we met up physically, was to talk through the anxieties and "panicky" feelings that were emerging in the world, and in us all, as a result of the pandemic, something that

was reflected in the humorous name of the performance piece, *"not panicky."* Many people throughout the course of *The Panarchy Projects* had misheard the unfamiliar word "panarchy" as "panicky." I had become used to saying "not panicky, panARchy!" But in the context of the coronavirus, the name *"not panicky"* seemed more appropriate to our work, and it was this name that stuck. Given that panarchy is proposed by Gunderson & Holling as an alternative to catastrophic and panicky thinking about climate change, and we were working actively to reduce our own and each other's anxieties and to adapt to an environmental crisis situation, the title *"not panicky"* seemed doubly apt. The performers shared with audiences their practical strategies for "not panicking" in the first part of the performance event, in the participatory "warm-up." The warm-up related to the Bodyworlding method of the Performic Cycle.

By doing the warm-up, Euan Hayton hoped to help the audience, who might be particularly nervous given the coronavirus situation, to "relax"[42] and Chloe Maxwell wanted to "welcome" the audience into the space.[43] For Hughie McIntyre the warm-up was important in "showing other people what we can do when this lockdown is hitting us badly," and that "is not to panic, that's the message we're giving to every/ each and every one/ not to panic."[44] One of McIntyre's strategies in not panicking, that he shared with the creative team in our processes, and with audiences in the performances, was a practice of imaginative visualisation and relaxation in which he connected with the sea. For McIntyre this was about:

> mind control, that's what ah call it / like / pretending to be on the beach/ listening to the waves and the music playing /(laugh) / don't let the Covic

[42] (individual interview, 31st January 2021)

[43] (individual interview, 30th January 2021)

[44] (individual interview, 31st January 2021)

> (sic) take over ye […] just, let your mind go elsewhere / because your mind / you're the one that's in control / of your own body and mind.[45]

One of Euan Hayton's strategies in "not panicking" was to work with the breath, and "the calm." Very often when we started work by a river or in a studio, or arrived at a new location together, we would position ourselves at a physical distance from each other, and Hayton would lead us in some breath exercises, which would get us into "the flow" (see below), and help us to relax, so that we were able to enter the moment and open our senses to ourselves and each other, as well as to whatever or whoever else was around us. When I asked Hayton what this process was about for him he said,

> well, […] it not only makes me calm, but it makes people around me calm as well because […] that's a good state to be cos if you're in a calm, calm positive way then that's a good way […] to be in the present you know, to be in the, like the, the here and now […] And, I just wanted to help people who were, weren't doing too great or just or, just needed some relaxing before we, before we got going and that's why I did the / the, the breath work.[46]

Chloe Maxwell and Alison Mackenzie's strategies for not panicking were equally calm and careful, but more physically engaged. They led first each other (during process) and later the audiences (in the performances) in body-focussed warm ups, that could be done sitting down. Their work was especially useful and effective in getting the energies gently circulating and shifting out of the head connection and into the whole-body connection. Figure 30 shows

[45] (individual interview, 31st January 2021)

[46] (individual interview, 31st January 2021)

Mackenzie leading the ensemble and the audience in a warm-up at one of the *not panicky* live performances.

Figure 31: The performers leading the audience in the warm-up

Mackenzie said in a Zoom group discussion reflecting on the performance[47] that she had really enjoyed "guiding the audience," and in a one-to-one interview later in the reflective process that she felt the warm-up had helped the audience with "the breath and the calm."[48] Where Mackenzie focussed in the warm-up on "doing a stretch with the body, and the arms as well" (ibid), Maxwell took time to work gently and methodically with the head and neck areas, opening up the "bridge" between body and mind, something that enabled those who wanted to, to realise and release the tensions that they were holding in this area.

[47] (Zoom discussion 16th November 2020)

[48] (individual interview, 6th February 2021)

The audience feedback would suggest that the performers' various strategies worked, at least for some of them, with one audience member writing that "The introductions and warmups were lovely especially as there was a certain nervousness or tension at being at a live performance again. You could feel people relaxing around you as the performance went on."[49] Another audience member remarked on "the caring and gentle relationships between the performers," and the way they "attended to the being here and being present," something that she said she had "welcomed" especially in this difficult time.[50]

As a performer, Chloe Maxwell enjoyed "helping the audience with the warm-up" because she "could see the difference" and, "I don't know why but I get what they feeling and understanding."[51] Hughie McIntyre expressed this feeling as the audience "getting our energy and we're getting theirs."[52] This articulation of a transfer of energy or understanding between performer and audience resonates with Fischer-Lichte's (2008) description of the autopoietic feedback loop that can operate between audience and performers in live performance, and shows the level of expertise that the performers were working with. The *not panicky* warm-up could be understood as the performers helping the audience to relax in a time of heightened anxiety by establishing the autopoietic feedback loop. They did this in part through a performative practice of care; sharing relaxation strategies, inviting the audience to connect in a calm way with their own complex energetic dynamics, as well as with the energies and flows circulating in the space. They did it also through inviting the audience to access the flow of their imaginaries, and to connect their understanding of their own

[49] (personal correspondence, 25th September 2020)

[50] (personal correspondence, 23rd September 2020)

[51] (individual interview 30th January 2021)

[52] (Zoom group discussion, 16/11/2020)

flow with the flow of the river, from the very start. Documentation of the performers leading an audience in this warm-up can be watched in the following link: Link to documentation of "not panicky" warm-up.

4.3.2 Flow, Lines and Storying – Different Journeys

"Working with flow" across human/riverine dimensions, which partly emerged from the insights and practices of what Milton (2017) calls "autistic flow states," was a key aspect of The Performic Cycle dramaturgy (see Chapter 2.3). It was introduced to the audience in the warm-up, but went on to define the second neurodivergent and river-led survival strategy developed in *not panicky*, which was expressing life experiences in connection with water/ the negative feedback river dynamic. This second strategy, in some ways the heart of the "not panicky" performance piece, was related to the Vital Materialist Storying and Performance methods of The Performic Cycle. It was shared with audiences through a series of autobiographical/river performances developed by the performers in the second "Different Journeys" part of the live event. These autobiographical performances were introduced by the performers through the only ensemble movement piece in the performance event. In this ensemble piece, performers mapped out their individual journeys on the stage, while remaining at a physical distance from each other. The music they worked with for this piece was the song *Rivers Run*, by Karine Polwart. For most of the performers, the idea of "flow" was synonymous with life, with the flow of life. As Euan Hayton put it, "flow can mean lots of things/ a river flows, […] / which means it goes from place to place and it / it never stops moving, all rivers do that, the Clyde, every single river around the world, it won't stop in one place it will flow it'll keep going, and life can be like that, you know, there can be a

flow to life you know, it can/ life just keeps going, you know, and nothing's the / nothing's the same."[53]

Hayton opened the storying part of the performance by playing a singing bowl, using it to balance the flow of energies, the feedback loop he could feel between performers, and between performers and audience. He then told his story, which was at its heart a story of transition and adaptation – of adapting from living by one river to living by another river, of adapting to his parents splitting up and meeting new partners, and of adapting to a world threatened by climate breakdown. In telling what could be understood as an "autistic autobiography" (Stenning, 2020; yergeau, 2018; Davidson, 2009; 2010) through his evolving relationship with the rivers he is connected to, Hayton referenced previous *Panarchy Projects* as well as the NTS production of *The Reason I Jump*, (see 2.3 above), and other autistic thinkers, activists and autobiographers who have influenced and informed him. These thinkers included American scientist Temple Grandin, Japanese writer Naoki Higashida, and Swedish climate activist Greta Thunberg. According to Robert Melchior Figueroa, "the normate preference to define relationships according to personal identity rather than environmental identity is precisely the obstacle to understanding autistic (and nonautistic) environmental identity" (Figueroa, 2017, p585) By performing selected aspects of his life story, and sharing part of his experience and understanding of being diagnosed as autistic in connection with the rivers he lives by, Euan Hayton communicated the fact that environmental identity is just as important to him as personal identity. In doing this Hayton was not defining himself as "a subject of study or the bridge between human and nonhuman justice" (Figueroa, 2017, p591), but as a "self and community advocate" with

[53] (Individual interview, 31st January 2021)

an environmental identity "that raises difficult questions" and "explores and refines environmental empathy" (ibid). This last aspect is important. In telling his story, Hayton also hoped that the audience would "take away, any, any stories that they had," and think about their own "connections" with the "natural world."[54] In other words, he was directly and consciously inviting audiences to "explore and refine" their *own* "environmental empathy" (Figueroa, 2017, p591), through his telling of his story.

Many audience members fed back afterwards to say that the piece as a whole *had* made them "feel" their own connections, with one writing a beautiful short memoir about her own life, which she sent to us afterwards. She prefaced this piece of writing by saying that she had been "pulled in immediately […] Pulled, because it's my river too." Her "own memories were brought to the surface" by the performances, prompting her to access her own creative flow, something that she greatly appreciated.[55]

In terms of working with dynamics of flow some performers chose in the *not panicky* piece to continue working through the physical structure of "the 8." Indeed, in the context of the pandemic "the 8" gained a new expression when we finally got into the theatre, when the loops of the 8 were confronted by the lines of "the square." In order to remind anyone accessing the theatre to keep physically distanced at all times during rehearsal processes, theatre technician Tony Sweeten had taped large red squares on to the stage floor. When we first got into the theatre, we practised working with these squares, devising games and exercises which involved us getting used to moving around together while keeping a distance between us at all times. Performers then went on to use these

[54] (Individual interview, 31st Jan 2021)

[55] (email correspondence sent to the performance team, 25th September 2020)

squares to construct their life stories physically on the stage. Figure 31 shows Euan Hayton and Hughie McIntyre sitting in the middle of two different "red squares" during a *not panicky* rehearsal.

Figure 32: Euan Hayton and Hughie McIntyre working with the "squares" on the stage floor

The creative constraint of the grid, the tension between the squares of the grid and the loops of the 8, helped us work with the complexities of communicating "flow" when flow is being blocked, and leant a new perspective to the performance of simultaneous positive and negative feedback dynamics. This worked different when we we were performing outside to when we were in the studio, something that was particularly evident in Chloe Maxwell's piece. When I asked Maxwell what flow means to her, she said, "[Flow] means everything, for what I love, telling the feelings, telling the story, like how I felt, it means a lot. It's my life, really, it's everything." Maxwell does not feel as connected to rivers as she does to water more generally, something that is perhaps related to the fact that the river she lives closest to in Glasgow is the Molendinar burn, a

watercourse that has been driven underground by centuries of human settlement in the city. Her innate understanding that water is everywhere, constantly moving through the city, through the walls, around us all and between us all, agential and active, resonates with the phenomenological work of dancer Saffy Setohy and hydrofeminist Astrida Neimanis as outlined in Chapter 2. In the movement piece that Maxwell choreographed, she told her story first outside, in a park close to her home, in connection with the trees and the air. There was little constraint on her movement here, and she moved with the flow of the environment she felt around her, spontaneously and freely. In the studio, she shared her innate understanding of flow consciously, through mapping out and performing two directionally opposite 8's on the floor, with the squares as her guide and a Russian doll as her only prop. In the first 8 she performed the mapping out of the structure through which she would tell her story, opening out the dolls one by one, revealing the nested cycles. In the second, directionally opposite 8, she actually performed her life story, enclosing the dolls, one by one, back into their nest. She did this while responding to a question asked of her by her co-performer Euan Hayton, "How do you adapt to change?" In responding to Hayton's question, with reference to her own life, Maxwell explored multiple flow dynamics and realised that for her, the freedom to access and express her own life flow, in her own way, in connection with her immediate environment, were essential to her ability to adapt and change. In this way Maxwell's performance built on the "freedom space" for rivers thinking explored in both *Panarchy 2* and *Panarchy 4*, albeit in a very different way, something that was reflected in the question that she formulated for the audience and passed on to Alison Mackenzie to answer, "What is freedom and movement for you?"

Maxwell respected Hayton's autistic autobiography, and supported his telling of it, but did not define herself either in our processes or in the performance in

terms of disability or autism, although she is interested in the identity of neurodivergence. Neither did she align herself particularly with either disability politics or environmental activist politics. Those ways of thinking weren't particularly interesting to Maxwell. For her it was more important to be able to tell her story and think about her identity "in fluid ways that defy rigid constructions of identity" (O'Dell et al, 2016, p175).

If Euan Hayton and Chloe Maxwell's understandings of flow were essentially conceptual, dynamic and vital, then Hughie McIntyre and Alison Mackenzie's understandings of flow were more physical, embodied and material, more directly related to the properties of water itself. Neither McIntyre nor Mackenzie is autistic, though both identify as learning-disabled. Both wanted to connect and perform with rivers materially, through physical touch, during our performance processes. Mackenzie also embedded this tactile material aspect of her storying into her live performances, bringing stones and water collected fresh from the River Gryffe near her home to perform with each day.

For Alison Mackenzie, freedom of movement was connected to the freedom to express love, in many different ways. A significant part of Mackenzie's story concerned the flows of maternal love and romantic love. Mackenzie wanted to express her deep love for her mother and grandmothers in her story (both of whom she cares for informally, as well as being cared for by them) and she also wanted to express and honour the maternal side of herself. She wanted to be free to acknowledge the safety and love she feels in her home in the heart of her family, but also to be free to express the desires she has to engage in intimate relationships with others outside her family. Ultimately, she told the audience of her desire to find "a good man, who can feel love," to get married (like her parents and her sister have), and to create her own home, with her animals. In

her sensual and sensitive performative response to Maxwell's question, in which she communicated her own nuanced understanding of "making kin" across species (Haraway, 2016; 2003) and of "entanglement" across human/nonhuman dimensions (Tsing, 2015), Mackenzie articulated a new question, which she then passed on to Hughie McIntyre, and to the audience; "What is home for you?" Mackenzie's question was again one that had a particular resonance in the COVID-19 pandemic, a time during which people were being advised wherever possible to "stay at home," a time during which "home" was becoming a site of "work" for many people, and a time during which home was becoming, for some people, a site of entrapment as much as one of sanctuary.

For Hughie McIntyre the question "What is Home for you?" is complex and difficult. Like many older learning-disabled people who have spent significant periods of their lives in residential institutions, Hughie's formative understanding of home was not one of unconditional love and practical support, such as that underscoring Mackenzie's story. For 16 years of his life, McIntyre's home was a residential institution, Lennox Castle hospital, a "castle" in the Campsie Fells, a range of hills just north of Glasgow. Lennox Castle hospital was closed in 2002 and McIntyre wanted, as part of our performance processes, to return to the waterfall near the Castle that he had a strong connection with. He wanted to return there with the performance team, both to educate us about this important chapter of learning-disabled history, and to share the magic of the waterfall with us. He wanted to revisit the river that he felt had helped him to access his life flow when he was "trapped" in Lennox Castle, just as he felt "trapped" and scared now by the lockdown. He also wanted to make an imaginative piece of art in connection with this waterfall.

McIntyre's aims for his work in *not panicky*, and his story of connection with the waterfall, speak across disciplinary divides to academic research in disability studies, autobiographical/ecological performance and cultural geography, but his story about the Castle is perhaps of particular significance to "therapeutic landscapes" and asylum/post asylum research in cultural geography.

Health geographer Gesler (1992) is attributed with coining the term 'therapeutic landscapes' "as a vehicle for exploring why certain environments seem to contribute to a 'healing sense of place' (Gesler, 2003)" (Bell et al, 2018, p123). Gesler's work has been challenged by non-representational geographers such as Hannah Macpherson (2008; 2009; 2011; 2016) who have questioned the anthropocentricity of the 'therapeutic landscape' concept, arguing for a more entangled, 'intercorporeal' (Macpherson, 2016) understanding of both landscape and health.

Geographer Jennifer Lea also "looks more closely at Gesler's category of 'the natural,' and she does so in order to ask what happens when 'nature' becomes a performative actor, thus contributing to the therapeutic effects of landscape," (Lea, 2008, p96) something that is particularly resonant to McIntyre's work with the waterfall in *not panicky*. During our bodyworlding processes, when restrictions allowed, we went as a team to the Campsie Hills, and McIntyre led us to the waterfall. Once there, he prompted us all to immerse our hands in the river, to actually feel the flow and the energies of the water. He himself immersed his feet in the water, and lay down on rocks beside the river. Figure 32 shows McIntyre's bare feet and Alison Mackenzie and Chloe Maxwell's hands in this water.

Figure 33: Bodyworlding at the Campsie Glen waterfall

In McIntyre's own words, connecting with the waterfall, and the river, both then and now

> makes ye/ makes ye not actually a part of being sad, or angry any more, it makes you feel like you're a part of the river. That's what ah felt. Ah felt like my life was gonny be more changeable, and ah felt like a part of the river, and ah wanted to BE a part of the river, […] to be a magical person.[56]

Like McIntyre, Lea is interested in the idea that "Place, in conjunction with different embodied and bodily practices, can have purchase in inventing different possibilities of living, since micro-scale engagements between epidermal surfaces and rocks, or foot and floor, might precipitate particular processes of subject formation and therapeutic landscape experiences" (Lea, 2008, p96). McIntyre's understanding of "therapeutic landscape," gained through 16 years of living at Lennox Castle, were much more extensive than his sporadic excursions to the waterfall however, and his performance in *not panicky* speaks also to the work of cultural geographers such as Philo (1989; 1995; 2016), Parr (1999; 2007), Philo, Parr & Burns (2003), Imrie & Edwards (2007) and Chouinard et al (2010). These

[56] (Individual interview, 31st Jan 2021)

scholars have argued for greater recognition and analysis of the *power dynamics* in thinking about geographies of health, often with reference to asylum and 'post-asylum' landscapes. Parr, for example, has argued that there can be "a politics of power" (Parr, 2007, p557) in health geographies, in which "disciplinary agendas and agents (in the form of psychiatrists, therapeutic horticulturalists, funding agencies, community workers and so on) ensure that the complicated power work involved is often orientated to taming both nature's difference and patient difference" (ibid p559). In McIntyre's performance, his living agential relationship with the waterfall, and the river, was in fact what enabled him to *resist* the oppressive "disciplinary agendas and agents" of the "therapeutic" institution, and claim his, and the waterfall's, "difference." In his imaginary story, inspired by his own life experience, the river was his ally, and it was his entangled, 'intercorporeal' (Macpherson, 2016) interaction with the river, and his engagement with the negative feedback dynamic of its flow that helped to liberate him from the oppressions of the "asylum."

McIntyre shared with audiences the alternative possibilities of being and "subject formation" (Lea, 2008, p96) that connecting with the waterfall gave him when he was a resident at Lennox Castle hospital, and that it was giving him again, now, in the lockdown situation. One of McIntyre's long-standing support workers told us after the performance he came to, that he had not realised how much he had "in common with Hughie." This support worker had himself grown up in the Campsie hills, and also had an important living connection with the Glazert Water and its waterfalls, one that he was then able to share with McIntyre. By sharing his story of resistance and survival, in connection with the Glazert, the Kelvin and the Clyde, McIntyre brought attention to an important part of learning disability history and established an entangled politics of location. In doing this, he invited and inspired solidarity

across human differences, and explored new forms of learning-disabled led relational dynamics. He also brought the flow, the vital materiality, the power of the river onto the stage, in what was a complex performance of human/river "intercorporeality" (Macpherson, 2016). Indeed, one of the findings of the project was that working across the riverine can enable connections to be made across distances as well as differences. Just as viruses can work across boundaries without care for borders or legislation, so can rivers. It became particularly evident in the *not panicky* project that deepening our understandings of and care for one another's lives in connection with rivers could effectively reduce feelings of isolation and anxiety.

Although each performer told their story and their understanding of "flow" in very different ways, according to what they wanted to share with audiences (and how), each also performed it "in the grid" of the squares, in connection with video and audio and through the four stages of The Performic (adaptive) Cycle (Growth, Conservation, Release and Reorganisation). Transitions were marked and performed, carefully and safely. In addition, each performer's "journey" or story started with a question asked by a fellow performer, and ended with a new question that had emerged through responding to this question with reference to their own life experiences. The four autobiographical performances, and the movement piece which introduces them can be found on the following link:
Link to documentation of "not panicky" autobiographical performances.

4.3.3 Communicating across differences– Neurodivergent-led discussion

Audience numbers were limited to a maximum of 15 in each performance, with 2 metres between each person, and we had to submit a list of people coming in

advance of the performance, with contact details, for coronavirus contact tracing purposes. We discussed as a team who we felt it was important to invite, and shared up the invites equally between the five of us. The result was a mix of academics, industry professionals, collaborators from other *Panarchy Projects*, friends, family members and support staff. It was also a mix of autistic, learning-disabled, neurodivergent and neurotypical people. The dialogue in the discussion part of the performance events thus nurtured respectful communication not just across the audience/ performer divide, but also across multiple other socio-economic divides and human differences. Hughie McIntyre's question, "What does the River (Clyde) mean to you?" was opened out to the audience but first answered by performers from previous *Panarchy Projects* via a transitional audio piece. The audio piece was played with the lights out, giving both audience and performers time and space to think about McIntyre's question, and to process the multiple layers of the whole performance event. The audio piece then led in to the third part of the performance structure, which shared the third strategy for adapting to the coronavirus pandemic; communicating across differences, via neurodivergent-led Discussion. Figure 33 shares an image of the discussion on the final day of the *not panicky* live performance run.

Figure 34: *not panicky* Discussion with the audience (live performance)

New relational dynamics explored in the warm-up and opened out in the performances were developed by the performers in the discussions and used to nurture new kinds of dialogue. In these discussions, the performers asked members of the audience the same questions they had asked each other and explored themselves, in their stories. Given the tendency for neurotypical and non-learning-disabled people to assume control of the dominant narrative, we practised extensively how the performers might invite responses and dialogue while politely keeping the narrative in their own hands. All three discussions were very different, and they got increasingly relaxed and free-flowing as the week went on. An artist in the audience of one of the live performances said that they had been "feeling very cut off from my practice […] as I'm still on furlough," but that the performance had reminded them "where the creativity lies, in the relationships between people and the potential to explore, create and reflect on something that really matters."[57] The Discussion part of the event from the second of the three live performance events can be viewed on the following link: Link to documentation of "not panicky" discussion

In the second lockdown following the live performance run, we adapted the show to share via Zoom, and in the second and third lockdowns we shared the performance digitally in intimate performances with individuals and small groups. This allowed us to share the work with some people that hadn't been able to come to the live performances for reasons of health or geography. The questions and discussions in the third part of the event seemed to work better in the even more intimate digital events, and proved very resonant for some audience members. As theatre practitioner Louise Brown wrote after

[57] (personal correspondence, 24th September, 2020).

experiencing a Zoom performance, "the questions were very deep and very multi layered and very relevant. Never more so."[58] Nikki Frew from the *Panarchy 3* project told us that the piece reminded her that "the river is a friend" and that "you can communicate with everyone else and the water, and the water communicates with you."[59] Sam Ridley, from the *Panarchy 4* project, who is particularly knowledgeable about anxiety, said that the performances and the questions, "made me think in a calm way about difficult things."[60]

Adapting the show to a digital format reminded us again of the fact that digital platforms are not equally accessible to all, nor are they equally enjoyable for all, either for performers or audience members, and this seems to be especially pronounced with learning-disabled and autistic performers and audiences. Ultimately, it would seem that neither video alone nor live digital performances can activate the autopoietic feedback loop in the same way that felt presence, shared space and energetic performance can. We found that performing live in a shared physical space and time can also mean that *performers* are more in control of how the "feedback loops" between them and audiences are felt and experienced, rather than business apps. The *not panicky* performers were in control of all three parts of the performance structure in the short performance run at the university; the somatic, the narrative and the dialogical. The performance events were held by and belonged to the performers; every performance had its own life in the theatre, each one very different, depending not just on the energies of the performers but also of the audiences in the space. We discovered that sharing digitally and "streaming" live can enable engagement with people across geographical boundaries, and can support

[58] (personal correspondence, 14th December, 2020).

[59] (discussion following Zoom performance, 25th January, 2021).

[60] (discussion following Zoom performance, 9th December, 2020).

explorations of new ways of communicating, but that it can also be exclusionary and limiting. In the end, there seems to be no substitute for the communitas that can be created when people gather together physically in the same place, at the same time, just as there is no substitute for the physical river itself.

Conclusion

Environmental and social justice scholars Ray & Sibara identified in 2017 a need for humanity to shift its understanding of "the vulnerability of disabled people" to an understanding of "our shared vulnerability on the planet?" (Ray & Sibara, 2017, p19, quoting Elizabeth Wheeler). The coronavirus pandemic is certainly a huge reminder of our shared vulnerability on the planet, as well as a reminder of the inequalities in the way this vulnerability can be experienced by humans across the world, and of the different levels of support available to different people. Not all people who wanted to engage in the project could, despite our best efforts to find creative and inclusive strategies, and this emerged as an important finding, which points to the need to tackle digital as well as health and social inequalities in society, as well as to the need to continue to explore and rehearse different ways of coming together and creating/sharing work both digitally and physically.

As Anna Tsing puts it, "Precarity is a state of acknowledgement of our vulnerability to others. In order to survive, we need help, and help is always the service of another, with or without intent" (Tsing, 2015, p29). This state of interdependence is something that many learning disabled and autistic people understand all too well, and the performers who were able to collaborate in the *not panicky* project were certainly able to use this understanding in order to create a welcoming and safe space in which emotions, stories, and strategies for

survival could be shared and explored in a time of crisis. Through performative processes in connection with rivers and/or water and each other, the performers were able to nurture a feeling of calm in a time of heightened anxiety, promote a sense of "environmental empathy" (Figueroa, 2017, p591) in a time of ecological crisis and host respectful and meaningful dialogue across multiple human differences. Each performer was supported to do this, by family members, friends and/or support workers, and in some cases by all three. The project was supported ethically and practically by the University of Glasgow, by both academic and non-academic staff who worked together in order to ensure measures were in place to keep the University buildings clean, safe and open in a global pandemic, albeit in a massively reduced capacity. Creatively, the *not panicky* piece was supported by dramaturg Susan Worsfold, videographer Jassy Earl and lighting designer Tony Sweeten, as well as by a wider community of learning disability theatre groups, neurodivergent performers and neurodivergent-led collectives. In *not panicky* it was the nature of our *interdependences* across the personal/social/natural/technological and not our abilities to act independently that emerged as the most critically important factor in *both* surviving/adapting to a changing world *and* understanding that we are all at risk from each other. This paradox was central to the work. Given that we will almost certainly continue to experience increasingly severe social, political and environmental crises as the climate continues to change, I propose that the various insights generated in the *not panicky* project might be valuable not just in the context of the COVID-19 pandemic, but also as we recover from and move beyond it. In the conclusion to the thesis, I summarise the key findings of this doctoral research, across all five *Panarchy Projects*. I discuss the limitations of The Performic Cycle model as it has emerged, and identify areas that might benefit from further development or exploration in the future.

SUMMARY OF FINDINGS

I have proposed, in this thesis, a new model of ecological performance practice called The Performic Cycle. This model emerged through four participatory, neurodivergent-led and riverine performance-based research projects called *The Panarchy Projects* (Chapter 3). It was tested out in a final project, *not panicky*, in the context of the global COVID-19 pandemic (Chapter 4), which demonstrated that the model could support those engaging with it to adapt to/with an environmental crisis.

The *Panarchy Projects* were created in collaboration with more than 40 neurodivergent (mostly learning-disabled and autistic) performers and horticulturalists from across Central Scotland, in connection with the River Clyde, the River Forth and their tributaries. They also included an autoethnographic project with the River Severn. The projects engaged with around 10 professional artists, some of whom themselves identify as neurodivergent. They were supported financially and logistically by the University of Glasgow and practically by a variety of allies including support workers, families and friends. They engaged in partnerships with a variety of cultural/arts, social, ecological and policy organisations, across both rural and urban settings. Some of these partnerships (see 3.4) were set up by performance leaders who had ideas about how the research could/should proceed.

One of the original aims of the doctoral research project was to "develop innovative, interdisciplinary models of body-landscape research" (see Introduction) and The Performic Cycle could certainly be understood as "an

innovative, interdisciplinary model of body-landscape research." However, The Performic Cycle also speaks to a number of the other original aims of the PhD brief. Specifically, the model emerged through:

- engaging with landscapes as performative cues to rethink disability/ embodied access issues, and
- investigating ableist presumptions of body-place interactions.

Although it did not set out to be either an emancipatory model of theatre, as defined by Augusto Boal (1974) or an emancipatory model of disability research, as defined by Michael Oliver (1992), for the reasons given in Chapter 1, it became clear as *The Panarchy Projects* evolved that there is emancipatory potential with The Performic Cycle model. In particular, it appears to have the potential to intervene in processes of stigmatisation in new ways. Collaborating performers in all of *The Panarchy Projects* identified stigmatisation of disabled/ neurodivergent people, disrespect/pollution of the river/natural environment and climate change as real-world problems that they wanted to do something about. Performers and audiences in urban areas were concerned overwhelmingly about the littering and pollution of rivers. Performers and audiences in rural areas were concerned overwhelmingly about river flooding. Working in connection with rivers resulted in an expanded awareness of stigmatisation as something that does not just operate between humans, but also between humans and rivers. Stigmatisation was as observable, for example, in the demonising of flooding rivers or toxic estuarine mud (see Chapter 3.2 and 3.4) as it was in the stigmatisation or humiliation of "normally different" (Hanson & Philo, 2006) humans (see Chapters 3 and 4). The research thus identified links between processes of ableism and processes of anthropocentrism, and it identified stigmatisation and fear as methods used in

the maintenance and preservation of ableist and anthropocentric structures, systems and practices, within the context of the "Capitalocene" (Haraway, 2016; Moore, 2016).

On the other hand, the research identified that Performic Cycle practices such as Bodyworlding, Vital Materialist Storying, care and kin-making can lead to intersectional solidarities, and nurture connections across human and nonhuman dimensions which are capable of *resisting* this stigmatisation (Chapter 3.2 and 3.3), and of exploring alternative ways of being and doing with others. These alternative ways have the capacity to create a politics of location (Strang, 2014) which can empower traditionally marginalised communities or individuals (Chapter 3.3, 3.4 and 4). They can include new ways of organising and performing, for example through revolving leadership practices (Chapter 3.3). They can inspire action and activism (Chapter 3.3, 3.4 and 4). They can also generate new kinds of art-work and related dialogue across multiple differences and disciplines, and bring diverse people together to learn from each other and *reimagine* the "watery commons" that we all rely on in order to survive (Neimanis 2012, 2017) (Chapter 3.3, 3.4 and 4).

The Bodyworlding (or "riverworlding") and Vital Materialist Storying methods of The Performic Cycle model speak to two more of the original aims of the PhD brief, namely:

- to explore affective and sensuous dimensions of body-place affordances and entanglements through a variety of innovative new methods, and
- to explore the inter-relationships between disability and the environment

Both Bodyworlding and Vital Materialist Storying methods are capable of imagining and exploring new ways of being and doing across human/ nonhuman dimensions. Riverworlding and Vital Materialist Storying, both terms I believe I have coined, are powerful ways of expressing human/landscape entanglements and affordances and nurturing "environmental empathy" (Figueroa, 2017) in performers and audiences. Both practices can lead to ways of expressing "the tendrils of sensation and interrelation that invent knowledge and mediate […] experience" (yergeau, 2018, p116).

The last aim of the original PhD brief was "to influence the value of geodiversity for human culture and welfare in a greener Scotland." As discussed in Chapter 4, the *not panicky* project demonstrated during the COVID-19 pandemic that connecting with the natural world can alleviate anxiety and distress. Earlier *Panarchy Projects* also identified, through praxical Performic Cycle body-landscape research methods, that geomorphological "working with nature" thinking, which respects and seeks to maximise diversity, could be valuably extended to working with *human nature*, too. Thinking geomorphologically can promote a social and cultural understanding of the necessity of diversity (whether geological, biological, neurological or socio-cultural diversity) for adaptation and survival. Concepts and practices of "freedom space for rivers" (Biron et al, 2014) and "slowing the flow" proved particularly fruitful to work with in this respect, as practices which nurture the conditions within which diversity can flourish. *The Panarchy Projects* revealed that connecting and performing with rivers could "influence human culture and wellbeing" by shifting us out of a "positive" feedback loop overly concerned with processes of Growth, Consumerism and exploitation and into a more balanced understanding of the whole of the life cycle, an understanding of the equal need

for Resistance, Release and Reorganization, and a greater acknowledgement of our shared vulnerabilities, precarities and interdependencies.

As well as meeting the original aims of the PhD brief, and collaboratively creating a portfolio of experimental performance practice, which can be accessed via the following link, (Link to The Panarchy Projects documentation/portfolio of practice), The Performic Cycle makes another quite unexpected key contribution. It offers a unique interdisciplinary creative learning tool.

An interdisciplinary creative learning tool

The Panarchy Projects proved that The Performic Cycle model can be an effective and empowering creative learning tool, capable of supporting collaborators to lead and develop research inquiries and aesthetic/performance explorations of their own as well as working collectively towards mutually agreed shared aims. The model proved itself able to support collaborators to identify their own goals and develop new competencies, confidence and capacities in a variety of contexts, often to the surprise of people close to them. In *The Panarchy Projects* this ranged from developing performance, communication and presentation skills, to developing agency in environmental and policy/political discourses to developing independent/interdependent travel skills, and realising team work and leadership capacities. Some collaborators discovered friendships and alliances through the project that were enriching to their lives, while others discovered the power of collective action. Some secured part-time employment or gained personal/professional/artistic recognition or satisfaction through engagement with *The Panarchy Projects*.

Although The Performic Cycle proved itself an effective and empowering interdisciplinary creative learning tool, it is not designed to be used with predetermined outcomes or agendas in mind, and would most probably not work if used in that way. The model is explicitly non-hierarchical and exploratory. It works responsively to support learning and action that emerges genuinely through process. This process-relational openness is essential to the integrity of the model, and is something that is supported by working in conscious relationship with ever-changing landscape forms and processes. It is also what supports the participants' agencies in the process.

The interdisciplinarity of the model is also essential to its integrity. The Performic Cycle methodology combines an understanding of the cyclical and praxical nature of both theatre practice-based research and participatory action research, with an understanding of Gunderson & Holling's (2002) ecological concept of the adaptive cycle (see Chapter 1). The research identifies creative and critical reflexive and reflective practices as being an essential part of any participatory performance process. In developing the Performic Cycle I engaged in a time-limited reflexive autoethnographic project, which enabled me to interrogate my own positioning in the research and become more aware of my own internalised ableisms and multiple priveleges, as well as to my own neurodivergences. This reflexive project was crucial to the knowledge created, to the integrity of the research and to the evolution of The Performic Cycle model. I recommend its use on an as-and-when-required basis, with agreed time and resource limits and supervision (such as I had) to ensure these limits are kept to. Collaborative and collective Critical Reflection is central to the model and is non-negotiable. It is built into The Performic Cycle model, as the crucial final phase when findings are identified, distilled and disseminated,

reorganisation/ change/ transitions can happen and new cycles can be identified (or not).

I present the Performic Cycle as a model of practice which makes a new contribution to knowledge. I suggest it contributes to knowledge through:

- the unique interdisciplinary nature of its methodology, including the empowering creative learning tool it offers
- its exploratory human/landscape performance-based research methods
- the findings/knowledge/artworks these methods have generated so far.

Figure 34 summarises the Performic Cycle model of Practice, it's phases, methods, scales, processes and outputs.

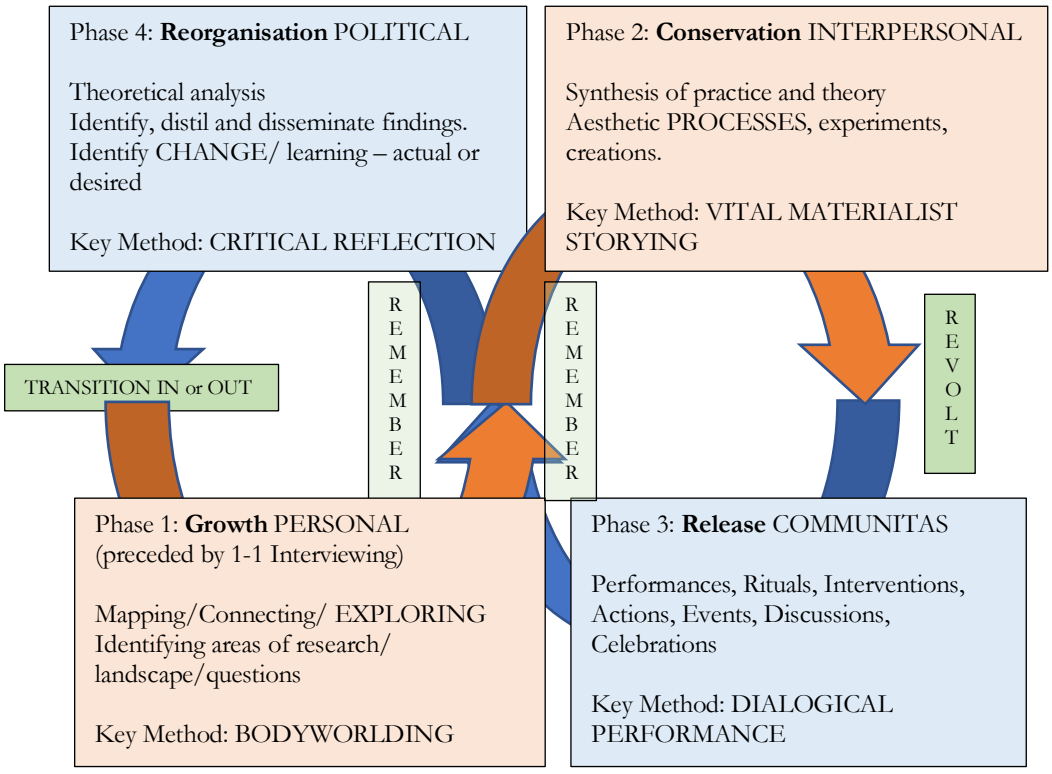

Figure 35: The Performic Cycle Model of Practice

Discussion

I suggested in Chapter 2 that The Performic Cycle model addresses a number of gaps in contemporary performance/ performance as research practices in Scotland and the UK. Specifically, I am hopeful that it addresses a disability gap in site specific performance practices and an environmental gap in learning disability and autistic performance practices. The Performic Cycle emerged through *The Panarchy Projects*, in collaboration with a variety of neurodivergent performers and students. *The Panarchy Projects* build specifically on the learning disability scholarship of practitioners and academics such as Leighton (2009), McCaffrey (2019), Reason (2019), Calvert (2019), Ames (2015; 2019) and Hargrave (2015), and the critical autism scholarship of Milton (2013; 2017), yergeau (2018), Bertilsdotter-Rosqvist et al (2020) and Judge (2017). They developed with reference to the disability performance scholarship of Hadley (2014; 2019; 2020), Conroy (2009; 2010; 2015; 2018), Johnston (2016) and Kuppers (2003; 2013; 2014), among others, and they revisited a number of complex ongoing academic and institutional questions about disablism from a new perspective. A number of these questions remain unresolved.

One of these questions concerns "the academic theorising and disseminating of […] research" conducted with learning-disabled performers or collaborators (Leighton, 2009, p111). For theatre practice-based researcher Leighton, this question is "fraught" with a "normalising /othering tension." Applied theatre studies scholar Matt Hargrave (2015) responds to this "normalising /othering tension" by creating an Easy Read version of his monograph *Theatres of Learning Disability: Good, Bad, or Plain Ugly*, which he includes as an appendix to his book. Following Hargrave, I include at the start of this thesis a

three-page Easy Read/lay summary of the processes and findings of this PhD. I am aware that this oversimplifies the research and does not do justice to either the theory or the practice, but I hope that it, alongside the video documentation of the exploratory processes, might make this written part of the research accessible to a greater range of readers. In *The Panarchy Projects*, the participatory processes and physical performances themselves often proved to be the most effective and egalitarian ways of disseminating and sharing the research both within and outwith the Academy, and that is indeed one of the strengths of a combined participatory action and theatre practice-based research methodology. Throughout the process, I have presented findings and art-works, sometimes along with collaborators, at a number of national and international conferences and events (see Appendix). As the research has progressed, I have supported performance collaborators who are interested in the research side of The Performic Cycle (the Reorganisation/Critical Reflection phase) to develop their own presentation competencies. Sharing art-work and creative research processes alongside more academic arguments means that there can be more parity in the dissemination process. It can also make academic research which concerns non-academics more accessible to people outside the Academy. Although we have collectively developed some competencies and insights in this area, it is something that I suggest would benefit from increased, dedicated attention in the future.

The second ongoing question that this research has engaged with but not resolved concerns accessibility of writing, media and documentation. I experimented with creating captions and audio-description for the first *Panarchy Project* video documentation, and while this was an interesting process, I did not feel the results were ideal, and this is partly because of the abstract and layered nature of the work. All of the video documentations, except

for *Panarchy 4A: Funny Edit*, work across media, and across many layers of process, and captioning does not necessarily help with accessing these in a coherent way. My hope is that the video documentations are accessible in some way by most people who will encounter them, given that they are not narratively driven and work as much through sound and audio as they do through visual media. My hope is that different people will meet them according to their own sensory and communication preferences and particularities. This thinking builds on the "aesthetics of access" thinking of O'Reilly (2016) and the "creative access" work of Birds of Paradise Theatre Company,[61] (for example with regard to incorporating sign language interpretation and captioning into the "plot" and the central body of the performance) but from a neurodivergent perspective. With respect to *The Panarchy Projects*, and the documentations of them, I am not proposing that I have resolved any of these questions of accessibility and aesthetics. This is an area of research of its own and it was neither one of the original aims of the research to explore this, nor an aspect of the practice that I have had sufficient time to dedicate myself to. I am, however, flagging it up as an ongoing concern and interest that requires further research, experimentation and attention, especially from neurodiversity and learning disability perspectives.

The third ongoing question that the research engaged with but wasn't able to resolve, for reasons of systemic and social/institutional inequality, is that of equitable payment, and professionalism. Within *The Panarchy Projects* themselves, non-professional learning-disabled and neurodivergent artists who collaborated independently and not through a partner organisation were unable to be paid industry/Equity approved wages for their contributions to the

[61] https://www.boptheatre.co.uk/what-we-do/bop-theatre/

practice-based research. This was partly because the University would have required them to be self-employed in order to process payments via the project resource budget, and partly because being paid by the University might have interfered with their benefits payments without providing any financial/ employment security. One assistant workshop leader in the *Panarchy 3* process, who is a trained theatre artist was able to register as self-employed during the process and to be paid for her contributions to the work, but she could only invoice for small amounts spread over time without it affecting her financial security. Performers in both *Panarchy 1* and *not panicky*, who came independently to the projects and gave freely of their time, expertise and knowledge, were able to be formally thanked for their participation in the research through as generous as was bureaucratically possible gift vouchers from the University, through refreshments on field trips and through payment of any expenses. This was clearly not ideal but was a pragmatic solution in a difficult structural context. In general, the projects acted more as a (much needed) performance training ground/creative learning opportunity than as an employment opportunity for collaborating neurodivergent artists, and this is certainly how they were used by the two main partner organisations, the Citizens' Theatre and Green Routes. In the projects with these two organisations, the University covered participants' transport and refreshment costs for field trips, and I was careful to thank everyone personally, but there was no question of anyone being paid for their participation.

A number of participating performers started remunerated (temporary and part-time) work during their involvement with *The Panarchy Projects,* in collaboration with employment support organisations, and several explored the possibility of paid menteeships with arts organisations, something that they might not previously have considered. This speaks to the potential efficacy of

the model as a (performer) training tool. However, temporary part-time work is not substantial enough to rely on, and the lack of secure employment opportunities for people with additional support needs in general is something that needs to be addressed systemically. Equally, the achievements of those who have gained paid work do not make the contributions or processes of those who are unlikely to gain paid work within the current economic system any less valuable and important to this research. In fact, the contributions of those performers and participants who experience the greatest barriers to employment within the current economic context are *central* to the findings of The Performic Cycle model. This is important to stress. Rather than falling back into a way of thinking in which success is measured by normative standards and many artists (or other kinds of workers) compete against each other for scarce funding (and most do not succeed), I wonder if the questions raised by The Performic Cycle might point to a different way? What if everyone was remunerated equally and fully for their contributions to a project, regardless of whether they were contributing to the front loop or the back loop of the cycle, to "growth" or "release" - in the understanding that both are essential to the long-term survival of the species, and the overall health and diversity of the ecosystem? In the understanding that we all have different capacities and needs, and that these shift and change throughout our lives, as we do? What if goals were created and success measured collectively with the health and diversity of the ecosystem, of the whole life cycle in mind, rather than in accordance with an economic system geared towards maximum growth and exploitation in the interests of a minority of humans? These huge questions are clearly beyond the remit of this research project, but they do come from important concerns that were raised, if not resolved, by *The Panarchy Projects* – concerns regarding who is valued and remunerated for what with regard to participatory and theatre practice-based research and how this is supported systemically and practically. These issues

remain live and important issues in the wider learning disability arts context and in the wider academic research context, and again, this is something that I suggest would benefit from further, dedicated attention.

The Performic Cycle model was developed and tested out in collaboration with neurodivergent (mostly learning-disabled and autistic) performers from across Central Scotland. It is not yet clear how it would work with other demographics, in other geographical contexts, and what different findings might emerge in these different contexts, and this would be interesting to research. I propose The Performic Cycle as a model of particular interest and potential value to other neurodivergent people, but see no reason for it to be exclusively of interest to neurodivergent people. I hope that it could be used by any individual, group or organisation interested in working non-hierarchically and organically across the human/nonhuman in order to make performance/art-work, or engage in practice-based research in response to (collectively) identified environmental, social or cultural concerns.

Similarly, The Performic Cycle model has developed in connection with rivers and estuaries. It is unclear whether or how the model would work with other landscape forms and processes, especially given its focus on flow, confluence, freedom space for rivers and the negative feedback dynamic of the river. It would be fascinating to explore how working with different landscape forms and processes would inform the work and change the findings (or not), and inform the ongoing ecological development of the model.

Related to these latter two points, the model has largely developed and been tested out with people living within a shared community of location, or in disparate locations connected by a river network. It is still unclear how the

model would work in connecting people with river networks or landscapes they do not live with/by, or connecting people across wider geographical areas and across landscape forms. The original *Final Panarchy Project* was going to have explored this, by bringing diverse performers from across Central Scotland together, and by working with the Forth and the Clyde, and the earth between them, but this was prevented by the coronavirus pandemic. The findings from the *not panicky* project would suggest that digital technologies can connect people across geographical divides but that they can also exacerbate existing inequalities and create new ones, and are not therefore an egalitarian solution without accompanying structural change. *not panicky* also demonstrated that many theatre and performance processes work best through live physical presence, and that there is no substitute for this, but that technology, including video and audio, can greatly enhance this. As a site-responsive, adaptive and experimental methodology interested in diversity in human/nonhuman "assemblages," The Performic Cycle embraces hybrid natural/technological approaches with the proviso that they are used flexibly, critically and adaptively, and geared towards maximum inclusion and accessibility.

Finally, I would like to end on a note of caution. The Performic Cycle model requires time to go through the four phases; it takes time to develop the praxis in a meaningful way. It cannot be rushed. The basic requirements of both humans and rivers for:

freedom of movement
time to process and absorb
space to express, make mistakes, spill over
opportunities to reflect, rebalance and change course if necessary
supportive and flexible structures

are perhaps the most crucial findings of the research. Given the financial pressures, organisational priorities and time constraints on most people, groups and institutions within the current system, these requirements are not usually met, something which creates barriers and distress for many people. The Performic Cycle model is structured in phases which enable these requirements to be met, and the model could be helpful to other practitioner-researchers attempting to initiate more neurodivergent-friendly, expansive and egalitarian ways of working with potential partner organisations or institutions.

Similarly, when working with people categorised as vulnerable or as having additional support needs, The Performic Cycle model requires organisational and logistical support, and an ethical framework capable of assessing and managing risk. These things too can take time, resources, energy and persistence, and the relationships that are central to this process need space and time to evolve. I would urge practitioners and researchers not to be put off by these factors, whether they are using The Performic Cycle model or any other model of participatory site responsive performance practice, but to take due account of them in the planning process.

To conclude, the earth and the natural systems we rely on to survive are changing, in part due to our own actions. As ecofeminist Vandana Shiva has put it, the earth will survive these changes, but we, and other living creatures who rely on the earth, may not.[62] At the same time, the social systems we rely on to survive are effectively preventing many of us from engaging in processes which affirm and nurture our connections with the earth and its processes, and therefore from taking better care of it. Some people are more disadvantaged than

[62] Psi conference keynote, Hamburg, 2017

others in this respect, and disabled people can be particularly disadvantaged, despite having insights and capacities that will be essential as we adapt to changing conditions.

To adapt to a changing climate and a changing earth we will need, as a species, to develop more respectful and responsible relationships with the earth and its processes, and with each other. We will need to be able to express how changes are affecting our own lives, manage our own and each other's anxieties, and talk – across differences - about ways that we might relate, organise, create and perform differently in order to survive, and ideally thrive, together with the earth. I offer The Performic Cycle as an exploratory tool with which it is possible to begin to do this.

APPENDIX

List of Presentations/Performance Lectures Delivered

May 2021, *Researching with Rivers: Freedom Space and Flow,* International Autism Research Festival, University of Leeds (online)
Co-presentation with performer Euan Hayton and horticulturalist Cameron Browne

January 2020, *A Panarchy Project with the River Forth: how creative public engagement work can contribute to thinking about adaptation,* Sniffer Scotland National Flood Risk Management Conference, University of Strathclyde
Co-presentation with Sam Ridley and Cameron Browne from Green Routes

July 2019, *Panarchy: Risk, Resistance and Agency,* International Conference on Educational, Cultural, and Disability Studies, Liverpool Hope University

June 2019, *Panarchy: River Rings and River Risks*, Scottish Centre for Geopoetics "Expressing the Earth" conference, Wiston Lodge, Biggar

April 2019, *Panarchies 1-3*, George Ewart Evans "Storytelling and the Environment" International Symposium, South Wales University, Cardiff

March 2019, *pAnarchy, Our Space, our Place*: Creating Ecofeminism Symposium, Glasgow Women's Library

Feb 2019, *Rivers, Risk and Resistance: Towards a Panarchic Performance Practice*, Human Geography Research Group Testing Ground seminar, University of Glasgow

Jan 2019, *Risk, Resistance and Agency: How can performance work open productive dialogue across disability and environmental discourses?* Centre for Disability Research (Disability Studies: Developing Theory, Researching Policy and Practice seminar), University of Glasgow

September 2018, *Panarchy 2: Rivearthings – A Performance Lecture* TaPRA - Theatre and Performance Research conference (Bodies and Performance Working Group), University of Aberystwyth

August 2018, *Panarchy 1: Riverings*, Royal Geographical International Society conference (Postgraduate Snapshots), University of Cardiff

May, 2018, *Panarchy (1): Riverings – screenings and discussion*, TFTV/CCPR Postgraduate Symposium, University of Glasgow.
Co-presentation with performers Euan Hayton and Krissy Neilson

May 2018, *Panarchy (1): Riverings - Materials, Meetings, Musings*, "Performance, Ecology, Heritage Hub" launch, University of Glasgow

May, 2017, *Towards a "normally different" ecological performance practice,* TFTV/CCPR Postgraduate Symposium, University of Glasgow

Feb 2017, *Survival Methods in a Post Truth World*, TaPRA (Theatre and Performance Research) symposium, University of Leeds

Jan 2017, *Negligence and Performances of Care*, Glasgow New Scholars Theatre Research seminar, University of Glasgow

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