Resilience Building in Everyday Life

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Appendices

Content in the Appendices is unedited, to meet the criteria for thesis submission. The reader may be surprised by the use of unconventional and coloured font, which is representative of my usual working method, by way of managing my dyslexia and indicators of Myres-Irlen Syndrome.

Dedication

This thesis is dedicated to the biosphere of this beautiful planet.

Contents

Chapter 1: Introduction

The Garden of Eden	1
1.1 Motivation	1
1.2 Reskilling	4
1.3 Positionality	5
1.4 Resilient Living in Deheubarth, Late 1940s	7
1.5 Methodology	8
1.6 How, and Why do People Build Resilience?	10
1.7 Approaching Alternative Futures	10

Chapter 2: Approaches to Resilience

2.1 Defining Resilience	13
2.2 The Transition Town Movement	15
2.2a Post-Capitalist Futures	17
2.2b Commoning	20
2.2c Eco-Socialism	21
2.2d Maker Geographies	24
2.2e Peak Oil	25
2.2f Doubts about the Transition Movement	28
2.2g Resilience Building	30
2.3 Social-Ecological Resilience	30
2.3a The Anthropocene	31
2.3b Planetary Boundaries	32
2.3c Sustainability versus Resilience	33
2.3d Adaptive Capacity	34
2.3e The Three Concepts of Resilience Thinking	35
2.3f The Emergence of Resilience Thinking	36
2.3g Multiple Scales and Variables	39
2.3h The Adaptive Cycle	41
2.3i The Panarchy	45
2.3j We are all Interconnected	46
2.3k Managing for Change	48
2.3l The Back Loop	50
2.4 Feminist Approaches	51
2.4a Ecofeminism	53
2.4b Ecofeminist Agriculture	55
2.4c Ecofeminism and the Spiritual	56
2.4d Ecofeminism and Resilience Thinking	58
2.4e ‘Society of the Goddess’	60

2.4f Uncomfortable Reading 61

Chapter 3: The Problem with Fieldwork

3.1 A Reflexive Ethnography 62
3.1a My Entry into the Field 62
3.1b Ethnography 67
3.1c 'Make-do' Methodology 70

3.2 Feminist Methodologies 74
3.2a Positionality 75
3.2b Reflexivity 76
3.2c Subjective Methodology 77
3.2d Qualitative versus Quantitative Methods 79
3.2e Duppy Feminism 81

3.3 What I Actually Did 83
3.3a Research Questions 85
3.3b Research Ethics 86
3.3c My Field Diaries 87
3.3d Forest Garden Plan 89
3.3e The Eco Shop 90
3.3f Spending the Masculinist Privilege 94
3.3g Rags to Rugs 97
3.3h Creative Research Methods 99
3.3i Semi-Structured Interviews 101

3.4 Reflection on Field Diaries 105

3.5 Becoming an Activist Scholar 107

Chapter 4: Resilience Building in Everyday Life

4.1 What Motivates People to Build Resilience? 111
4.1a Theory-led Resilience Builders 112
4.1b People-led Pragmatists 117
4.1c Satisfied Resilience Builders 120

4.2 How do People Build Resilience? 123
4.2a Growing Vegetables 124
4.2b Skilling Up and Passing it on 130
4.2c Community 131
4.2d Permaculture and Transition Initiatives 134

4.3 Instinctive Resilience Building 135

Chapter 5: The Resilience Perspective in Everyday Life

5.1 Flashes of Insight 137

5.2 Participants Describe a 'Late K Phase' 138
5.2a A 'Regime Shift' is Coming 141
5.2b Permaculture Lifeboats and Communal Living 142

5.3 Community Glue 144

5.4 Everything is Connected 146
5.4a Holistic Perspective 148

5.5 Globalization Erodes Culture 153

5.6 The Re-Enchantment of Everyday Life 157

Chapter 6: My Immersive Ethnography

6.1 Case Study 160

6.2 Descriptions of the Forest Garden 163

6.3 The Performance of Forest Gardening 167

6.4 The Aesthetics of Resilience Building in Everyday Life 172
6.4a Balancing Perfection and Mess 173
6.4b The Hidden Waste of Capitalism 175

6.5 The Eco Shop is Unusual, Special, Treasured 176
6.5a The Eco Shop has a Life of its Own 178
6.5b Rhythm of the Afternoon 180

6.6 The Eco Shop Serves Community 181

6.7 The Eco Shop Confronts Capitalism 184

6.8 The Eco Shop is Inclusive 184

6.9 Performance of Making Rag Rugs 187

6.10 Transition Culture or transition culture? 190

6.11 Experiential Learning 191

Chapter 7: Conclusion

7.1 Resolution of Methodology Through Making 195

7.2 Grassroots transition culture 197

7.3 The Web of Life 200
7.4 An Instinctive Maker Culture 200

7.5 Commons 203

7.6 Commoning is the Glue 207

7.7 From Resilience Building to the Re-Enchantment of Everyday Life 209

Bibliography 212

Appendices:

Appendix 1
Coloured Drawings of Forest Garden I

Appendix 2
Forest Garden Plan VIII

Appendix 3
Eco Shop Plan X

Appendix 4
Eco Shop Infographic XII

Appendix 5
Eco Shop Leaflet XIV

Appendix 6
Rags to Rugs Posters XVII

Appendix 7
Letter of Support XX

Appendix 8
Interview Transcript XXII

Appendix 9
Interview Crib Sheet XXXII

Appendix 10
Participant Information XXXVI

Appendix 11
Explanatory Statement XXXIX

Appendix 12
Informed Consent Form XLIII

"'That's true enough,' said Candide; 'but we must go and work in the garden.'"

(Voltaire, 1947 [1759], 143)

Figure 1, Author's own garden

Chapter 1:

Introduction

The Garden of Eden

The supposed quick read of Voltaire's Candide took me a while, but I was rewarded by the reassuring simplicity of the denouement. This was striking, having witnessed the misadventures and philosophical wanderings, the arguments and the disappointments that afflicted the protagonists at every turn. But despite their travails, which contrasted with their personal philosophies, they eventually come to find peace, as Candide and Pangloss cease their restless search, in exchange for the simple satisfaction of growing their own food. I find it satisfying that having journeyed to the ends of the earth and back, Pangloss reflects:

> '"When man was placed in the Garden of Eden, he was put there "to dress it and keep it", to work, in fact; which proves that man was not born to an easy life.'"
>
> (Voltaire, 1947 [1759], 143)

1.1 Motivation

I have always loved gardens and making things and I have been a sporadic dabbler in permaculture, which is a method of agriculture that mimics a natural ecosystem (Mollinson, 1988; Whitefield, 2004), and is touted as being efficient and robust. But other than completing an 'Introduction to Permaculture' course and doing strange things to my garden, I hadn't taken my study to a deeper level. Likewise, I have had a longstanding, yet uncommitted (even superficial) curiosity of ecofeminist concepts. I had read many times that, 'all is interconnected', but it was my involvement

with a local Transition Initiative that introduced me to resilience thinking, and I was fascinated by the idea of a way of life that could withstand perturbations without losing essential function.

Years later, I boldly embarked upon my PhD studies and was surprised to receive a jolt of recognition when I began to delve into the concepts underpinning resilience thinking. Suddenly I was being reminded of ideas I'd vaguely been aware of when flirting with ecofeminism. Thus, it seemed sensible to attempt to explore these concepts thoroughly and to seek out commonalities, neutralities, disparities and divergences. Congruently, I became aware that permaculture had not only proved a valid practice for building resilience, but also was a great way of practicing eco-feminism, but the idea behind permaculture is to encourage an organic agricultural system which maximizes yield, whilst minimalizing resource-use (Whitefield, 2009), which is interesting as some resilience scholars might critique this as being a form of optimization (Walker and Salt, 2006) (See Sections 2.3 and 2.3d).

Bill Mollinson and David Holmgren developed permaculture theory and practice as a *conscious* idea. Of course, many societies already existed along those lines, but permaculture is evolving and open to debate over what it exactly is (Whitefield, 2004). More recently, permaculture has been hailed as the 'intellectual inspiration' for the Transition Movement (Bailey, et al., 2009), as Rob Hopkins (then a permaculture teacher at Kinsale Further Education College, Eire) enthused his students to develop an Energy Descent Action Plan for the town of Kinsale (*Students of Kinsale Further Education College, 2005*). Subsequently, Hopkins expanded his work and moved to Totnes, Devon, which became the first official Transition Town, with the aim of building resilience in response to the challenges of peak oil and climate change, via community engagement (Hopkins, 2008a). In 2007, the Transition Network was formed as many British towns became Transition Towns, acting as 'hubs', 'initiatives', and this emergent movement became Transition Culture (it seems as though this name is derived from Hopkins's web log of the same name) (Mason and Whitehead, 2012). And according to Mason and Whitehead (2012), Transition Culture is:

> "Inspired by the practices of permaculture, alternative energy generation, organic food production… the Transition Culture movement is devoted to creating places that are more locally resilient to the threats posed by declining global oil production and climate change."
>
> (483)

What excited me about Transition Culture was the enthusiastic conviction that engaging with energy descent (the period post-peak oil when oil demand exceeds supply) might be an enjoyable process which could even be prosperous, as working together is exciting and rewarding, and

reskilling brings a sense of accomplishment (Hopkins, 2008a), and the idea that this could translate into a far more resilient way of life (Mason and Whitehead, 2012). It is hard to briefly sum up what 'resilience' actually is, but Hopkins (2008a) suggests, "In the context of communities and settlements, it refers to their ability to not collapse at first sight of oil or food shortages, and to their ability to respond with adaptability to disturbance" (54), whereas Walker and Salt (2006) say that a resilient system has inherent robustness and elasticity and following a shock or stress event, the system can re-arrange itself and carry on functioning, even if some parts have suffered damage.

The Transition Movement uses key ideas from the social ecological resilience literatures, such as the panarchy, the adaptive cycle (Brown, 2014) and managing the backloop (Quilley, 2012), which seeks to implement sustainable transformations now, in order to prevent destructive future forces. This thesis investigates ways in which people in Deheubarth are trying to manage the backloop. I knew that some people in Deheubarth were involved in resilience building, and I wanted to know what motivated them, and what practical steps they took. Thus, my research questions began to nebulise, and I tentatively approached Pobl yr Afon Forest Garden, asking whether I might conduct ethnographic field work. I thought this would be an ideal place to find out about resilience building because a forest garden is designed to mimic a natural forest ecosystem, with multi-layered planting of ground layer, climbers, shrubs, and a canopy layer of flora, but the plants are purposefully chosen to be of edible, medicinal or pragmatic use to humans (Hart, 1996; Whitefield, 2004).

I decided the best way to proceed would be to volunteer as a member of the forest gardening group and to conduct ethnographic fieldwork, with the hope of gaining enough trust to earn some interviews later. Thus, I spent many hours on my hands and knees, weeding, wheelbarrowing mulch and sharing bread round a communal fireplace in a field. I became a forest gardener. But I soon discovered that the Forest Garden was funded by the Eco Shop, a second-hand shop, and this became the second place at which I volunteered, and so I spent many an afternoon furiously steaming donated clothes. My work at the Eco Shop then led me to forge an alliance with another volunteer, whom I collaborated with in the Rags to Rugs project.

The environmental problems that we are facing demand collective action (Connors and McDonald, 2010). One such method for achieving this is localisation, which is dubbed part of the "new environmentalism" by Connors and McDonald (2010), whereby people act at the community level, perhaps in lieu of sufficient (or inspiring enough) action at the state or governance level.

When people embrace localisation, what they create can be refuge-like and it can be so agreeable that they can relegate external concerns and aims of transition (Kenis and Mathjis, 2014). Some of my participants created such havens through organic and permaculture inspired grow your own gardening, which Olivia calls 'lifeboats', and this is a term that I use in this thesis (see section 5.2b).

1.2 Reskilling

I was struck by the decline of the Norse settlers of Greenland because it is, "the only example of a developed European society which (so far!) has been extinguished" (Bell and Walker, 1992, 142). A resilience thinking perspective suggests that the Norse had made themselves susceptible to climate fluctuations because of their eroded resilience, whilst the native Inuit population was able to persist, in part because of their skill at exploiting the local resources and providing themselves with appropriate clothing. The Norse's loss of darning skills makes me think of Transition Culture's popular sock darning workshops. Hopkins (2008b) writes that whilst darning is indeed a useful reskilling activity, perhaps more importantly, it is seen as a way of building social cohesion, as by getting together and relearning lost practices, people gain in confidence, and it gives them hope that they may be better equipped to survive an uncertain future. Perhaps though, we come full circle, as Twigger Holroyd, author of *Folk Fashion, Understanding Homemade Clothes* (2017), takes the art of mending clothes to its zenith. She can even mend a cable jumper, not through darning, but by putting old stitches on new needles and knitting afresh from there, seamlessly blending the old with the new.

But Holroyd is not the only one who is passionate about radical mending and reuse of textiles, by which I mean going beyond simpler acts such as darning holes. During one of our Rags to Rugs workshops, Helen told us all how she is able to unknit a jumper, wash and dry the yarn to remove the kinks, wind it up into balls, and then use it to knit a whole new garment, and she says that this practice was once commonplace. So, if people are learning to darn in an effort to build local resilience and improve their chances thriving during perturbation, it is particularly poignant that the Norse settlers lost these skills before their society collapsed. It is becoming increasingly clear, especially in Transition Culture, that adaptability is gaining importance in the modern world, as we find ourselves perched once more in a situation where disturbance and threat may arrive from a variety of sources, be that conflict, economics, climatic, or even cultural. Perhaps we should look to the past to prepare for the future?

1.3 Positionality

Through my feminist readings, I was introduced to the notion of writing in the first-person, and that positionality is vital (see Sections 3.2 and 3.2a). I might position myself as the granddaughter of 'just a simple peasant' from the Burgenland area of present-day Austria, who has been indoctrinated to believe she has 'peasant blood'. This is because much of my formative experience included the notion that my love of nature, gardening and provisioning was ancestral, as on declaring how much I enjoyed grubbing around in the garden, my mother would often comment, "that's the peasant in you". As I grew up, she occasionally told me a little of village life that she witnessed in Zagersordf when she had visited, and when she agreed to be interviewed as part of my research, I was hungry to know more and record things for posterity. Also, because the first time I read Hopkins (2008a) describing resilient organic communities in Eastern Europe, it sounded as if he was describing Zagersdorf, and this infused more motivation to record my mother's memories.

Key to the lifestyle of Zagersdorf was its diversity in the variety of animals that were kept, the variety of crops grown, and the variety of tasks that villagers were involved in, as my mother recalls, "they owned the land and they grew their vegetables, they raised small amounts of meat, with small animals and birds, hens and such like, eggs" (Interview with Greta, 2015). What struck me was the tightness of feedback loops described, with chickens scratching around, laying eggs, and being a readily available source of food "I can remember my grandmother going to the back door, grabbing a chicken, slitting its throat and that was our chicken soup, or chicken schnitzel" (Interview with Greta, 2015). This is an exceptional example of a close cycling of resources, and extremely efficient when you consider chickens were a big part of the diet, despite the dubious nature of their scavenging methods, as "they'd scratch for edible bits from the pile of poo. Or grains, I suppose. I mean, I was a bit shocked but anyway, nobody caught anything as far as I knew." (Interview with Greta, 2015). My mother also tells me the families had a pig each and that they would be fed scraps and then would be slaughtered, and it sounded like not a single part of an animal was ever wasted, with the rendering of pig fat to be used for cooking, and goose down from slaughtered geese being used to make pillows, which my mother remembers were very soft:

> "My grandmother collected goose down, because it's lovely and soft. It's the under feathers, the down. When they killed a goose, they saved the down and I remember my grandmother saved enough to make a little tiny pillow for me, so that when I went back on the train, I could be comfy and sleep."
>
> (Interview with Greta, 2015)

Multifunctionality is another important aspect of resilience that I discerned from my mother's memories of Zagersdorf, as she describes how, "Transport was quite often by bullock cart, or ox cart. So, a cart would go to the fields, drawn by a cow, usually. So, the cows were doubly useful!" (Interview with Greta, 2015). This reliance on animal power for transport, whilst at the same time providing milk and meat is certainly an indicator of a resilient system, and as there were no artificial fertilisers available, the farming was organic by default. But a great source of fertiliser came from the fact that there was no mains drainage, or sewer system until later, as my mother describes "my Tante Agnes, the eldest, who was farming in the village, would not have mains drainage put into her house because she thought it was a criminal waste of good fertiliser!" (Interview with Greta, 2015). I cannot help feeling that this was a world where people were truly connected to their environment, and that this is something we have lost in our sanitised present. I also think it significant that people made their own clothes, and that my mother's memories resonate with a resilient ethos:

> "My mother made clothes, she made them from scratch. The clothes that I can remember wearing with the greatest of pleasure when I was a child had been made by my mother, with pleats and smocking and all sorts of stuff."
>
> (Interview with Greta, 2015)

It is a blessing that my mother was taught these skills, and that in turn, she passed this on to me, as she explains, "She sewed everything, she sewed beautiful clothes for me and she recycled clothes…. And I've done the same thing and passed it onto my daughters" (Interview with Greta, 2015).

Some of the activities and resources in Zagersdorf are shared between the villagers. A goat herd came to each house daily and took animals to graze together. Each household also had a strip of land on the village vineyard. In this way, they experienced a degree of commoning. I use commoning as a metaphor to describe post-capitalist transition activities and ways of sharing space, resources, and knowledge with one another (Chatterton, 2016; Adey et al., 2019). I also think of the commons in terms of a shared experience, an ethics of care, a feeling of being in common (Dawney, 2013). In Britain, the commons as a physical space, enclosure and commoning connects to the advent of agrarian capitalism, the way the land was viewed and people's ability to provide for themselves and be stewards of the environment (Huckle and Martin, 2001). Prior to this, British common land was held in trust, people had rights and access to the land, and it provided valuable habitat for wildlife (Huckle and Martin, 2001). As enclosure grew, culminating in Enclosure Acts, not only did biodiversity suffer but people lost the ability to subsist (Huckle

and Martin, 2001) and the 'dispossessed' rural poor had to seek new sources of sustenance (Adey et al., 2019). Concurrently, the land began to be viewed as a means of generating profit (Huckle and Martin, 2001).

Existence in Britain became less sustainable as the mediaeval economy was based upon organic materials and renewable resources (wood, water and draught animals), but this was replaced with non-renewable energy (coal) and inorganic materials (metal) (Huckle and Martin, 2001). Eco-socialism holds that humans are innately part of nature, that they possess a spiritual essence and that a disconnect from nature leads to a disconnect with part of our humanity (Pepper, 1993). Pepper (1993) suggests that to reconnect to nature and to reclaim the means of production will dissolve this disconnect, and he believes that we must confront capitalism through common ownership and collectivism, as capitalism caused the original chasm between ourselves and nature. This thesis argues that the act of commoning can facilitate a reconnection to the means of production, nature, and thus ourselves more fully.

1.4 Resilient Living in Deheubarth, Late 1940s

An interesting similarity with the Zagersdorf of my mother's recollection can be drawn closer to home, with an account of rural community in Deheubarth during the 1940s and 50s. As I am conducting my research in this geographical location, I take inspiration from an enchanting book by Sheila Barry, *There's a calf in the sitting room…* (2006). As a result of her parents' accidental death, Barry left her urban life in Ipswich as a seventeen-year-old and went to live on her aunt and uncle's farm, Penrallt (Barry, 2006). Although life on the farm appears more modern than that described by my mother in Zagersdorf, nonetheless, Barry's account of a time when resilience was still embodied into the way of life makes it a fascinating example of what we have lost in such a short space of time. The massive blizzard of 1947 exemplifies this sense of lost resilience when it leaves Penrallt under five feet of snow (Barry, 2006). Although she describes the challenges, such as having to struggle to provide water for the cows, Barry is explicit in pointing out that the rhythms of everyday life were more able to continue, particularly in isolated areas where the National Grid did not yet reach:

> "we had no electricity to lose or miss. Milking could go on as usual; light was available as usual; heat for comfort and cooking was there, as usual. Farms and other isolated dwellings were already accustomed to stocking up with plenty of non-perishable food to take them through bad winters, so eating was much as usual too. In fact, the whole of life for us at Penrallt went on pretty much as usual."

(Barry, 2006, 64)

It is telling that she contrasts this resilience with what she suspects the outcome of such a situation would create in our modern era:

> "Think what panic and complaint there is when gales or snowfalls deprive us of our phones and electricity, even for a few hours. Especially electricity, which has so many essential tools of everyday survival dependent upon it. It was not so great a loss in 1947, for those who have mains electricity had fewer gadgets than are about today."
>
> (Barry, 2006, 63)

With people having a much lower reliance on electricity, it follows that they were far more resilient with a system with much shorter supply chains and greater insularity. This is a point raised by Hopkins (2008a), who describes the fragility of the National Grid, in that it is a network with very long supply chains. When everything works, life is easy, but when there is a problem from afar, things can very quickly start to collapse (Hopkins, 2008a). Amidst the description of the sheer hard work, and the funny occurrences that make Barry's story so entertaining, what emerges as most pertinent to this thesis are the instances in which life carries on regardless of perturbation.

1.5 Methodology

My fieldwork methods were informed by ecofeminism and ethnographic methods, where at times I deep dive into the lifeworld of others, people who are actively creating post-capitalist transitions. This was because I was inspired by feminist scholars such as Seager (1993) and Moss (2002) who encouraged me to believe that a feminist analysis of resilience is important, as there is a perception that environmental organisations and policy makers are masculinist in outlook, and that it has been this masculinist approach that originally caused our environmental woes (see Section 2.4). Since the 1980s, ecofeminist aims have (superficially at least) been part of the wider environmental and social justice debates (Buckingham, 2004). Although critiqued, ecofeminist thought holds that women can articulate the concerns of nature, due to essentialist arguments that both women and nature are marginalised (Buckingham, 2004).

This suggests that a different culture needs to be applied when trying to address environmental concerns. As a fieldworker I was troubled by the ghosts of masculinism, and I explored the idea of becoming a duppy feminist (Butz and Berg, 2002). I found that many research tensions were

resolved through more active, embodied, and visceral fieldwork practices, such as walking with participants, making things with them, and sharing space (Sandover, 2015; Carr and Gibson, 2017). Through these practices I experienced reduced researcher privilege. Butz and Berg (2002) advise the researcher to 'occupy liminal space', recognise the ghosts of masculinist culture and undergo a process of 'osmosis', and I wanted to try this. A source of inspiration came when I attended some Creative Research Methods workshops at Birmingham and Westminster universities and through group exploration of the topic, I started to see how research could be less exploitative and more of a 'meeting halfway' experience.

Throughout this ethnographic fieldwork, different aspects of Goffman's (1959) dramaturgy are enacted (Dell, 2016), as sometimes I am front stage, but at other times, backstage, producing different types of knowledge. I conducted semi structured interviews with individuals living in or with strong roots to Deheubarth, who are enacting resilience building activities. I also became a volunteer as a forest gardener and at the Eco Shop, helping in the 'textiles team' to re-sell old clothes. Further to this, I co-hosted a series of participatory community upcycling workshops where we took waste T-Shirts and made them into colourful rag rugs. These practical aspects of my fieldwork made me privy to visceral and embodied knowledge, as I engaged with the materiality of resilience building (Sandover, 2015).

Abatemarco (2018) uses ecofeminist theory to understand the lives of women farmers in Vermont, USA, an area which possesses a flourishing sustainable, organic local food network. An ecofeminist perspective acknowledges the imbricated nature of environmental and social problems in agriculture (Abatemarco, 2018). Abatemarco's work is informed by Plumwood's reason-nature dualism, and she observes her participants exhibiting both sides of this dualism (Abatemarco, 2018). In my own work, we'll see some of my participants reflecting Abatemarco's (2018) work, as they develop the nature side of the dualism, in their creation of an "integrated life"; one which foregrounds nature, elevates seasonality, and seeks more just and caring relationships. We also see aspects of the reason side play out at times, when hard decisions are made and the most pragmatic choice wins (Abatemarco, 2018). Some ecofeminists take an animist approach to the world and objects, viewing them as being alive and sentient (Rose, 2013). There are hints of this idea scattered throughout this thesis (especially in Section 6.5a), where some participants view the Eco Shop as having a life of its own.

1.6 How, and Why do People Build Resilience?

Having initially been inspired by listening to Rob Hopkins talk about resilience building and having read various literatures about what confers or erodes social-ecological resilience, I was curious to understand how and why people in Deheubarth (with all the constraints and opportunities afforded to them), might put theory into practice and engage in resilience building activities in pragmatic terms. As my research questions crystalised, I wanted to test my results against the idea that to be fully aware of and engaged with resilience building, there needed to be a process of education, or an intervention on the part of formal Transition Culture groups, organisations or initiatives. What struck me most was that I found that whilst some people consciously engage by reading widely, joining a group, or attending courses, others have always done it and consider anything else to be nonsensical. I found that people are building resilience simply because they believe in it, not because any top-down initiative is nudging them that way. From the results of my fieldwork, I determine that most of my participants are engaged in what I call 'transition culture', rather than 'Transition Culture', and so I use these as distinct terms in this thesis (see Section 6.12). Many of the people with whom I spoke and worked with resist alignment with formal organisations, as in the main they prize their autonomy too highly. I set out to find how people go about building resilience in everyday life, and from my time in the field, I have been heartened by people who live a resilient lifestyle by 'just getting on with it'.

1.7 Approaching Alternative Futures

We are facing a multitude of environmental, societal, and economic challenges. Industrial society relies upon fossil fuels, which are presenting two problems, the first being supply, as they are becoming harder to extract (Bridge, 2010), and we are facing grave insecurities due to geo-political systems. The second issue being that the more fossil fuels we burn, the higher the concentration of carbon dioxide in the atmosphere, from our 'carbon-intensive mode of existence" (Bridge, 2010). Brown (2014) argues that emerging concerns such as climate change will inevitably lead to undesirable global environmental change, and there is an imperative to instigate benign and sustainable transformations to thwart more catastrophic consequences. For Brown (2014; 2017), if we wish to retain the relatively clement environmental conditions of the "Holocene stability domain", society must change in significant ways.

Resilience has become a central topic of concern within discussions of social responses to our ensuing ecological crisis. Manifold debates and interpretations surround the resilience literature, nonetheless, it is an idea being used by a plethora of social groups and movements as ways in which to envisage and fashion what Brown calls, "alternative futures" (2014, 113). The resilience perspective (from complex adaptive system theories) has gained traction in the policy and sustainability arenas, as we seek to head-off the (proposed) new geological epoch of the Anthropocene (Brown, 2017): where humans are significant drivers of environmental change. Whilst geographers have engaged with the Anthropocene, they have focussed less on the part of the debate concerning planetary boundaries (the idea of nine environmental tipping points). There is scope for geographical enquiry into the connection between humans and nature, sustainability, and environmental change (Brown, 2017), which this thesis seeks to satisfy. An articulation of the concept of planetary boundaries arises curtesy of my participants in Section 4.1a.

Winter (2018) noted that policy makers commit to 'green' targets, yet the work is carried out by the individual, and Franklin et al. (2011) concur. They state that policy leaders desire community engagement in sustainability, yet there is scant focus on the skills needed by community members to actualise this (Franklin et al., 2011). Franklin et al.'s (2011) participants in Stroud believe the success of community sustainability projects relies less on the prior skill and knowledge sets of individuals, but that it is vital to have community actors who hold core values, along with commitment and drive. In this thesis, we will get to know some of the temperaments and preferences of my own participants and what motivates them to want to make a greener, low carbon world.

Winter (2018) studies Green City Copenhagen and notes that sustainable lifestyle choices tend to be more expensive, which can render them exclusionary. She observes class divisions in Copenhagen, as the top down approach to sustainability reveals people's unequal ability to participate with the state's 'green' agenda (Winter, 2018). When the state commits to sustainability goals, the onus to fulfil this agenda, to do the morally correct action, falls on the individual (Winter, 2018). Sometimes we find that organic food and sustainable choices are more expensive, thus exclusionary (Winter, 2018; Sandover, 2015). As Sandover (2015) saw in her embodied, visceral food research focussed on allotment food production, and as my fieldwork revealed, one way to make organic produce more affordable and accessible, is to reclaim the mode of production (Pepper, 1993) and to grow it yourself, in an act of "self-provisioning" (Sandover, 2015).

As we face environmental challenges, such as climate change, there is a need for geographers to study material culture and making, and their implicit link to the finite nature of raw materials (Carr and Gibson, 2016). Resource consumption must be less profligate, and while scholarly interest shows a 'burgeoning' field of work on making- concerned with resources, production of goods and using the body for work (with geographers playing a starring role), we still need more detail from actual makers themselves (Carr and Gibson, 2016; 2017). I perform aspects of this in this thesis, as I help to create a forest garden, and help to run a series of community workshops which upcycled waste T-shirts into rag rugs. Carr and Gibson (2016; 2017) call for maker geographers engaged in slow scholarship, to come forward with the details of their embodied auto-ethnographic work with materials, as we prepare for 'volatile futures', in the face of looming ecological catastrophe.

In this thesis, I will use the idea of post-capitalist transitions (grassroots, community led practices of Marxist and anti-capitalist ways of change) as a means of navigating the social changes needed to build a more just and sustainable future (Chatterton, 2016). We need to see more case studies in geography of projects which confront capitalism, since climate change and capital accumulations are linked (Chatterton, 2016). In the Eco Shop and the Rags to Rugs project, we shall witness sites of alternative economics (Turker and Murphy, 2021), where less profit is made and sometimes, goods are given away for free, or as an exchange. I also volunteered as a forest gardener, whereby we enacted an eco-socialist aim of Pepper's (1993), that of benevolent environmental stewardship.

Chapter 2:

Approaches to Resilience

2.1 Defining Resilience

The term resilience is subjective and has been studied by varying disciplines, from understandings gleaned from ecosystems; to applying it to social-ecological systems; then to the study of social resilience- which examines human responses to disruption with a focus at the local level of communities (Wilson, 2012; Brown, 2012). Whilst being used in many debates around global environmental changes, sustainable development, as well as in politics, resilience was a key concept in debates at the World Economic Forum's Global Risks 2013 report, the Rio +20 conference 2012, and at the United National Secretary- General's High-Level Panel on Global Sustainability 2012 (Brown, 2014). Although each application of the concept of resilience contributes a unique understanding of its focus, there are unifying elements and thematic ideas (Brown, 2014). For example, we can talk about urban resilience or even climate resilience, a subsection of which is resilience as applied to a social ecological system, with its focus on adaptive capacity and the adaptive cycle (Brown, 2014).

In the field of social resilience, the pathways and agents of change, as well as markers of social resilience, have been identified by Wilson (2012) as benefitting from greater research. Wilson (2012) advocates using "*transition theory*" as a perspective through which an enhanced awareness of the resilience process at community level, whilst also noting that there is a dearth in research on the potential connections between various types of "human and environmental capital" and community resilience. Wilson (2012) speaks of concurrent forces impacting communities throughout the globe- factors such as globalization, capitalism and neo-liberal ideologies on the one hand, and factors such as climate change, increased pressure on resources and more mobile communities on the other, all conspiring to force a transition upon communities, as they, "act together in complex ways to influence development trajectories and, ultimately, resilience and vulnerabilities of communities." (2). This causes a bottleneck like situation of factors which could

be leading towards irrevocable degeneration of natural resources (Wilson, 2012). Some of the most obvious of these factors are loss of biodiversity and ecosystem damage, anthropogenic climate change and gross environmental pollution, which dovetail with the need to address fossil fuel consumption and vulnerability as a result of peak oil (Wilson, 2012). All of these challenges impact the community level where people ask themselves what needs to be done, how, and by whom? (Wilson, 2012). For Wilson (2012), resilience is, "about the ability of a system to absorb impacts/ disturbance and to reorganize into a fully functioning system, and about post-event adaptive processes." (4).

Brown (2014) points out that not only are the understandings and analysis of resilience actively contested in the literature, but its practical applications are also divergent, in the way in which it is employed by various social movements, community and civil society groups, who have embraced it and put it to work in their own unique ways. Some scholars view resilience as a positive progression on from sustainable development, or a welcomed move in a transformative direction, whereas, it is a troubling concept to some, who view it as: "a regressive concept embedded in neoliberal modes of governance" (Brown, 2014, 113). There is also disquiet in some fields, with the way in which a theoretical view of ecosystems has been transposed onto human systems, whilst some note that the meaning of resilience has become somewhat nebulous, perhaps you could say 'watered down', as it has been applied to fields far from its "ecological roots" and it is even viewed by some in metaphorical terms (Brown, 2014, 109). Concerns have been expressed that the term 'resilient' has been used as a desirable characteristic for communities who are under stress (Brown, 2014). Thus, people might be expected to display resilience in the face of adversity, which of course, could add to their stress.

There is a shortfall from resilience scholars in that insufficient attention has been paid to the process of dividing out and "management" of resources, since the "focus" has been placed upon managing ecosystem services with regard to human "well-being and development", without scrutiny of access to an even distribution of resources (Brown, 2014). Further, that the definition of resilience as being the ability to bounce back, implies a lack of transformation (Brown, 2014). Indeed, far from promoting a new vision of the future, various social science scholars have critiqued resilience for its desire to maintain the status quo, as it can be seen as: "inherently conservative" (Brown, 2014, 112). This is something I find confounding as my understanding of resilience was always that there is a huge emphasis on the need to manage through change. I always thought that transformation was a key attribute of a resilient SES (social-ecological system).

Indeed, as Brown goes on to point out: "more recent writings on resilience in SES signal a realignment- indeed a redefinition- of resilience linked to profound change and transformation" (Brown, 2014, 112). There are many ways in which these transformations can occur at multiple scales- from the individual through to societal (Brown, 2014). Many facets of life could transform, from ecology to the way in which we interact (relations), to technology, to our values, daily rituals and routines (Brown, 2014). The transformations can range from the political to the personal and they necessitate learning and an attitude of adaptation, an acceptance of unconventionality, so that we can: "imagine alternatives and possible futures" (Brown, 2014, 113).

2.2 The Transition Town Movement

In 'Reconnecting skills for sustainable communities with everyday life', Franklin et al. (2011) examine government policy making with regards to what Hopkins (2008a) would term 'reskilling', an essential aspect of the Transition Movement. Franklin et al. (2011) point out that the UK government is attempting to make steps in the direction of "sustainable communities", which they say are: "intrinsically linked with the wider goal of sustainable development and the UK government's "'place-making agenda"" (347). In the course of their research, Franklin et al. (2011) find that government policy encourages the development of sustainable communities and the documents often call for "strong leadership and effective community engagement", but the pragmatic need for skilled people and what skills they need in the community to enact these sustainable activities is ignored, thus these projects have a diminished chance of success (347). A prominent criticism of government policy in this regard, is their focus on improving "the skill sets of professionals from key professions", rather than cultivating a reskilling movement that is focused on more practical aspects of sustainability, and embedding this within local communities (Franklin et al., 2011, 347-8). It is this tendency to overlook the importance of building practical skill sets within centralised, top-down initiatives, which necessitates more concrete action to be taken at a local level and inspires movements which seek to build resilience, such as Transition Town initiatives to take root. Consequently, it is perhaps ironic that some scholarly debate derides resilience for being too conventional, and for furthering neoliberalization, because some communities are using resilience to challenge normative ways of organising and are forging their own pathways (Brown, 2014).

Many community initiatives use resilience as a "prominent" concept, but most vocal perhaps is the Transition Towns movement (Brown, 2014, 113). Much of the work of the movement's

founder, Rob Hopkins (2008a), has been massively influenced by the concept, and resilience is both a fundamental aim, and a crucial framework for organisation of Transition initiatives (Brown, 2014). Instead of addressing peak oil and climate change at the global level, the Transition Towns movement encourages action at the local level, which has the bonus of reducing the reliance upon fossil fuels (thereby decreasing carbon dioxide emissions, as supply chains are shortened) (Kenis and Mathijs, 2014). A diverse range of people across the globe are seeking ways to increase sustainability- often they do not believe that conventional environmental discourse delivers sufficient benefit, or justice, and so they seek alternative paradigms, The Transition Towns movement being a prime example (Kenis and Mathijs, 2014).

Localisation experienced a resurgence of interest during the mid 2000s to the mid 2010s, as people strove to act at the local level by way of addressing global concerns such as peak oil and climate change (Kenis and Mathijs, 2014). During this time, localisation was "increasingly promoted both by scholars and activists as a strategy for sustainability", and the Transition Towns movement was a noticeable component of this trend (Kenis and Mathijs, 2014, 174). The Transition Towns movement is now global in reach, offering communities inspiration for ways in which they can challenge conventional development and instead, help to foster a sustainable future in the wake of peak oil (Connors and McDonald, 2010). Drivers of this movement are the beliefs that lack of sustainability is threatening the future environment to such a degree that it may become uninhabitable, and that, through collective action, we can create not only more sustainable and low-energy futures but that in doing so, our lives will be enhanced and will be more fulfilling (Connors and McDonald, 2010). As Connors and McDonald (2010) state: "the increasing popularity of one such movement […] grants us all the promise of a key role in adapting the place where we live to that future" (559). Crucially, the movement encourages citizens to act autonomously and make the desired changes, in lieu of sufficient action from politicians and government (Connors and McDonald, 2010). Top-down approaches to environmentalism have been critiqued by some environmentalists as being part of but not all of the solution to environmental problems (Connors and McDonald, 2010). In a "process which became known as new environmentalism", there has been increasing interest in forming a multi layered approach, where actors all the way from individuals, businesses, and up to government level, work in tandem to increase social, economic and environmental gains (Connors and McDonald, 2010, 560). Under this new environmentalism comes the awareness that: "it is at the local level where most individuals feel empowered to act" (Connors and McDonald, 2010, 560). However, Kenis and Mathijs (2014)

warn that such is the focus on localisation: "that it sometimes overruns the movement's other concerns, which thus tend to become mere means to the actual end, localisation" (181).

North (2009) identifies what he sees as two types of localisation, namely 'intentional' and 'immanent'. Intentional localisation is described as something that ecologists and anti-global activist have been encouraging in recent times, and intentional localisers are developing new economic systems and re-organising themselves in terms of food production and energy generation (North, 2009). This includes transitioners, Small is Beautiful advocates, and those interested in or participating in local currency schemes such as LETS (North, 2009). However, with 'immanent' localisation, it is peak oil and the rising costs of transporting goods that leaves no option but to localise modes of production (North, 2009). In this instance, the global economy becomes more regional as goods are inevitably produced ever nearer to the market, and so, localisation in this context infers ecological and economic, rather than political devolution (community-based decision making) (North, 2009).

An example of this economic devolution can be found in Sandover's (2015) examination of Alternative Food Networks (AFNs), as a response to "concern" over our food production quality and providence (for example, the European horsemeat scandal). There is also an increasing awareness and desire to eat healthily (for example nutritional guides on labels), and Sandover says that this "paradox" can leave customers with concerns about their food and not being connected to its production, which may well be at a distance (Sandover, 2015). Alternative Food Networks offer consumers a chance to discover more about the food they buy, as often they can meet the producers at "farmers markets" and "farm shops", or take part in "vegetable box schemes", therefore, relying on a more localised food supply, and building trust in the local products and producers (Sandover, 2015, 152). One drawback that Sandover (2015) notes, is that this local, or organic food might come at a price premium, or perhaps the consumer needs to sign up to a delivery scheme, or get to the farmers market at certain windows of opportunity. Therefore, to some, local and organic food can be perceived as "elitist and inaccessible". (Sandover, 2015, 153).

2.2a Post-Capitalist Futures

Chatterton (2016) argues that a: "widespread disillusionment with elite and nation-state politics is leading to renewed interest in radical transition grassroots experiments" (406). This concurs with the fact that scholarly interest in alternative currencies (for example, barter systems, local

currencies, cooperatives) is on the rise, as the traditional economic practices have not solved uneven socioeconomic development and environmental deterioration and it is thought that these alternative economic practices have the potential to address these obstacles (Turker and Murphy, 2021). These alternative economics challenge the paradigm of: "exploitative and oppressive socio-economic relations" (Turker and Murphy, 2021, 65). While much has been written on alternative economics, there is a dearth of understanding regarding their materialisation, such as what gives them a robust and persistent nature, and to what extent they could flourish were their spatial territory to increase (Turker and Murphy, 2021). According to Turker and Murphy (2021), spearheading the scholarship in alternative economies are J. K. Gibson-Graham, who use a standpoint grounded in "poststructuralist feminist theory" and "postmodern and anti-essentialist Marxist analysis" to argue that economies are always a domain, be they alternative capitalist, non-capitalist or capitalist (44).

In *Postcapitalist Politics*, Gibson-Graham (2006), argue that: "If the economy is a domain of historicity and contingency, we can be actively involved in producing other economies, in a process that will transform us as economic subjects" (169). Their chapter on 'The Community Economy', promotes a vision of "freedom" and empowerment, for communities to take charge of their own futures, with the confidence and belief to engage with, and pursue alternative ways of functioning economically (Gibson-Graham, 2006). Thus, socio-economic relations have the potential to be transfigured via alternative economics into a more just and less oppressive model, and these alternative economics might be able to help us comprehend post-capitalist futures (Turker and Murphy, 2021). This is important, as geographies of post-capitalism can help us envisage ways in which we can transform our world into a less environmentally damaging, more democratic one, and it is here that in particular, critical and radical geographers can make a strong contribution (Chatterton, 2016). Chatterton (2016) believes that geographers need to engage with post-capitalist transitioning, and that future geography will benefit from: "novel social and spatial commoning practices", as this will help us to understand how: "decommodification, mutualism and self-management play out, as well as their limits and potentials." (412). Chatterton (2016) uses the idea of the "urban commons" here, to: "point towards the geographies of post-capitalist transitions and illustrate the kinds of social and spatial relations that underpin them" (403). Imagining diverse and community economics (DE/CE) and engaging with the scholarship which explores a post-capitalist future, where inter-relationships and ethics: "around commoning, consumption, encounter, investment, and surplus" (Turker and Murphy, 2021, 44-5) are considered, could help

geographers to "think" about interactions in the lifeworld of communities who are building sustainability (Chatterton, 2016).

The term post-capitalism is both challenging and speculative, as we can't be certain of the future, yet it offers an imaginative and affirmatory will to create new worlds in response to manifold convergent threats (economic, climatic, societal and so forth) (Chatterton, 2016). It is an intentional and transformative method of pushing against hegemonic modes of being, where the pinch point edges ever closer and society needs to consciously adjust (or actively manage the backloop), as there are fewer choices left to us (Chatterton, 2016). Work on post-capitalist transitions reflects an interesting point of convergence between post-capitalist theory and work on transition cultures: a space were visions of post-capitalism encounter practical questions of how we might best transition beyond capitalism (Chatterton, 2016).

Transition is a means of changing the way in which we live- and of moving from commodification, capitalism, inequality, and environmental and social crises- to something that is more egalitarian (Chatterton, 2016). For Chatterton (2016), post capitalist transition is not a prescribed method and outcome but, "Rather it embraces those who envision ruptures against capitalism, a multitude of possibilities of what could come after, as well as building daily competences to leverage social change." (405). Gibson-Graham (2006) believe that outcomes for a region are determined by the existence of a hegemonic capitalist economy but that there are openings or 'fissures', which provide alternatives to the normative way of doing things. Chatterton (2016) uses ruptures and cracks as metaphors for sites of post-capitalist experimentation where people build new worlds- either from within or without the existing system and structures. These interfaces rub up against and confront capitalism, they can be messy and they offer us glimpses of imaginings of the future from within the present (Chatterton, 2016). I argue that the Eco Shop and Forest Garden I explore in this thesis are examples of these post-capitalist fissures or future worlds.

Transition thinking informs Chatterton's notion of post-capitalist transitions (Chatterton, 2016. The term transition has no one clear definition but it implies moving from one state to another, via a change, towards an improved outcome, with the promise of something new (Chatterton, 2016). The considerable social-technical transition literatures explore new practices that we can develop, such as low carbon housing, transport, and energy, yet Chatterton notes a dearth of discussion on capitalism and anti-capitalism in this body of work (Chatterton, 2016). For Chatterton (2016), the environmental crisis means that we need to make thorough post-capitalist

transitions; we must confront accumulation, agitate around capitalism, lest the transformations be insubstantial: in essence, radical change is needed. Chatterton (2016) encourages an approach that favours grassroots movements and less normative, less technocratic methods. I hope my work will help to address the call for research on future low carbon worlds as Chatterton (2016) nudges us: "What we need to know is how post-capitalist niches actually emerge and function … the time is ripe for further critical research and action around post-capitalist socio-technical transitions." (407).

2.2b Commoning

For Chatterton (2016), the commons are a geographically bounded space populated by resources which offer succour to those who own and manage them, the commoners. Historically, in Norman (feudal) times, the commoners had extensive rights, entitling them to make use of a "significant proportion of parish land and ensure its conservation" (Huckle and Martin, 2001, 84). Although the commoners survived on a subsistence economy, they used this land to forage, cut turf and graze animals, which supplemented their existence to the point where their lifestyle was primarily self-sufficient (Huckle and Martin, 2001). Twigger Holroyd (2017) uses the commons as a metaphor to describe ways of being with each other and sharing resources, skills and knowledge. The academic 'hive mind' can also be seen as a commons, since academics share knowledge and collaborate (Gibson-Graham, 2006).

The idea that the commons can be used as "a form of counter-capitalist political discourse" is a more recent development and one in which the commons have been subject to, and are still threatened by loss and enclosure, as a result of neoliberal forces (Dawney, 2013, 33). Dawney (2013) juxtaposes this vulnerability discourse of the commons (as under threat) with a phenomenological approach, in which the commons are made at a variety of scales, and in which we can experience the "feeling of being in common" (33). Her proposition is that commons and commoning are less about what we once had (with particular respect to the land and the past), and more about ways in which we can be now, so as to create or find the commons in an emotional sense, in the present (Dawney, 2013).

For Dawney (2013), the notion that the commons are connected to ideas of being inextricably linked to nature can be dubious, not least because this perpetuates the 'nature-society' duality, as she observes, "Discourses of the commons are often haunted by the idea of loss, where the forces

of increasing enclosure and capture evoke the enclosure movement of the long nineteenth century" (33). I argue, however, that it is precisely for the above reason that the metaphor of the commons has so much purchase on the psyche: that to re-claim and re-populate the commons (in any way possible), is to right a timeworn wrong. For Adey et al. (2019), enclosure is inextricably bound to issues of justice, as they suggest, "The spatial act of enclosure enacts a redistribution of resources- removing them from many and allocating them to some." (353). The fate of the 'dispossessed' rural poor of the past were forced to look elsewhere for sustenance, their rights to the land curtailed (Adey et al., 2019; Huckle and Martin, 2001). For Adey et al. (2019), the streets were once part of the commons (a space that people could use) but now they are primarily for vehicles and humans are out of pace in them. Adey et al. (2019) note that whilst scholars have observed the need to develop low carbon mobility transitions, this has not yet happened, due to normative aspirations for conditions, such as personal freedom and economic growth (with its associated cultural and infrastructural weddedness to a high-carbon transportation system).

Adey et al. (2019) also draw the distinction between the commons as a space and property, a resource , and the act of commoning as a verb. As a verb, communing relates to a process of world-making: "as tools to envision and enact alternative post-capitalist politics" (Adey et al., 2019, 352). This thesis connects to the notions of commons in each of these contexts. My participants were physically engaged in activities bounded by specific space, such as their own land, the Forest Garden and the Eco Shop, but also, much relates to commoning as a verb, to the creation of alternative post-capitalist worlds (Chatterton, 2016), through practices such as gardening, laughing and crocheting together.

The primary understanding of commons to geographers may remain the former (connected to the land and the past) but there is increasing momentum in geography to view commons as a way in which we can relate to one another that is more equitable and enveloping (Adey et al., 2019). In this sense, Dawney (2013) also speaks of the aspect of being 'held' when we are creating more caring worlds together, worlds in which we feel a sense of ownership and belonging, and we see this played out in this thesis.

2.2c Eco-Socialism

Eco-socialism starts with the premise that non-human nature is not extraneous to humans, yet that humans are distinct from the animal kingdom (Pepper, 1993). From an eco-socialist

perspective, human behaviour and human nature are both natural and blameless, in that, if we exhibit pernicious behaviour, such as aggression or greed, it is conceivable that this is a result of the dominant socio-economic system, rather than a sinful immutable characteristic (Pepper, 1993). The founding tenets of socialism are, according to Pepper (1993), identical to the principles of environmentalism, as he argues that by taking steps to eradicate both poverty and capitalism, and redistributing resources according to need, environments will be enhanced, rather than being ruined. Whilst eco-socialism is neither a framework of "nature mysticism", nor a "bioethic", the belief is held that if we are disconnected from nature, this will result in a separation from our true selves (Pepper, 1993, 232). This disconnect can be vanquished by collectively taking back control of our relationship with the natural world, as Pepper (1993) argues, through: "common ownership of the means of production: for production is at the centre of our relationship with nature even if it is not the whole of that relationship." (Pepper, 1993, 233). The eco-socialist philosophy is bounded by natural limits, as natural resources are finite, but Pepper (1993) advocates that in seeking to exert our "human transformational power", we should only prevail over nature collectively, and in a manner of benevolent stewardship, instead of exploitation (233).

An area where eco-socialism diverges from the Transition Movement is in its aims for a global re-distribution of resource, in which "profit" will be replaced by "need" and, "world-wide exchange and reciprocity" is at the heart of this transformation (Pepper, 1993, 234). Whereas, a main aim of the Transition Movement is localisation, which has sometimes played such a pivotal role that it has trumped ideas of mitigating future catastrophes, or creating pathways that benefit others outside the locale (Kenis and Mathijs, 2014). Indeed, localisation has been viewed by some within the Transition Movement as an antidote to troubling times ahead, or even that it: "acts as a local haven of refuge against "the coming storm"" (Kenis and Mathijs, 2014, 178). Furthermore, Pepper (1993) talks about the "Eco-socialist strategies for achieving communism", which directly "confront" capitalism (234), whereas the Transition Movement encourages small-scale private enterprise at a local level, whilst encouraging independent and autonomous citizens to take charge of their own affairs (Connors and McDonald, 2010). Where eco-socialism feels more aligned with the Transition Movement is when Pepper (1993) stresses:

> "that we have great power, communally as producers, to build the society we want. Hence the labour movement must be a key force in social change, rediscovering its potential in this respect, and resurrecting its character as an environmental movement."
>
> (234)

This demonstrates a shared belief in the desire for stewardship of the environment and connection to nature. But, where eco-socialism seeks to re-distribute resources on a large, global scale, and to directly confront and destroy capitalism, Transition and localization agitate at the connections between the local and large-scale globalized conglomerates, and they seek to reduce their power and influence, by encouraging a proliferation of small-scale enterprise. Thus, they are covertly active in this regard whereas eco-socialism is overt in its desires. In conclusion, it could be proposed that Transition and localization are a form of 'eco-socialism lite', taking many of the aims and principles of eco-socialisms; such as volunteering together for the common good; expressing benevolence and stewardship towards nature; communal activity; reconnecting humans with nature (and thereby one's self); seeking out less aggressive technology; yet it falls short of true communism, whereby the will and capital of the individual are sacrificed to the communal whole.

William Morris was an early advocate of resilience building, who also believed that the fundamental needs of everyone ought to be met Pepper (1993). Whilst wealthy and part of the elite himself, Morris advocated anarchic, radical socialism, leading to spiritual fulfilment and bliss, an experience of being in the 'now', what might nowadays be described as 'mindfulness' (Morris, 2008 [1888]). There are many similarities here with the ethos of the Transition Movement, and with eco-socialism. Indeed, Pepper (1993) goes as far as to say that: "Eco-socialism would change needs, redefining wealth along William Morris's diverse lines" (233), and so it is only fitting to take a look at Morris's work.

Morris believed in localisation of manufacture, taking pleasure in the small details of life (in order to become someone of greater inner strength), eradicating wasteful labour and making only those goods we totally need, and reading his *News From Nowhere* (1951 [1890]) has been utterly enchanting. I am ever more convinced his voice is one which could prove inspirational in our present-day predicament, as his eco-socialism is a vision which does not concur with a more brutalisic or utilitarian socialism. Whilst Morris (1951 [1890]) ever argues for equality, this does not stop short of the aesthetic, as he sees the need for beauty (surroundings, homes, factories, tools, books, homewares and gardens) to be topmost. He also showcases organic gardening and in particular the sense in a well-functioning compost heap. When looking at where Morris got some of his ideas in the first place, Miller (2011) explains:

> "The origins of what we now call William Morris's ""Arts and Crafts"" philosophy of production can be traced to the ""expressive"" theory of labor that he inherited from John

> Ruskin: the idea of labor as a form of artistic expression vital to human dignity, which leaves a trace of individual workmanship in all created goods."
>
> (7-8)

This resonated with what I had read about geography's current adoption of the arts and creativity, which Hawkins (2015) calls: "Geography's recent creative (re)turn", as we see geographers using performance, visual art, and creative writing as methods by which to both conduct and present research (Hawkins, 2015, 2). This turned out to be something that I would draw upon when I entered the field, as it gave me the courage to be a little more artistic (see Appendix 1).

2.2d Maker Geographies

Morris's focus on individual craftmanship, and the notion that we must express ourselves artistically when creating, also chimes with the idea of maker geographies. Carr and Gibson (2017) state that: "Making cultures are increasingly the focus of social sciences and humanities scholarship", with geographers offering an especially enlightening contribution by: "embedding particular material and labour cultures in place, in ways that remind us of the deep connections between produced goods and the earthly resources from which they are made" (1). As we commit our focus and attention less on the final product, but more on the making process involved in getting there, we realise that this takes time (Carr and Gibson, 2017). We might well re-hash, repeat, start over, discuss, and reflect, rather than march from A to B, and all of this means that geographies of making require us to consider the merits of slow scholarship (Carr and Gibson, 2017). But slow scholarship goes beyond the more typical practice of "just interviewing subjects", and is sometimes trickier to execute, given the constraints and expectations of the neoliberal university, such as time, freedom, expected scholarly output, management, forms, ethics etcetera. A slow scholar has to find ways to be faithful to their lengthier process yet simultaneously satisfy the demands withstanding in terms of peer review of something inherently personal for example (Carr and Gibson, 2017). It is generally the case that making something is not as easy as it looks, especially having watched an expert, then ineptly attempting the same task, but actually performing the act of making can be immensely illuminating and insightful (Carr and Gibson, 2017).

Carr and Gibson (2016) indicate that with increasing threats from global problems such as climate change and the ecological crisis, we need to intensify our focus on the process of making and material culture. This is because we are forever enmeshed in a world of things that have been made, and concurrently we are seeking to use resources in a less profligate manner (Carr and Gibson, 2016). Even though the process of making is "fundamental to our being" (Carr and

Gibson 2016, 297), scholarship and debates on ways to be more frugal with resources in the future are lacking in detail from makers themselves, particularly from the "heart of the industrial complex" (Carr and Gibson, 2016, 297). Being passionate that as we face increased limits to resources and a less stable climate, skills of repair and making will become more, not less important, Carr and Gibson (2016) point out that:

> "it is worrying that diverse skills with materials are being lost at a time when climate change raises issues of technological and material uncertainty […] This raises the questions of how to provide alternative means to sustenance and comfort that do not depend on resource abundance and who is best placed to deal with material scarcity, should rationing and shared sacrifice become more widespread necessities."
>
> (307)

Carr and Gibson (2016) tell us that people can increase their degree of self-reliance through the process of making, by claiming more independence from mainstream consumerism and government policy, which can in turn, feed into small scale solutions to the concerns of limits to resources (such as oil), and global environmental problems.

2.2e Peak Oil

When it comes to "environmental futures" (Bridge, 2010, 523) or the future of the environment, Bridge noted in 2010, that two seemingly diametrically opposed concerns- one being the abundance of carbon dioxide in the atmosphere enhancing global warming, and the other being concern over stores and supply of carbon rich fossil fuels (in short, too much of one, not necessarily enough of the other), have found themselves sharing a platform in the environmental and developmental debates. (Indeed, Hopkins (2008a) called these concerns the "twin challenges" of peak oil and climate change). The reason for this unlikely scenario is simple, in that industrial societies are very dependent upon and have enmeshed relationships with fossil fuels, thus, the more they rely upon an abundance of fossil fuels as input, the greater the problems of carbon dioxide as atmospheric output will be, something called the "carbon problem" (Bridge, 2010, 523).

Kerschner et al. (2013) state, that according to the 2005 "'Hirsch-Report'", which was "commissioned by the U.S. Department of Energy" (2013, 1425), peak oil was predicted to impact the economy in a sustained and detrimental manner, due to the increased price of oil once the global rate of production passes its maximum. The problem was not so much seen as declining oil stocks, rather than the less easy extraction and concurrent enhanced production costs (Kerschner

et al., 2013). This is illustrated by the reality that Canadian tar sands could be as plentiful source of oil as the underground reserves of Saudi Arabia, but as extraction from tar sands is more costly than conventional sources, they cannot easily replace conventional sources (Kerschner et al., 2013). It is also not known for certain how much oil is available in stores and this matter is contested, "uncertain and debated" (Kharecha and Hansen, 2008, 1). What is certain is that anthropogenic global warming has been caused by the burning of fossil fuels and subsequent release of carbon dioxide (Kharecha and Hansen, 2008). It is up to society to decide how much of these fossil fuel stocks to use, more so when the source is "unconventional" or from "extreme or pristine environments." (Kharecha and Hansen, 2008, 1). Clearly, the extent of future climate change in the years to come could be implicated by the timing of peak oil and the choices we make to the energy mix (Kharecha and Hansen, 2008).

North (2009), believes that peak oil will be just one of the crises to be faced over the coming 20-50 years, unless other developments, such as technological changes, mitigate the situation (we need to remember that some 'solutions' such as tar sands will only cause further problems). North reflects, rather worryingly upon Hopkins's words, stating that: "Transition Towns founder Rob Hopkins argues that facing climate change with a collapsed economy is something to be avoided… But it seems that is what we have" (North, 2009, 2). However, Bailey et al. (2009), critique the way in which the evidence for peak oil used within the Transition Movement has shown a chaotic approach, in that a narrow spectrum of research has been consulted, "in spatial constructions of relocalisation that use selective readings of evidence about peak oil to posit a homogenized view of global resource scarcity alongside encouraging each initiative to develop its own vision of a post peak-oil world" (2), but whether this actually concerns relocalisers is debatable. According to Bailey et al. (2009), the relocalisation movement doesn't account for the differing effects of peak oil due to varying physical locations, nor are they convinced of the science, as they point out that:

> "Of particular note is the relegation of scientific uncertainty and geographical unevenness in the effects of peak oil within a spatial representation that seeks to makes [sic] relocalisation directly and equally applicable to everyone."
>
> (4)

In fact, it is twice that Bailey et al. (2009) cast a shadow of doubt over the thoroughness of the science upon which Transition is founded, firstly that peak oil arguments stem from a slightly narrow range of sources and secondly, the assertion that peak oil will affect everyone irrespective of spatiality is contested by some (Bailey et al., 2009; Mason and Whitehead, 2012).

For my own work, I always asked people about their thoughts on peak oil in my interviews but as time went by, it seemed increasingly irrelevant, as fracking in Britain was well and truly underway and we'd clearly entered a new regime. Interestingly, this was a scenario discussed with trepidation and horror at the *West Wales Without Oil* event and at the time, I gained the impression only the most cynical among us saw it as a likely scenario, such was the mis-placed faith in our capitalist society. Most people, myself included, were of the opinion that those in charge could never be *that* stupid. As Bailey et al. (2009) break Transition down into three distinct areas of interest: a limits to growth argument, whereby peak oil is indiscriminate and will affect all of us; the borrowing of psychological techniques and methods from organisational studies as a way of engaging people; and, the methods actually used to embed relocalisation discourses into communities, it has become clear from my research that my work falls under this third tranche, as people seek to build resilience organically, and without top-down 'interference' (see section 4.6).

There has been much discussion of peak oil, particularly from radical and critical political perspectives, as Bettini and Karaliotas (2013) state, "Peak oil has acquired prominence in the political lexicon of an increasing number of critical and radical perspectives during the ongoing ecological and economic crisis" (331). However, while debates around peak oil proliferated in the late 2010s and could be said to have been a huge inspiration behind the Transition Movement, Bardi (2019) observes that by 2019, it was no longer a popular point of discussion. Peak oil was defined as the maximum level in global production and whilst the forecasting of crises such as fuel scarcity, significant inflation, or even collapse of civilization did not come to pass, Bardi (2019) believes that due to the extent of our increased reliance upon 'unconventional' oil sources having been unforeseen, the idea of peak oil is now, to an extent, discredited and abandoned. It is interesting to note that Bardi (2019) believes that as:

> "members of the [peak oil] movement tended to prepare for the event in individual terms, emphasizing local and personal resilience. In some cases, they adopted or proposed a survivalist strategy, including stocking food, guns, or ammunition in expectation of the imminent collapse."
>
> (260)

Bardi (2019) argues that this stance meant that the 'movement' would only ever appeal to an 'alternative' section of society, and thus could always be rejected by "mainstream decision makers" (260). Bardi (2019) speaks of the demise of the peak oil movement, citing not incorrect timings

nor predictions for its failure to gain greater adoption but instead, a disagreement in perspective as the cause.

2.2f Doubts about the Transition Movement

When I started this thesis, I was convinced that much of my literature review would concern the geographies of Transition Culture, but it proved to inform to a lesser degree than expected. I started reading various Transition Culture literatures and once I had learnt that Hopkins's resilience ideas originated in ecology, I turned to those authors and thus changed trajectory. The closer I got to my fieldwork, the more I was questioning everything, as by then I had become immersed in feminist readings and I had niggling doubts about Transition Culture in Wales, as ghosts from my time with Transition Llambed begun to haunt me. As the initiative grew, we attracted new members, but as our steering group became evermore Anglicised, I watched with trepidation as the Welsh farmers, headteachers and shop keepers I had been so delighted to be working with, silently walked out of the door, never to return. I winced when I recalled a prominent Welsh Transtioner who told me that she feared Transition would only ever "float upon the surface" in west Wales and would never become embedded in the culture. Mason and Whitehead (2012) notice some similar problems within the Transition Town Aberystwyth Initiative, as they point out that it is:

> "clear that unease with politicizing the movement has resulted in as much internal division as it has facilitated open capacity building and inclusion. Through a focus on action, not political position, TTA has lost members who have become unsure what TTA is trying to change. At the same time, it is clear that despite the efforts of some, a notable gap has opened up between TTA and activist groups in the town."
>
> (509)

These kinds of tensions within Transition Llambed, made it hard to see how the town could come together to make positive change. I myself reflected that it was, after all, an English cultural import and I had misgivings, much as I loved the theory. And so it was that I forgot about Transition Culture for some years, the wheel turned and as a PhD student, I secured myself agreement from the gatekeeper of a transition group, under the auspices of Wise Owl Permaculture, but when I started to volunteer at their Forest Garden and Eco Shop, I heard very little mention of transition and it started to drop off my radar. When directly quizzed by me, I was told that they started out with plans to become an official Transition Initiative, but they realised that they were already doing all the activities they would be doing were they to become an official group, so they simply carried on (see section 6.8). I received a similar response when I asked people about permaculture. This

made me question the idea that you need to be part of an official Transition Initiative, or even that you need to know what the Transition Movement is in order to be fully engaged in resilience building activities. However, just as nonlinearity is a key feature of a resilient system (see Section 2.3e), I have a hunch that it is also fundamental to creative endeavors. Certainly, my own experience bears this out, as I've realised my work has come full circle and I have returned to the literatures which first caught my attention. Carr and Gibson (2017) liken this to forgotten drafts of written work, some of which will later be "resurrected', others to languish on the desktop, or in a filing cabinet forevermore, and I find it reassuring that that they insist, "false starts, failures, and incompetency's become critical" (4). In sifting through long discarded drafts, I have found a wealth of pertinent ideas within.

This led me to realise that the doubts that struck me about the Transition Towns Movement appeared to be similar to what Connors and McDonald (2010) experienced with Transition Town Totnes. Whilst the initiative in Totnes had proved itself a galvanising and positive movement, enabling communities to tackle problems they previously felt to be overwhelming, concerns around the movement in practice emerged (Connors and McDonald, 2010). It is interesting that, much like my concerns, Connors and McDonald (2010) even go so far as to wonder whether the initiative in Totnes built: "its reputation by colonizing existing networks", and they lament a tendency in the management style to be undemocratic, inflexible and top down (Connors and McDonald, 2010, 565). Being wary of the umbrella-like nature of the Transition Towns movement, which could collate and then accidentally dissipate the momentum of a plethora of smaller movements, Connors and McDonald (2010) cite a participant from Transition Town Totnes, who regretted aspects of the movement:

> "According to this informant, prior to TT [Transition Town] commencing, there was an existing broad network of groups actively engaged in different aspects of making Totnes a more sustainable and community-orientated place and there was a perception that TTT had effectively taken over or co-opted existing networks with apparently little regard for local history, or adequate consultation with all players in existing programmes."
>
> (564)

Some critiques of the Transition Town Movement appear to include: an insufficient challenge to the capitalist system, the potential for placing emphasis on local action and thereby neglecting global issues, and the longstanding bugbear of environmentalism as often being instigated by the values of the middle classes, which can "be more exclusive than inclusive" (Connors and

McDonald, 2010, 560). Winter (2018) makes a similar observation in Copenhagen, which is lauded as a 'green city', in that there is the danger of exacerbating class divisions in the sustainability arena. Winter (2018) identifies a phenomenon whereby those with access to more resources, the wealthier 'haves', are able to embrace sustainable lifestyles (and feel good about it), whereas the 'have nots' are forced to take a more pragmatic approach, and can even be subjected to derision for being "*un*sustainable" (16).

2.2g Resilience Building

When I first read Hopkins' book, *The Transition Handbook: From oil dependency to local resilience* (2008a), I found the chapter on resilience highly engaging, as he uses the work of ecologists in the field of social-ecological resilience to springboard his own ideas. Hopkins (2008a) seeks to convey an understanding of resilience which is suitable for a ley audience, and he talks about three essential elements to a resilient system, namely: 'diversity' of species, components or function; 'modularity', or the avoidance of highly networked systems; and 'tightness of feedbacks', which is the time taken and the volume with which a feedback message is delivered to another part of the system (Hopkins, 2008a). An example of diversity might be a mixed farming system, as opposed to a monoculture, whereas modularity might be said to occur when backing up work to a pen drive to avoid the possibility of losing data stored on an "over-networked" (Hopkins, 2008a, 56) system, such as the cloud. When we think of a tight feedback loop, the consequences of our actions are evident (Hopkins, 2008a), thus if an intervention is needed, this can occur. Whilst I found this inspiring, in terms of my thesis I could not rely solely on the Transition Movement's outline of resilience and resilience building. I also wanted to understand the basic concepts of social-ecological resilience put forward by ecologists, as this tranche of work was an original influence on Hopkins (2008a), and subsequently it has influenced the direction of my analysis of fieldwork data (see chapters 4, 5, 6). Indeed, according to Quilley (2011), the ideas of social-ecological resilience, such as the panarchy and the "heuristic of the "'adaptive cycle'" are key principles of the Transition Movement (22).

2.3 Social-Ecological Resilience

Folke uses the term, Social Ecological Systems, or SES, in order to combine both social and ecological systems, as the two cannot easily be separated (Folke, 2006). In an article published in

Ecology and Society, Folke et al. (2016) discuss the social-ecological resilience perspective and the way in which it's impossible for resilience scholars to separate the social (human) aspect from nature (ecological), as both are intertwined. This perspective sees humans and their manmade worlds as fundamentally part of the biosphere, meaning that we do not function in isolation, and Folke et al. (2016) are resolute on this matter, stating, "It should be clear that human development cannot be decoupled from the biosphere, as much as people think that human ingenuity and technology will allow this" (1). But we are witnessing a hyper-interconnected world, in which different interactions across different scales is altering the connection between humans and places (Folke et al. ,2016). Urbanisation is accelerating, and we predominantly source resources from rural areas, or places which urban inhabitants might fail to realise are impacted by their habits (Folke et al., 2016). Folke et al. (2016) argue that, **"**Irrespective of whether or not urban dwellers perceive themselves as part of and dependent on the biosphere, their behaviours and choices shape social-ecological landscapes and seascapes around the world" (1). In Folke et al.'s (2016) discourse on the biosphere, they are referring to the ecological aspect, which is all life on Earth- from fauna, flora, humans, to the atmosphere:

> "The biosphere is the global ecological system integrating all living beings and their relationships, humans and human actions included, as well as their dynamic interplay with the atmosphere, water cycle, biogeochemical cycles, and the dynamics of the Earth system as a whole."
>
> (1)

As we face a decreasing resource base, coupled with population growth and increased environmental degradation, it is becoming increasingly important that we understand the ways in which the very systems we rely on (be they economic, social or ecological) can become, or retain, resilience and robustness (Walker and Salt, 2006).

2.3a The Anthropocene

A significant consequence of the interconnectedness of humans and nature is that we are now said to be living in the Anthropocene, "the age of mankind", in which humans are agents of environmental change to an extent not previously seen (Folke et al., 2016; Lorimer, 2012). Since the retreat of the last ice age, approximately eleven and a half thousand years ago, we've been cossetted by the comparatively benign and stable Holocene environment (Bell and Walker, 1992), one which many believe has been favourable to human development (Brown, 2017). This

development has enabled and facilitated an anthropogenic influence on the environment to such an extent that, rather than natural agents such as Milankovitch cycles, sunspot and volcanic activity, or physical agents such as weathering or fluvial processes being the primary drivers of environmental change (Bell and Walker, 1992), it is now human activity which is the main driver of the age (Brown, 2017; Lorimer, 2012). The implications of this process provides much to think about for the geographer, be they human or physical, as there is ample opportunity to interrogate debates around anthropogenic environmental change, sustainability and the relations between humans and nature (Brown, 2017).

2.3b Planetary Boundaries

Brown suggests that whilst geographers (particularly human) have enthusiastically discussed the Anthropocene thesis, they have engaged less with the associated planetary boundaries thesis, which has its roots in ecology, and first appeared in the journal *Nature* in 2009, in a multi-authored article from the Stockholm Resilience Centre (Brown, 2017). The concept describes nine tipping points, or boundaries, for environmental quality (such as loss of biodiversity or stratospheric ozone levels), beyond which we should not proceed (Brown, 2017). Already research shows that we may have exceeded the limit in regard to the degree of climate change, loss of biodiversity and changes to the nitrogen and phosphorous cycles (Brown, 2017).

Thinking around sustainable development begun in the 1970s with "limits to growth" notions (Brown, 2017)- that the biosphere cannot sustain our unbridled economic development, that resources and ecosystem services are bounded. These neo-Malthusian ideas were developed in the 1990s and onwards, sketching out various undesirable scenarios which could play out unless global political action is taken (Brown, 2017). More recently, the planetary boundaries thesis has gained traction amongst scientific, public, policy, global governance and sustainable development literatures, even "influencing" the Rio +20 agenda (Brown, 2017). To some, the idea is even being used as a "defining metaphor for sustainable development" (Brown, 2017, 119) and the way we comprehend humans and nature is seen in a new way for some (Brown, 2017). Not only has the framework of planetary boundaries gained traction in the policy sphere, but some scholars believe it is useful to apply it to the local level also, in lieu of policy action (Brown, 2017).

This appears to be a necessary development, as the planetary boundary framework is coupled with the idea that time is running out (Brown, 2017). The theory is that if we transgress the planetary

boundaries, the benefits of the Holocene may be in peril, and we will find ourselves living in less hospitable conditions, thus we can view the planetary boundary framework as a "safe operating space". (Brown, 2017, 127). Since human action is responsible for the Anthropocene and now that life is so globalized and interconnected, crises can easily spread through the system; add to this the idea of safe operating spaces which can be transgressed, there is a sense of "urgency" in the narrative that humans act to correct the imbalances (Brown, 2017).

2.3c Sustainability versus Resilience

Although 'sustainability' (meeting current demand yet also ensuring there is enough to bequeath to future generations) is a widely popular aim, Walker and Salt (2006) do not believe it goes far enough, as they point out, "Many ecosystem collapses are occurring in places where enormous resources are being invested in understanding the system and where significant effort is being made to be 'sustainable'" (5). Walker and Salt (2006) are not particularly surprised about this, as they realise that whilst many environmental management practices are aimed at a maximum 'yield' (be that a farmer's crop or a species being conserved), and that 'conservation for optimization' might work in average conditions, they remind us of the fact that the world does not actually function to averages. Hopkins (2008a) also suggests that resilience goes further than sustainability, because in addition to the environmentally benign or less damaging practices of sustainability (for example, re-cycling waste plastics), a resilient practice will feed back into the community or ecosystem in a beneficial manner (for example, re-cycle waste plastics locally and deliver a useful product or material back to the community).

Although sustainability works to a certain extent via efficient resource use, this same careful use is actually a form of optimization, which, in some instances, can work to negative effect, and if resilience is seen as a part of sustainability, then sustainability works well, but only if we truly understand what confers or erodes resilience within a system (Walker and Salt, 2006). Walker and Salt's (2006) explanation of this idea is something which I return to again and again in my thesis:

> "The bottom line for sustainability is that any proposal for sustainable development that does not explicitly acknowledge a system's resilience is simply not going to keep delivering the goods (or services). The key to sustainability lies in enhancing the resilience of social ecological components of the system."
>
> (9)

In contrast to a system which lacks resilience, if part of a resilient system becomes damaged following a shock or perturbation it will reorganise itself, whilst retaining both identity and essential function (Walker and Salt, 2006). In 'Comparing Ecological and Human Community Resilience', Gunderson (2009) examines key characteristics shared by both resilient human and ecological systems. Gunderson (2009) indicates that the definition of resilience is plural, in that it can be used to describe the ability to bounce back after disturbance, along with the length of time taken for this to occur, and he finds that both resilient human and ecological systems require a diversity of components and capital, a diversity of cross-scalar interactions, and both systems must exhibit the capacity to learn and experiment.

Gunderson (2009) notes that various definitions of resilience exist according to discipline, and that ecologists observed two types of resilience, namely 'engineering resilience' (which is the time taken to recover following perturbation), and 'ecological resilience'. Being a term coined by Holling, ecological resilience is made up of two components which measure the robustness of the system or ability to maintain the same state, along with the amount of disturbance a system is able to assimilate before regime shift occurs (Gunderson, 2009). The ecologists who studied 'disturbance-driven ecosystems' used ecological resilience as it provided the best fit to their observations, an example of such an ecosystem being one which has suffered a drought, fire or flood (Gunderson, 2009). In terms of planetary boundaries, it is interesting to note that the transgression of such a boundary might not result in a regime shift for the Earth system, but could have a detrimental effect upon human wellbeing (Brown, 2017).

2.3d Adaptive Capacity

Resilience thinking can be put to good use in the examination of social-ecological systems with respect to sustainable development and policy, especially as we face a plethora of social and environmental problems, as Folke (2006) perceives:

> "The resilience approach provides one among several arenas (e.g. vulnerability research, ecological economics, sustainable science) for generating integrative science and interdisciplinary collaboration on issues of fundamental importance for governing and managing a transition toward more sustainable development paths, one of the greatest challenges facing humanity."
>
> (260)

Humans are well versed at optimizing for the sort-term, (extracting maximum yield from a given input), but for resilience thinking to succeed, we need to consider the long-term as well (Walker and Salt, 2006). Social-ecological systems are much more complicated than we generally imagine and when change does occur, it is often dramatic and unpredictable, rather than linear and incremental (Gunderson, 2009; Walker and Salt, 2006). A grasp of thresholds and how they can be transgressed, and the consequences these transgressions is key to understanding resilience (Walker and Salt, 2006). In some scenarios where a threshold is transgressed, the whole system behaves differently, as feedbacks between components have changed, the structure is altered, and this results in what is known as regime shift (Walker and Salt, 2006). Overtime, a system follows a pattern (a trajectory or pathway), yet this is complicated by multiple time frames, or temporal scales, each operating simultaneously (Gunderson, 2009; Walker and Salt, 2006). For instance, a system may experience a current input change or shock, whilst simultaneously reacting to a previous input change (a delayed reaction, if you will) (Walker and Salt, 2006).

Thus, if viewed simplistically, the behaviour of the system might seem surprising (if only the recent input change has been taken into account) (Walker and Salt, 2006). The recent event might simply trigger the effects of a shock or pollution event that happened twenty years previously, and this is due to cross-scalar variables (Walker and Salt, 2006). More recently, it has been realised that if we desire consumption, production and wellbeing (in other words, environmental goods and services), not only is it necessary for the links within the system and region to be functioning well, but that ecosystems from other regions need to be likewise, as Folke (2006) explains:

> "It is now clear that patterns of production, consumption and wellbeing develop not only from economic and social relations within and between regions but also depend on the capacity of other regions' ecosystems to sustain them."
>
> (253)

2.3e The Three Concepts of Resilience Thinking

In *Resilience Thinking* (2006), Walker and Salt identify three concepts which are critical in order to become adept at resilience thinking, which I outline below:

Concept Number 1- Everything is Interconnected

We do not live in isolation- social and ecological systems are interconnected: social systems are embedded within ecological systems, "We live and operate in social systems that are inextricably linked with the ecological systems in which they are embedded, we exist *within* social-ecological

systems" (Walker and Salt 2006, 31). If change occurs in one part of the system, it will cause impacts to other domains (Walker and Salt, 2006).

Concept Number 2- Change is Non-linear, Unpredictable and can result in a Variety of Outcomes

"Social-ecological systems are complex adaptive systems. They do not change in a predictable, linear, incremental fashion" (Walker and Salt, 2006, 31). These systems are unpredictable and non-linear, and this notion concurs with ecofeminist ideas, which I discuss in section 2.4. Evocative of a parallel universe, a state of alternative reality is possible for a system in which the feedbacks, structure and function are not the same and, "they have the potential to exist in more than one kind of regime (sometimes referred to as "alternate stable states") in which their function, structure, and feedbacks are different" (Walker and Salt, 2006, 31). Thresholds can be transgressed, and a new regime is thrust upon the system as a result of perturbation such as a flood, stock market crash or drought, and the outcome is often an undesirable one: for example, Walker and Salt (2006) mention that a lake which previously benefitted from clear waters could now be perpetually muddy.

Concept Number 3- Resilient Systems can still function despite Threats

Resilience can be defined as a system which has the ability to absorb shocks and undergo a degree of change without suffering a regime shift, whilst at the same time retaining essential structure, feedbacks and function (Walker and Salt, 2006). So, an example of this could be a resilient agricultural region, which is more likely to be able to continue delivering the goods and services we enjoy so much, even if it suffers perturbation (Walker and Salt, 2006).

2.3f The Emergence of Resilience Thinking

Brown (2016) states that resilience thinking is derived from theories of complex adaptive systems, and recently has become more popular in the discussions of the public, scientific and policy arenas (Brown, 2016). According to Bailey et al., (2009) resilience thinking is a concept imported from several other fields such as ecology, social science and geography, which:

> "seeks to define and design systems with increased diversity, modularity (how system components are linked), and tightness of feedbacks (how quickly and strongly changes in one part of the system are felt and responded to in other parts), the overall aim if which is to reduce shocks in one part systems rippling destructively through the remainder of the system"
>
> (5)

Ecologists studying ecological stability theory in the 1960s and early 1970s, were the first to put forward the resilience perspective (particularly the pioneering ecologist C. S. Holling, who developed much of the theory), but predictably, as they opposed accepted ecological knowledge, the findings were met with caution (Folke, 2006).

The perspective gradually gained recognition, but the work of the Resilience Alliance (a collective of resilience researchers from disciplines such as economics, ecology and the social sciences) was largely restricted to the scientific community until relatively recently when publications such as *Resilience Thinking* by Brian Walker and David Salt were released to a wider audience (Walker and Salt, 2006). The conventional understanding of environmental systems is that the environment is inherently stable and has capacity for self-repair if left unhindered by human interference, but this idea is critiqued by resilience scholars, as Folke (2006) points out:

> "Old dominant perspectives have implicitly assumed a stable and infinitely resilient environment where resource flows could be controlled, and nature would self-repair into equilibrium when human stressors were removed."
>
> (253-4)

Thus, the conventional view is that systems are inherently stable and that we need to manage change - whereas the resilience perspective is that social-ecological systems have the ability to adapt, and even to drive change (Folke, 2006).

According to Folke (2006), the resilience perspective contrasts starkly with more dominant centralised strategies which focus on regulating variables in order to maintain productivity and manage risk, and he argues that although this is the prevailing approach for "contemporary natural resource and environmental management", it is inherently flawed as "Such management creates landscapes that become spatially homogenized and vulnerable to disturbances that previously could be absorbed" (256). That is because the short-term benefits of conservation for optimization are outweighed by "changes in variables that operate at other temporal and spatial scales, like nutrients or food web dynamics" (Folke, 2006, 256), therefore, managing for a certain stable outcome erodes resilience and makes a system inherently weak and vulnerable.

Despite the work of Holling and colleagues having proved inspirational, their work has often been in opposition to, or even ignored by the field of ecology (Folke, 2006). Certainly, this was true in the formative years of the resilience perspective, as Folke (2006) describes the difficulties involved

in getting these ideas across to the ecological profession, particularly in demonstrating the real-world effects of "non-linear dynamics and alternate domains of attraction" (256). It was easier to use ecological modelling to show these shifts of states, rather than empirical evidence, and this failure meant that:

> "work in ecology continued with implicit assumptions of one steady state and with a focus on addressing issues close to a single-equilibrium (the balance of nature view) on small scales with short-term experimentation."
>
> (Folke, 2006, 256)

This adherence to a single equilibrium view meant that engineering resilience remained at the forefront of mainstream ecology, rather than ecological resilience, and so, the desire to preserve the status quo, to resist change and to promote optimization for conservation was maintained (Folke, 2006). But resilience is not just about being robust, as Folke (2006) argues, a resilient system must be able to maintain a balance between simultaneously sustaining and developing, and if these two factors are unbalanced, the system will eventually succumb to collapse. This means that in a system with too much change, there is no opportunity for consolidation, whereas a system which incorporates too much stasis is likely to become brittle and vulnerable to perturbation, and so an adaptive system which has the capacity to learn is better equipped to be resilient in the face of perturbation (Folke, 2006). A particularly revelatory idea is that "In a resilient social-ecological system, disturbance has the potential to create opportunity for doing new things, for innovation and development", which contrasts starkly with a vulnerable system, in which "even small disturbances may cause dramatic social consequences" (Folke, 2006, 253).

Walker and Salt (2006) attribute the human ability to see things from a narrow, specialised and limited viewpoint (which lends itself to the practice of optimization of resources or outcomes) as simply an unavoidable facet of human nature. We can't help our behaviour, and we tend to manage systems and resources by breaking them down into component parts and arranging affairs so as to gain maximum yield (Walker and Salt, 2006). Walker and Salt (2006) also understand that as a short-term strategy, optimizing works, but the problem comes in the long run, and they use the example of the management of the Everglades, in which, "Regulating the system to optimize its short-term human returns was shutting down natural cycles that sustained its wealth and allowed it to recover from extreme events" (28). Short-term focus and atomistic management lead to a more vulnerable system, so we have to be more holistic and come to realise that we cannot understand what makes a system healthy without long term knowledge (Walker and Salt, 2006).

As I discuss later, this holistic approach is also supported by ecofeminism, and adopted in permaculture practice (see section 2.4).

Walker and Salt (2006) are highly critical of the 'command and control' approach to ecosystem management, which they describe as, "The belief is that it is possible to hold a system in a 'sustainable optimum state'" (29). The very name implies domination over nature, in a way that seeks to control rather than understand, but as Walker and Salt (2006) emphasise:

> "This is not however, how the world actually works. Yes, we can regulate portions of a system- and increase that portion's return over the short run- but we cannot do this in isolation from the rest of the system"
>
> (29)

What happens when we optimize is that we attempt to keep a certain part of the system at a constant- and the system does adapt to this- but this is only possible at the expense of the resilience of the whole, and a fundamental aspect of complex adaptive systems is the concept that "no one is in control", of the entirety of a system (Walker and Salt, 2006, 29).

According to Brown (2016), the concept of resilience thinking can be applied to enhance our understanding of sustainability, as it encourages a different perspective when analysing environmental systems and can sometimes elucidate dynamics and interactions which otherwise remain confounding under the application of prevailing understanding. For instance, often, policy employs a short term and rigid approach, often overlooking vital factors, but if we take a resilience thinking perspective, our temporal scale adjusts and we might the be able to incorporate neglected factors such as a longer temporal frame, we might achieve better outcomes, especially for poorer members of society (Brown, 2016). It is impoverished people who sometimes experience increased vulnerability to climate change as a result of present "responses" which are sub-optimal (Brown 2016, 3).

2.3g Multiple Scales and Variables

A vital understanding of the resilience perspective is that a complex adaptive system is influenced by variables which act across different spatial and temporal scales (Walker and Salt, 2006). Mainstream ecology, however preferred to concentrate on: single equilibria states (from the view of the balance of nature) and short-term variables (Folke, 2006). The conventional way of looking at ecological systems was using a short-term temporal scale whereas a resilience perspective would include much longer-term variables and also actors from hitherto unaccounted-for places (Folke,

2006). Folke recounts email correspondence with Holling, who berated the quadrat perspective as it only viewed the system using small scale variables:

> "That view is reinforced by a ""quadrat"" mentality. Not only small in time, but small in spatial scale; and a theory limited to linear interactions between individuals in single species populations or between two species populations, all functioning at the same speed (e.g. predator/ prey, competitors). But the multi-stable behaviour can only be interpreted within the context of at least three (but probably not more than five variables), that differ quantitatively in speed. It is therefore inherently ecosystematic."
>
> (Holling, email to Folke et al., 2006, 256)

Holling mentions that the resilience perspective was stopped in its tracks in one area of science, as Sousa and Cornell were unsatisfied with a lack of empirical evidence to support the theory in relation to their study of the spruce budworm (in Folke, 2006). Sousa and Cornell regarded the 40-year study period of budworm change as a long-term variable, but Holling contests this assumption because, "the relevant time scale for the multi-equilibrium behavior of budworm is set by the trees- the slow variable" (cited in Folke, 2006, 256). In showing his frustration at the short-term thinking behind the rejection of the resilience perspective, Holling alludes to, "all those conditioned by single variable behavior and linear thinking", saying that, "None of their examples had anywhere near the length of temporal data needed" (cited in Folke, 2006, 256).

Ecologists are humancentric and view long-term variables in humanistic time frames, whereas resilience thinkers view trees as the long-term variable, and Holling suggests that Sousa and Cornell's study could only have been effective had they had they recorded, "budworm data (the fast variable) over several generations of trees (the slow variable), i.e. several centuries, at a resolution of 1 year" (cited in Folke, 2006, 256). Folke (2006) says that an ecological resilience perspective has developed our knowledge of cross-scale relations, long-term environment and climate records, and landscape ecology, which means that we have a fuller and deeper understanding of our ecological systems, such that we can make room for long-term variables. Folke (2006) is also keen to emphasise the importance of social factors, such as, "social learning and social memory", as they play their part in building a broader, more holistic understanding (253). Perhaps we are beginning to look through a less myopic lens?

2.3h The Adaptive Cycle

Walker and Salt (2006) introduce us to cycles which occur throughout our life such as birth, growth, reproduction and death, and we cannot escape these cycles- they surround us and exist across various spatial and temporal scales. It is crucial to acknowledge which phase of the cycle is is action at the current time, as this affects the way in which things occur (Walker and Salt, 2006). According to different phases of the cycle, we can expect: swift change, slow movement, unexpected events or rebirth phases (Walker and Salt, 2006). Walker and Salt (2006) encourage us to look to natural ecosystems for wisdom: "By studying ecosystems all around the world, researchers have learned that most systems of nature usually proceed through recurring cycles consisting of four phases: rapid growth, conservation, release, and reorganization" (75). This knowledge can also apply to socio-ecological systems (Walker and Salt, 2006).

According to Walker and Salt (2006), the original idea of the adaptive cycle was developed by Joseph Schumpeter, an Austrian economist who noticed that economies went through cycles of bust and boom, and who coined the phrase, 'creative destruction' as applied to capitalism. Resilience thinkers say that 'creative destruction' occurs periodically throughout the adaptive cycle (Gunderson, 2009). It is this force which smashes apart the status quo, releasing bound up resources, preparing the ground for reorganisation and innovation, and Walker and Salt (2006) believe that an understanding of these phases is crucial when managing natural resources, because there are times when it is easier, or conversely more difficult, to effect change in an ecosystem. Through my embodied research as a forest gardener, I observed this effect while weeding. In the main, this was strenuous work, especially in high summer. However, when weeding in the autumn, the time when nature is 'turning in on itself' and the weeds' purchase on the soil weaker, I found that they 'yielded' themselves to me.

Contrary to Walker and Salt (2006), Gunderson (2009) suggests that the concept of the adaptive cycle came from Holling, whom he states:

> "proposed an adaptive cycle as a metaphor of temporal change in ecological systems. It suggests that systems at specific scale ranges exhibit four distinct and usually sequential phases of change in the structure and function of a system"
>
> (3)

These four phases are represented by a corresponding letter, so the rapid growth phase is known as the 'r phase', the conservation phase is known as the 'K phase', the release phase is the omega,

or 'Ω phase' and the reorganisation phase is referred to as the alpha, or 'α phase' (Walker and Salt, 2006).

r phase

The r phase is a time of exploration and colonization by new species when the system is first developing, perhaps when microorganisms and lichen colonize bare rock as in the case of primary succession, or when pioneering species recolonize an ecosystem following a regime shift such as a fire or a flood, as in the case of secondary succession (Walker and Salt, 2006). The nature of this phase is characterised by rapid development, the accumulation of biomass and complexity and fierce competition for resources (Gunderson, 2009). Opportunistic species, colonizing species or entrepreneurs (r-strategists) take advantage of all the "available resources to exploit every possible ecological or social niche" (Walker and Salt, 2006, 76), and the links between system components are tenuous.

Following the retreat of the glaciers at around 11,000 BC, r-strategist plants such as birch, sallow and aspen colonized the British tundra (Rackham, 2002). The rapid springtime expansion of dandelions on a previously bare but neglected vegetable bed exemplifies the r-strategist's exploitation of opportunity! Being characterised by uncertainty, variability, expansive, fast, pioneering, colonizing and impulsive behaviour of ecological or social systems, the r phase is it is a time of new societies or new nations, and in the social world, it is a time of entrepreneurs and innovators taking the floor (Walker and Salt, 2006).

K phase

The transition from the r-phase to the K phase is incremental, as the opportunistic r-strategists give way to the K-strategists, who favour slow, steady growth, ever greater efficiency, and strong networks between components (Walker and Salt, 2006). The K phase sees ever more diversity and connection between components, as the emphasis shifts from building to maintaining the system (Gunderson, 2009), and as they nurture connections between themselves, the relationship between actors develops to the extent that eventually there is scant room for newcomers to gain a foothold (Walker and Salt, 2006).

The K phase is not a good time for opportunists, as successful K-strategists are conservative, long-lived and use resources carefully, the spatial and temporal scales are longer than for the r phase, and K-strategists are "strong competitors" (Walker and Salt, 2006). In the natural world, we think

of the mighty oak tree, and in the business world, economies of scale come to the fore: larger equipment is bought, investment in machines, work force and buildings may occur, all delivering a greater efficiency and thus greater profits (Walker and Salt, 2006). The K phase instils the belief that the future is stable and certain as, "the system's components become more strongly interconnected, its internal state becomes more strongly regulated" (Walker and Salt, 2006, 77). However, despite the ostensible indestructability of the K phase, its increasing rigidity makes it vulnerable to major input change (Walker and Salt, 2006).

What happens to all these resources that have been so efficiently bound up is that they might be stored as biomass (dead organic matter, heartwood of trees), machines, factories, knowledge, personnel, and as time goes by, resilience begins to decrease as the ever more rigid system undergoes a slowing of the growth rate, as, "The cost of efficiency is a loss in flexibility. Different ways of performing the same function (redundancy) are eliminated in favour of doing the function in just the most efficient way" (Walker and Salt, 2006, 77). So, the actors find out the most efficient way of doing something and then stick to it, and Walker and Salt (2006) point out that despite the fact, "Such a system is increasingly stable", this stability is only secure, "over a decreasing range of conditions" (77). What happens is that the socio-ecological system loses the ability to 'bounce back' from change from outside, and ends up being vulnerable to changes that previously it could have absorbed, and anthropogenic activity such as soil erosion, eutrophication, suppression of natural fire cycles (alteration of the disturbance regime) can cause a regime shift (Folke, 2006).

Omega (Ω) phase

Unlike the incremental transition from r phase to K phase, the shift between K phase and omega (Ω) phase can be lightning fast (Walker and Salt, 2006). Gunderson (2009) describes the omega (Ω) phase as "a period of creative destruction", which is initiated via the application of a stress or force from outside the system (3). Almost anything can happen as this is the release, or chaos phase, and rapid-change and unexpected outcomes occur (Walker and Salt, 2006). In an ecological system, this could be an event such as a flood or hurricane, whereas in a social system it might appear as a budget change, new management, or closure of a business (Gunderson, 2009).

At this time, resources which were previously bound up within the system are released and the system rearranges itself to begin a new cycle, which may look much like the old one or could be a new track (Gunderson, 2009). The resources bound within the system are released and linkages are broken, and this phase is short-lived and destructive, but as every artist knows, destruction and

chaos precede creativity, thus, "Tightly bound capital is released and becomes a source of reorganization and renewal" (Walker and Salt, 2006, 78). Often resisted (we're looking at you, masculinist culture) and understudied (certainly by mainstream ecology and conventional resource management), is the crucial yet dreaded omega (Ω) phase, in which a perturbation acts as a trigger, resulting in sudden and shocking change, which allows resources held onto tightly during the K phase to be rapidly released (Walker and Salt, 2006). This is the beginning of the backloop cycle, which again is a neglected area of study (Folke, 2006), but one which I discuss later (see section 2.3l).

Alpha (α) phase

The destructive force of the omega (Ω) phase is essential for clearing the way for the alpha (α) phase, as the release of rigid structures and the redistribution of resources enable opportunities for reorganisation and renewal (Walker and Salt, 2006). At this unconventional and unique time, the system doesn't operate by the 'usual' rules, and variables which normally exert little effect upon the system can suddenly have an amplified effect in shaping its future trajectory, and species or individuals can thrive under conditions where once there was no room for them (Walker and Salt, 2006). It's a time when there is no single basin of attraction in operation, thus the identity of the system is in flux and we can't yet predict the outcome, and things may look much the same as before, things could be radically different, or even a state of decline could occur (Walker and Salt, 2006).

The system reorganises itself, through the action of 'remember', with the memory being, "the accumulated experience and history of the system, and it provides context and sources for renewal, recombination, innovation, novelty and self-organization following disturbance" (Folke, 2006, 259). Remember brings hitherto forgotten or hidden resources into the fray (Walker and Salt, 2006), such as seeds in the soil bank, or nutrients which have been released into the soil and using these, it will start afresh (Gunderson, 2009). Perhaps this means that seeds which have lain dormant in the seed bank for many years have the chance to germinate and the gardener of a domestic garden which was at one time a hay meadow, might look in astonishment as scarlet pimpernel appear, seemingly out of nowhere. The outcome of the remember process is significant, because the shape of the next r phase is determined as, "a result of what types of colonizers, entrepreneurs, or organisers can establish and take hold" (Gunderson, 2009, 4) during the alpha (α) phase. In the springtime, it is usually dandelions which prevail!

2.3i The Panarchy

The panarchy (from the Greek nature god, Pan), describes how the dynamics and pathways of a complex adaptive system change, as a result of variables interacting over different spatial and temporal scales (Gunderson, 2009). The concept relies on hierarchies, but it is unconventional in that not only top-down actors exert their influence, but also, change can come as a result of smaller scale or bottom-up actors or processes (Allen et.al., 2014). The actors who interact within the system can be living or non-living, and pan-scalar processes of decay, renewal and growth occur as part of the adaptive cycle, an idea which differs from the traditional hierarchy theory in that is it more dynamic, less "static" (Allen et.al., 2014, 578). The scales can be lower down or higher up than the adaptive cycle in question (Walker and Salt, 2006), for example, if an organic farmer and their livelihood is seen to be a middle-scale adaptive cycle, and if the government changes the payment system of the agri-environment scheme in which the farmer is participating, we see a higher-scale exerting its effect upon the farmer's fortunes (Walker and Salt, 2006). Likewise, a smaller-scale effect would be the impact upon the farmer as they sell their produce at a local farmers market and a change occurs across the customer base (Walker and Salt, 2006). Another example can be found in the structures and processes at a variety of scales in needle-leaved evergreens (Allen et.al., 2014). Observing the small scales, we view individual needles or leaves at the spatial scale, which spans from centimetres to meters, whilst the temporal scale at this level spans months to years (Allen et.al., 2014). At a larger scale, we view the whole tree in multiple meters (spatial scale) and decades (temporal scale), and when we zoom out and observe the whole forest, the spatial scale is measured in kilometres and the temporal scale in centuries (Allen et.al., 2014). Each of these scales has their own signature structure and processes, instigated by positive feedback processes (Allen et.al., 2014).

Panarchy theory was born from a desire to describe and "assess" the *resilience* possessed by complex systems (Allen et al., 2014, 580), and has been gaining influence in many fields, as it has not only been used as a perspective to interpret ecosystems and their associated social-ecological systems, but has also been extrapolated onto social systems (Allen et.al., 2014). Indeed, social scientists have used it to elucidate the connections between ecological and social systems, and when an institution is perceived in this way, helpful insights may be gleaned, which if implemented as organizational change, serve to increase resilience (Allen et.al., 2014). What's fascinating to me is that, according to Gunderson (2009), plentiful empirical evidence exists to suggest that change to a system comes from the top-down, but panarchy theory gives agency to actors from the bottom-up, which can

exert an upward "cascading" effect, and what began as a small change spreads through the nested system, to ever bigger scales (Gunderson, 2009; Allen et al., 2014). This idea gives power to small variables which might only blink on the radar, yet at the right (or wrong) time, could initiate a whole regime shift, especially if the cycle is in the brittle stages of a late K-phase (Gunderson, 2009; Allen et al., 2014). This bottom-up process is called 'revolt', and revolt dynamics are intriguing because often the small variable would have little or no effect upon the system, yet at the opportune moment, can trigger a significant sequence of events (Gunderson, 2009; Allen et al., 2014).

When a system has multiple adaptive cycles at play, it's preferable that they are not synchronised, as cross-scale dynamics stand less chance of sending a devastating shock throughout the whole system (Walker and Salt, 2006). If the various adaptive cycles are synchronised, and a farmer, for example, enters a late K phase at the same time that there is a wider economic crash, then it is likely that the higher-scale agri-environment scheme grants are reduced or frozen by the higher-acting governmental scale (Walker and Salt, 2006). Then if the customers also cut their household spending budget, the combined multi scaled late K and omega (Ω) phases could send the farmer's adaptive cycle into a devastating back loop, and they might go out of business (Walker and Salt, 2006). The way in which the panarchy functions is the reason for complex adaptive systems exhibiting nonlinearity, because when a faraway variable can 'suddenly' come into play, this could come as a surprise and the system is shown to be nonlinear (Walker and Salt, 2006). To me, the interaction of cross scalar variables in the panarchy resembles the way in which elements from different chapters interact across a thesis!

2.3j We are all Interconnected

An important aspect of resilience is to realise that everything is interconnected in the realm of humans and nature, and these interactions and interconnections are complicated, changeable and non-linear (Walker and Salt, 2006). "We are all part of the system" seems like a perfectly straightforward statement, but none-the-less, it does not preclude modern ways of splitting the world down in order to understand it (Walker and Salt, 2006, 32). It may be that ecologists, sociologists and economists for example, can all recognise in part how things work in terms of their specialised field, but this approach means that they view the system as an outsider, and so there is little interdisciplinary work which might give a more holistic understanding of the system of which they are a part (Walker and Salt, 2006). So, even from the early years of resilience thinking,

the proponents of this ecosystem-based ecology deviated considerably from the mainstream branch of ecology, primarily because resilience thinking recognised "humans as agents of ecosystem change" (Folke, 2006, 262). The mainstream ecology profession:

> "excluded humans or treated human actions as external to the system and consequently the interdependencies and feedbacks between ecosystem development and social dynamics, and their cross-scale interactions, were not on the table."
>
> (Folke, 2006, 262)

It is easy to see how the wrong conclusions may be reached when only part of a system is studied, but Walker and Salt's (2006) assertion that, "Resilience thinking is all about seeing the system- the social-ecological system that we're all part of- as one interlinked system" (32), causes us to view the world in an entirely different manner. If we do not operate in isolation, but instead are part of a connected whole, then we might hold more influence than we think. If we enable the flow of knowledge and ideas, then knowledge from scientists and ecologists can 'flow' to policy makers, helping them to make more environmentally benign decisions (Walker and Salt, 2006).

Folke (2006) makes the point that if analysed exclusively through what he calls the "social dimension lens", we may be led to believe that a given society of humans may demonstrate high "adaptability" and "ability to cope", but this is disregarding the ecosystem, which may not be able to cope with such changes, and may in fact: "generate traps and breakpoints in the resilience of a social-ecological system" (260). Likewise, when designing for sustainability, disregarding the human component and focusing exclusively upon the ecosystem will lead us to errors (Folke, 2006). This again reiterates the idea that the social component and ecosystem component are *not* mutually exclusive but must be viewed together, as interdependent elements within a whole, and that: "the delineation between social and ecological systems is artificial and arbitrary" (Folke, 2006, 261-2).

However, as Brown (2014) points out, there has been opposition to this notion, particularly amongst human geographers, who noted a paucity in the discussion of the "Social and political dimensions" (107). In the article 'Social and ecological resilience: are they related?', Adger (2000) defines social resilience as being a crucial part of a human societies' capacity to adapt, and to: "cope with external stresses and disturbances as a result of social, political and environmental change" (347). Whilst acknowledging a "clear" connection between the two categories, Adger (2000) queries the assumption that a concept from the field of ecology can be transposed to social systems:

> "Simply taking the concept of resilience from the ecological sciences and applying it to social systems assumes that there are no essential differences in behaviour and structure between socialized institutions and ecological systems. This is clearly contested in the social sciences."
>
> (350)

Furthermore, Adger (2000) argues that whilst an ecosystem may be ecologically resilient in itself, this doesn't necessarily lead to a resilient social system for the people who live there, especially when the social system relies upon a specific ecological resource (Adger, 2000). This would apply to the questioning of the resilience of specific communities, such as in coastal locations who are heavily reliant on the supply of fish, and who are vulnerable to calamities such as oil spills (Adger, 2000). However, it is interesting that Adger (2000) implies an intrinsic connection between the resilience of the sea, and the resilience of the social systems who depend upon it:

> "Both the speed of recovery and the buffer capacity of coastal seas following severe oil spills continually confound ecologists. The resilience of coastal communities to hazard may therefore be enhanced by the regenerating and absorptive capacity of the coastal ecosystems themselves."
>
> (361).

The resilience of the world's ecosystems is important in terms of future social policy, not only in terms of the supply of natural resources on which social systems depend, but also in terms of managing to lessen, and preparing for the impact of climate change (Adger, 2000). Additionally, it is concluded that the desirable goals of ecological resilience, in being a system which can absorb shocks and undergo change without suffering a regime shift (Walker and Salt, 2006), are exactly the conditions required in order to "allow innovation, coping with change and social learning in social institutions" (Adger, 2000, 361).

2.3k Managing for Change

It is clearly being suggested that polarised thinking will lead to misguided decision-making, and that resilience thinking cannot separate humans from nature, and biodiversity is an important factor in managing for change (Folke, 2006; Adger, 2000). It is essential that a complex adaptive system absorb disturbance and then reorganise itself, and systems with a high biological diversity are more able to do this (Folke, 2006). In fact, a study into the role of biodiversity, undertaken in 1991 by the Beijer International Institute of Ecological Economics, showed that civilisation would

perish without biodiversity (Folke, 2006). But whilst there is bountiful research around the idea of absorbing shocks whilst retaining functionality, there is not much written on re-organisation (Folke, 2006). As Folke (2006) puts it, "resilience is not only about being persistent or robust to disturbance", but crucially, "It is also about the opportunities that disturbance opens up in terms of recombination of evolved structures and processes, renewal of the system and emergence of new trajectories" (259).

In managing for change, it is important to consider that the very process of change allows new and reconfigured connections, processes and relationships between elements within the system to emerge, and the ability to roll with the punches, to remain in a flexible and adaptive mode in the midst of upheaval and chaos is an essential part of building resilience (Folke, 2006). The sorts of action that have caused regime shifts are: bottom up impacts, such as soil erosion, nutrient enrichment, or changing water systems, and top down impacts, such as removal of biological functions, "fishing down, food webs", "altered disturbance regimes" (for example, suppressing fires), more frequent and intense storms (Folke, 2006, 257). All these factors result in shifted ecosystem states, and the shift has been to a 'less desirable' state, which impacts society and livelihoods (Folke, 2006). By 'less desirable', Folke (2006) is talking about the capacity the ecosystem has to deliver "goods" to a society in terms of resources and services, as "Less desirable refers to their capacity to sustain natural resources and provide ecosystem services for societal development" (257).

Both Folke (2006) and Gunderson (2009) state that we cannot accurately predict the exact way in which a system will recover following disturbance (due to variable nature of disturbance events and also spatial heterogeneity). The new regime may appear much as the previous one, or the system could have set out on a new "trajectory" (Gunderson, 2009). Thus, according to Folke (2006), it is preferable to avoid terms and notions such as "recovery", likewise one should think in terms of "attractors" or "regimes" instead of "stable states" or "equilibria" (257). Folke et al. (2016) are insistent that if we neglect the biosphere from our future plans, then we are courting disaster, as:

> "Focusing primarily on wealth and inequality or social resilience while remaining ignorant about and disconnected from the biosphere and its stewardship is not a recipe for long-term sustainability for people on Earth."
>
> (1)

As we've been extolling the concept that human beings and their associated cultures are an integral part of the biosphere, it makes sense that to Folke et al (2016), when we start to contemplate human well-being, we see it is as concordant with biosphere stewardship. In other words, if we wish to achieve sustainability, we have to find ways to enhance the well-being of humans which is simultaneously environmentally benign (Folke et al. 2016).

2.3l The Back Loop

Attempting to understand the basic characteristics of a complex adaptive system has proved to be significant for my research, as many of the characteristics have shown themselves in my results (see chapters 4, 5, 6). Folke (2006) suggests that some people like the adaptive cycle (and find it inspirational) whilst others dislike it, as they see it as a deterministic device. It goes without saying that Folke (2006) endorses it, as he explains:

> "It has helped me to think about structures and processes in a dynamic fashion, to move away from a steady-state world where change is looked upon as an exception, to confront complexity and uncertainty, and move further into patterns and processes that you cannot directly observe and quantify with available data and it has inspired the generation of many exciting hypotheses and new ones to be explored."
>
> (258-9)

I believe the adaptive cycle is a useful tool for future planning, as much can be learnt from studying the continuing cycle of the four distinct phases. Natural ecosystems teach us (if we are willing to learn from them) that sooner or later, everything changes. The 'creative destructive' power of revolt in resilience thinking terms turns everything on its head, wreaks havoc, unbinds carefully tied up resources, unhinges slowly nurtured bonds and relationships and brings the system to its knees. This is the back loop, moving between the carefully controlled and constructed K Phase to the foreboding and uncertain omega, or release phase (Folke, 2006).

As the system nears the end of the K Phase, it becomes ever more efficient and expert at what it is doing but a slowing occurs and other ways of doing things are extinguished or given no room, which in turn leads the system losing resilience and becoming more vulnerable to external shocks (Walker and Salt, 2006). Ideally, towards the end of the K phase in a natural forest, a small forest fire ('revolt') will occur, burning away the brush wood and clearing the ground for new growth (Folke, 2006). However, if we overmanage natural forest fires, we prevent these cyclical events from happening, we extend the K phase unnaturally beyond its time and leave the forest much

more vulnerable, and if a threshold is transgressed, it may usher in a new regime altogether (Walker and Salt, 2006). In our socio-economic systems, ideally, we have people who realise that change is anticipated and start to creatively respond and adapt to the coming future, discovering and demonstrating ways by which we could traverse the back loop relatively unscathed (Walker and Salt, 2006).

As it emerges from my results, this might be people who are consciously and actively acknowledging change and working out strategies, and many of my participants grow much of their own food, others make their own clothes, and some are designing homes with climate change in mind (see section 6.5a). Walker and Salt (2006) argue that when a society shuns, or ignores these ideas and people, it is exhibiting classic symptoms of a 'dangerously' late K phase. This is when there is a growing attempt to delay, or deny the omega phase, and Walker and Salt (2006) warn that that when it does happen, it will be more severe, more catastrophic and that more human suffering will occur. This shows that rather than to reacting to change, a more resilient system actually starts to manage by change, and there is an essential role played by individuals or small teams within the system (Folke, 2006). Indeed, an extremely inspiring concept to me is that: 'It implies that uncertainty and surprise is part of the game and you need to be prepared for it and to learn to live with it" (Folke, 2006, 255).

2.4 Feminist Approaches

According to Moss (2002), feminist analyses are often concerned with power methodology, whereby different ideas and approaches to power are discussed. Moss (2002) thinks that usually, a research project focuses upon one argument of power, rather than a variety or plethora of power arguments, which might enrich the research. Seager (1993) also argues that it is important for us to understand gender hierarchies and the way in which power is played out in patriarchal society, as this understanding is beneficial to both men and women. The official Transition Culture organisation could be seen by some to hold a degree of power which my own participants were resistant to, they preferred to be autonomous (see Chapters 4, 5). *In Earth Follies,* Seager (1993) defines a masculinist culture as being one that was originally created by men and which sanctions the rational and scientific over the irrational and subjective. The environmental movement and feminist studies may at first seem divergent disciplines but in fact, the study of geography is not beyond gender (Moss, 2002).

Often the environmental sphere is dominated by masculinist ideas, in fact, Seager (1993) believes that the eco-establishment (big environmental NGOS, organisations and political groups) is generally masculinist in outlook and organisation. This is something some of my research participants comment on (see Sections 4.3 and 4.2d). A feminist reading of *The Transition Handbook* by Rob Hopkins (2008a) reveals masculinist outlook and assumptions, which lends weight to Seager's (1993) claim that feminist analysis and social critiques tend to remain omitted from environmental studies, and that there exists, within the eco-establishment, a resistance to feminism. She truly believes that masculinist cultures have caused the environmental problems in the first place and that it is not through a masculinist approach that we will solve them (Seager, 1993). Conversely, I have often pondered upon a masculinist approach to environmental problems, simply because in this (British) society, it is a widely accepted approach- whereas leftfield activities and theories can often remain on the periphery, and thus have less chance of general adoption.

Carolyn Merchant's (1982) paper, 'Isis' Consciousness Raised', discusses the idea that there is an inbuilt bias in scientific writing which favours the objective, rationalistic modes of thought and scientific inquiry over the 'delicate', more philosophical approaches. Merchant (1982) sees a tangible thread of assumption and bias running through much scientific writing, which sees nature in terms of a woman or goddess, who is ripe for plunder, mining, and scrutinising under a microscope until her mysteries are 'revealed', knowledge is extracted, and her drapes are torn asunder. In truth, Merchant's (1982) paper makes for challenging reading, as she reports that in socio-biology, bluebirds are accused of 'adultery', male mallard ducks are capable of 'rape' (when there are too many males), Acanthocephalan worms can be 'homosexual', kittiwakes can get 'divorced', and Californian gulls can be 'lesbian'.

If this is hard to swallow, Merchant (1982) reminds us that John Knox (1505-1572) likened the sexual desire of untamed females to that of beasts, whilst Renaissance writers blamed female lust on high levels of animal passions. In order to properly assess women's scientific achievements, we need to be very aware of the social factors which have served to exclude them, and Merchant (1982) critiques some who have conducted studies without having understood the lurking bias. She is particularly critical of Johnathan Cole's *Fair Science*, in which he finds that there is only minor discrimination against women in science, pointing out that Cole failed to use qualitative sources and that his data was drawn from more traditionally 'female friendly' scientific fields. Merchant

(1982) argues that this casts doubt over what she sees as inherent bias in his study, and she calls for a greater adoption of feminist perspectives to be included in such analysis.

For a useful way of recognising inherent bias in the way in which nature and science are viewed, Merchant (1982) identifies three levels of categorisation: the 'superstructure', 'symbolic', and the 'substructure'. She explains that the superstructure is ideological, and stems from the "Western scientific world view, it's historical origins, and the way this perception has permeated the history of science" (Merchant, 1982, 399). She uses the example of Aristotle's classification of the male as the semen, the active principle, and the female as matter, or the passive embryo awaiting fertilisation; along with Descartes' separation of mind from matter, creating a thinking subject and an external object (Merchant, 1982). She then goes on to equate the symbolic level with "the role played by language image and metaphor in science and the writing of its history" (Merchant, 1982, 399), with its association of women with nature, and the prevalent use of sexualised imagery, with the unveiling of Isis' cloak representing rape, sexual conquest and male dominion over nature and the feminine (Merchant, 1982).

Finally, the substructure level deals with social roles and behaviour, particularly, "the way women, women's roles, and women scientists are portrayed by historians" (Merchant, 1982, 399-400). At this level, we see the stereotypical association of women within scientific fields such as botany, which are deemed to be feminine enough (Merchant, 1982). With such ingrained masculinist perception across these three levels, it is not hard to see how this bias plays out in science, and despite Merchant's (1982) paper being written in the early eighties, it could be argued that these assumptions are still prevalent in society in general, and on the question of whether this it is only male scientists who are guilty of such work and bias, Merchant insists that women are just as guilty of perpetuating such myths.

2.4a Ecofeminism

Susan Buckingham states that the development of an ecofeminism as an approach to environmental issues occurred in the 1970s, and in which time, "there have been, arguably, major policy shifts in the fields of gender (in)equality and environmental sustainability […] and that this is in part a result of lobbying at a range of scales by groups informed by ecofeminist debates" (Buckingham, 2004, 146). In global terms, there is a higher chance that women are experiencing poverty than men (Buckingham, 2004). What distinguishes ecofeminism from feminism, according

to Adams (1993), is that alongside matters of "sexism, racism, classism and heterosexism, ecofeminists add naturism" (1) is the conviction that the oppression of women is intrinsically linked to the degradation (or oppression) of nature and that both must be understood and dealt with in tangent (Adams, 1993). On a personal level, ecofeminism appeals because I have always been engaged with nature on some level, be it the study of geography, gardening or creating items from natural materials. In a similar vein to Merchant's symbolic level of recognising bias above, Adams (1993) points out that ecofeminism addresses patriarchal spirituality, which associates women and nature with sin, mortality and evil, thus sanctioning oppression under the guise of spiritual cleansing: "When patriarchal spirituality associates women, body, and nature, and then emphasizes transcending the body and transcending the rest of nature, it makes oppression sacred" (Adams, 1993, 1). Perhaps even more exasperating is the 'logic of domination', which employs dualisms in order to justify and establish ideas of superiority and inferiority (Adams, 1993). Thus, we see polarities such as: earth/heaven; female/male; nature/culture, and (much like in Merchant's superstructure (see section 2.4), the scientific and rational is favoured over the instinctual (Adams, 1993). Adams (1993) accuses Judeo Christian religions, the Enlightenment philosophy (with its emphasis on objective knowing), European mechanistic science, and also, "the desacralization of the Earth in favour of a sky-god", as being the intellectual and philosophical wellsprings of dualistic thought (2). She is particularly vociferous in her opposition to such dualistic thought, as she points out the ecofeminist perspective:

> "False dualisms result in several patriarchal theological tenets: transcendence and domination of the natural world, fear of the body, projection of evil upon women, world- destroying spiritual views. Moreover, the second part of dualism is not only subordinate but *in service* to the first. Women serve men, nature serves culture; animals serve humans; people of colour serve white people. Ecofeminists seek a transformed consciousness that eliminates the dualisms that undergrid dominance."
>
> (Adams, 1993, 2)

Riley (1993) concurs with this sentiment, warning that:

> "With dualistic thinking, humans, non human nature, and ideas are categorized in terms of their difference from one another. However, one part is not simply deemed different from its counterpart; it is also deemed intrinsically *opposed* to its "Other.""
>
> (195)

So, it is clear that in order to gain equality and conquer patterns of dominance and subjugation, a shift in consciousness needs to occur, and we need to start viewing the world and those who dwell within as interconnected, equal and part of the whole (Adams, 1993), and what I find encouraging

is that this blends perfectly with the resilience thinking perspective that 'we are all interconnected' (see 2.3j).

In exploring the interplay between the environment, gender and the role of women, ecofeminist writers have asked how we (in the west), use and control the environment (Buckingham, 2004). Superficially at least, some aims of ecofeminism *have* become a part of the wider environmental and social (justice) debates and policy making (Buckingham, 2004). Examples of this include the UN's adoption of 'gender mainstreaming' since 1995, specifically the notion that there needs to be a preliminary analysis on how decisions will affect different sexes (Buckingham, 2004). Women's environmental groups from civil society challenge the government to engage with gender mainstreaming (Buckingham, 2004). One such enterprise, which at its conception in 1988 was "informed by ecofeminism", is the UK Women's Environmental Network (WEN), set up to tackle the perceived lack of feminine perspective within the environmental debate (Buckingham, 2004, 151). WEN have since had some success influencing UK government policy, and are now actually consulted by local authorities and central government in an advisory capacity (Buckingham, 2004). The reflections made by Buckingham (2004) are heartening:

> "In looking back, then, over the past 30 years of ecofeminism, I would argue that significant strides have been made to incorporate women's and gender issues within certain policy areas at both global and local level."
>
> (153)

It is encouraging to learn that issues of gender and the needs of women have been given more weight at different levels of society.

2.4b Ecofeminist Agriculture

In the article: 'Women's sense of farming: ecofeminism in sustainable farming and local food in Vermont, U.S.A.', Tatiana Abatemarco (2018) examines the role of ecofeminism in the lives of women farmers in a place with a vibrant sustainable, organic and local food 'scene'. The women farmers produce a variety of food, including dairy, meat, grains and vegetables, and Abatemarco (2018) explores the challenges, tensions, successes, and joy experienced by these farmers, as they concurrently run local food business and live an 'integrated life'. Abatemarco (2018) often mentions an 'integrated life', which for her participants, is seen as a value, as it means to embrace: self-sufficiency, home based child rearing, and to immerse oneself in the seasons of nature.

Buckingham (2004) points out that, "ecofeminists do question the validity of economic growth, as much of this is likely to produce negative impacts on the environment" (149). Abatemarco, (2018) uses qualitative methods to tease out ways in which the women in her study enacted active resistance to industrial capitalistic modes of production, whilst paradoxically being small business owners in a capitalist society, who farm organically and sustainably. Abatemarco (2018) recognises the radical potential of the production and consumption of local food as an alternative to globalized industrial capitalist modes of production as something which can bring freedom, and the women farmers re-draw their relationship to the environment, by esteeming it:

> "Honouring the natural environment actively subverts the dualistic tendency to background the natural world and deny one's own dependence on it. These farmers have an intimate relationship with the natural environment such that they derive their livelihood from the land, but also see it as something valuable in its own right."
>
> (Abatemarco, 2018, 1615).

Farming is part of the answer to how we repair damage done to the ecosystem, as if our aim is a healthier biosphere, we need to be free of dualism, we need to be egalitarian, and local organic farming can do this (Abatemarco, 2018). Furthermore, Abatemarco (2018) suggests that ecofeminism is, "one of the best-equipped theories to deal with the confounding of social and environmental issues in agriculture" for a plethora of reasons (1602). Firstly, from an ecofeminist perspective, environmental and social ills are both intertwined and inseparable, ecofeminism seeks to address the subjugation of women and nature, as well as issues of power and privilege, beginning from the women's standpoint (Abatemarco, 2018). Ecofeminism rejects dualisms and instead encourages interconnection and diversity of players, as well as feminist viewpoints. It even boasts that its theory and practice compliment and support each other (Abatemarco, 2018).

2.4c Ecofeminism and the Spiritual

Zoe Weil is an educationist and Harvard Divinity School graduate who includes ethics, emotion and spiritual aspects to her teaching. Her ecofeminist perspective is used to counter oppression caused by the dominant patriarchal structures- she works at undoing patriarchal indoctrination, she challenges assumptions, beliefs and ideas through her methodology:

> "I use what I feel is an ecofeminist pedagogy- a perspective which challenges the domination and hierarchical systems of oppression that underlie the dominant culture, and a methodology which attempts to untangle and disarm patriarchal indoctrination as it relates to various aspects of our life-styles, beliefs, ideas, and behaviors."
>
> (Weil, 1993, 311)

Weil (1993) validates multiple 'ways of knowing', as she is very clear that valid knowledge does not only come in the guise favoured by patriarchy- that of rational thought, and she gives equal weight to a multiplicity of knowledges:

> "As a feminist, I reject the patriarchal view that rational thought is the *only* basis for knowledge and morality, and I advocate a pedagogy which acknowledges and supports the education of the whole person."
>
> (312)

For Weil (1993), emotions, intuitions, spiritual insight are just as valuable to her as rational thought. Ecofeminists have realised that although Western theology and philosophy has divorced spirituality from politics, "as though humans are not a part of nature and politics is not integrally related to spirituality" (Adams, 1993, 2), but there is a distinctly spiritual dimension to ecofeminism. The reason being is simple: ecofeminist study has revealed patriarchal religion (particularly Judeo-Christian), and Euro-American cultures, as the ideological source of the twin domination over women and the natural world, and ecofeminists look to cultures and religions which do not have a patriarchal worldview, as a source of inspiration (Adams, 1993).

This approach leads ecofeminists to indigenous and non-technical cultures, and religious practices such as Wicca and shamanism, and crucially, Adams (1993) asserts that, "The voices of women of color and women from other philosophical traditions offer alternative metaphysical viewpoints in which the matter/ spirit dualism evaporates" (2). Adams (1993) argues that such a spiritual approach can address issues of dualistic-thinking and superiority by reuniting matter with spirit, and in *Ecofeminism and the Sacred*, she suggests that: "The transformations envisioned in these pages represent spiritual practices that are practical and environmental practices that are spiritual" (Adams, 1993, 8). Orenstein also advocates learning from marginalised spiritual cultures, and having spent four and a half years studying under a woman shaman in Samiland, she states the purpose of this exercise:

> "The reason that ecofeminists have such a deep interest in Shamanism is that Shamanism is practiced in a wide variety of indigenous cultures that have an earth-based spiritualty. Shamans from North America and other tribal cultures have kept alive the knowledge that the earth is sacred and that not only are humans and nonhuman nature part of the interconnected web of life, but also that spirit resides in matter, as well as in other dimensions."
>
> (1993, 172)

Orenstein (1993) believes that Shamanism techniques that enable us to communicate with the spirits of plants, animals, the living, the dead, and the deities can be put to good use by asking theses spirits how best to live in accordance with nature. The fundamental belief of shamanism

that spirit resides in matter effectively demolishes the patriarchal dualism of dominant western cultures- which is that spirit operates outside of matter (Orenstein, 1993). Additionally, shamanism is neither anthropocentric nor androcentric: neither gender is asserted to be superior to the other and humans are placed within the natural ecosystem rather than apart from the natural ecosystem (Orenstein, 1993). This echoes the resilience thinking's assertion that we are inseparable from the ecosystem, and my empirics concur with this notion, as discussed in Section 5.4.

2.4d Ecofeminism and Resilience Thinking

As was discussed throughout my analysis of the literature concerning complex adaptive systems and social-ecological resilience (see Section 2.3), many resilience scholars advocate a holistic approach to social and environmental issues. We are not separate to nature, as Folke et al. (2016) stress: "In essence, the social-ecological systems approach emphasizes that people, communities, economies, societies, cultures are embedded parts of the biosphere and shape it, from local to global scales" (1). This sounds very much like the arguments put forward by ecofeminist scholars such as Adams above, and it is evident that the two disciplines, although disparate in many ways, do share common ground on this most significant point. Riley (1993) also emphasises this crossover between the two disciplines, as she identifies:

> "a common theoretical approach in that both see all parts of a matrix as having equal value. Ecology asserts that without each element in the ecosystem, the biosphere as a whole cannot function properly. Meanwhile, womanism asserts the equality of races, genders, and sexual preferences, among other variables."
>
> (194)

In terms of conventional resource management, Folke (2006) points out that both the omega, or creative destruction phase, and the alpha, or re-organization phase, which form the backloop aspect of the adaptive cycle, have largely been ignored, but that acknowledgment of these possibly less desirable phases is essential to the whole process (see Sections 2.3h and 2.3l). A similar sentiment is echoed by Ruether (1993), who states: "The western flight from mortality is a flight from the disintegration side of the life cycle, from accepting ourselves as part of that process" (22). Just as resilience scholars advocate an honest acceptance of the death and renewal cycle, Ruether (1993) points out that: "Humans also are finite organisms, centers of experience in a life cycle that must disintegrate back into the nexus of life and arise again in new forms" (22). And, as Folke (2006) warns that conventional environmental policies are often rather myopically founded on the hope that the beneficial aspects of the r and K phases (growth and consolidation phases) will

continue indefinitely, Ruether (1993) states that in our effort to become immortal, and negate the natural cycles of life, we mercilessly degrade the environment. She bluntly and pragmatically reminds us that to think of ourselves as separate from nature is folly, and that:

> "It is in fact, human beings who cannot live apart from the rest of nature as our life-sustaining context, while the community of plants and animals both can and, for billions of years, did exist without humans. The concept of humans outside of nature is a cultural reversal of natural reality."
>
> (Ruether, 1993, 14-15)

As ecofeminists seek to understand how things became out of kilter, and then respond creatively and innovatively, visioning new relationships, and re-distributing unequal power dynamics; resilience thinking also seeks to embrace innovation in exploring creative solutions, and challenging the atomistic and short-sighted attitudes that have contributed to the precarious environmental situation in which we now find ourselves.

The route that resilience thinking took to reach their often-quoted philosophy, was to follow the scientific and intellectual modes full circle until logic arrived at 'we are all interconnected'. The route that ecofeminists took was to ask what ideologies caused our environmental degradation, arrive at patriarchy, and then to seek the remedy in nonpatriarchal, or shamanic and indigenous cultures, whose belief system advocates the interconnectedness of all living things (Ruether, 1993). Whilst the idea is arguably somewhat obvious for those whose intuitive understanding allows them to reach this conclusion without much hesitation, and who might wonder why it took so long for resilience thinkers and ecofeminists alike to concur, but this kind of knowledge can only ever be subjective, indescribable and 'known' rather than empirically 'proven' (Ruether, 1993; Weil, 1993). But this example of the different journeys taken by resilience thinkers and ecofeminists to arrive at common ground, illustrates the disparity in their starting points.

Unlike ecofeminist thought, Walker and Salt (2006) believe that the narrow perspective which has led to the exploitation of our planetary resources, can be attributed to human nature, as we cannot help striving for maximum yields and neglecting to employ long-term resilient strategies, "Our *modus operandi* is to break the thing we're managing down into its component parts and understand how each part functions and what inputs will yield the greatest output" (Walker and Salt, 2006, 28). Perhaps some feminists would contest this stance, and instead assert that it is not necessarily human nature that is to blame here, but human culture, moreover, patriarchal culture, the culture which enjoys dualistic thinking and the domination of the masculine over both nature, and the more feminine qualities which may have prevented such exploitation of the environment had

society been open to respecting their point of view (Adams 1993; Riley, 1993). In effect, I believe that feminist thinkers would argue that the problems that we are facing now have been caused by masculine nature, rather than human nature, and certainly not feminine nature.

2.4e 'Society of the Goddess'

Ruether (1993) explores how Western society came to the topsy-turvy mind-set in which we are separate to nature, and she casts her net back to pre-Hebraic society, when women took the majority of the work based around childrearing, and making household items such as baskets, and clothing; whilst men tended towards less frequent but more energetically demanding labours such as hunting, war and clearing fields. Orenstein (1993) also looks to the distant past as she examines the work of archaeologist Marija Gimbuntas, who believes that Palaeolithic society was pacifist, earth honouring and awarded women greater "prestige and equality" than our present society. In short, Gimbuntas describes a prehistoric society of the Goddess (Orenstein, 1993). But Ruether (1993) points out that the activities undertaken by the men gradually became just as valuable as those undertaken by women, yet the frequency of their work allowed men more leisure time, and they began to hold their activities in higher esteem than those more closely associated with 'women's work', as hunting and war gained prestige. Ruether (1993) asserts:

> "This is the primary social base for the male monopolization of culture, by which men reinforced their privileges of leisure, the superior prestige of their activities, and the inferiority of the activities associated with women."
>
> (Ruether, 1993, 15)

Thus, links formed between the material aspects of life being viewed as separate from men, and instead being associated with women: "The earth, as the place from which plant and animal life arises, became linked with the bodies of women, from which babies emerge" (Ruether, 1993, 15). In the 'society of the Goddess', land was held communally and of matrilineal descent, but with the advent of farming, when animals were domesticated (or 'enslaved') and the land could be ploughed, men began to assert their dominion over nature, and the land became patrilineal (Ruether, 1993). The next step was for men to seek more land, and so they set out to subdue neighbouring settlements or tribes by massacring their male populations, and then enslaving the women and children for domestic and sexual work (Ruether, 1993).

2.4f Uncomfortable Reading

Adams acknowledges that ecofeminism can make uncomfortable reading as it documents the domination and exploitation of the industrialised North over the poorer South (1993). I remarked earlier on the challenging nature of Merchant's 'Isis' consciousness raised', and this may have something to do with the fact that like feminists, ecofeminists are not content with an armchair movement, instead they advocate real, concrete and grounded effort (Adams, 1993).

The ultimate question to be asked is: can a feminist or ecofeminist analysis be a useful, insightful methodology to be applied to the study of resilience, localism and transition culture? There are theoretical linkages between the importance placed by resilience thinking on the concept that all components of a social-ecological system are interconnected (Walker and Salt, 2006; Folke, 2006, Gunderson, 2009), and the philosophies of eco-feminism, namely that we are all interconnected (Adams, 1993; Orenstein, 1993; Ruether, 1993; Gadon, 1995). Feminist analysis can allow lesser-heard voices to emerge, and it resists structures based upon patterns of domination. In Hopkins's book, *The Transition Companion*, a chapter entitled 'Diversity', addresses the need for inclusivity and suggests ways to combat dissonance (Hopkins, 2011). Feminist analysis has a strong ethical stance about non-exploitation of participants and provides guidance in fieldwork techniques (England, 1994; Holland, 2004; Lawson, 1995), thus my intention to take an ethical approach is fitting.

Chapter 3:

The Problem with Fieldwork

3.1 A Reflexive Ethnography

This thesis is methodologically deep, rich and full, which is why I am devoting this chapter to a discussion of my methods, whilst weaving in concerns about fieldwork and the issues I encountered, along with the strategies I employed, and my eventual successes. I shall discuss what inspired and informed my stance, and to what extent I abandoned or engaged with literature and theory once I was actually doing the 'real' work out in the field. My methodology has been influenced by various strands of thought and enquiry; from ethnography, to humanist and feminist geographies, to creative research methods and landscape phenomenology. I am not sure whether I can claim one distinct epistemology, and this chapter explores my ethical rumination amidst scrutiny of various methodologies, before I conclude by reflecting on previous areas of tension and resolved outcomes. Although it is difficult for me to 'go with the flow', my fieldwork has not followed the trajectory I originally imagined, and I have had to behave in a reflexive manner whilst navigating various situations, including blocked routes and opportunities as and when they have presented themselves. Therefore, I wish to spend a little time reflecting upon my own experience, and to compare and contrast it with previous ethnographies and 'tricky' field work projects (these less conventional methodologies, whilst open to much critique also tend to offer rich and fascinating insights) by discussing various literatures in the context of my project.

3.1a My Entry into the Field

To say that I found the actual practise of human geography (the fieldwork, the collecting of data) tricky would be an understatement. The starting point for my problem was simple, I was completely new to the discipline of human geography, and as such, at a considerable disadvantage to my colleagues. My scholarly foundation is in physical geography, biogeography, conservation and ecology. At undergraduate and Masters level, the absolute answers available contented me. The soil I was looking at was either a brown earth or a podsol, with no vagaries, no ethical

concerns, just a soil auger and possibly a quick chat with the landowner needed. Embarking on a new subject area, one which seemed without bounds, intimidated more than excited me.

Informed and inspired by feminist methodological readings, I enthusiastically and naively entered the field to rapidly find myself struggling in a quagmire of social interaction and self-consciousness. If this was not bad enough, I almost became paralysed by the application of heavy reflexivity. Like England (1994) who eventually quit the research process she believed to be too exploitative, I sometimes wondered whether I should change direction and start afresh. It was not so simple however, as although filled with social angst, very quickly the Forest Garden had *affected* me, claimed me, and I knew the overgrown, muddied and stony path ahead to be my own. I trudged on, the way unfolding as I went, a process Lorimer (2006) mentions (see Section 3.1c). I continued to grapple with the messy world of humans and real-world situations, dancing between incapacitated-self and extraverted adventuress. Taking dithering steps, and bold actions, until I became accustomed to the discomfort, and finally, began to work out how to actually *do* (and enjoy) human geography. The end result is work of which I feel immensely proud, and also, work which I believe has yielded some fascinating and less known data, which only the aforementioned degree of ill-ease and dedication to my cause could have unearthed.

Whilst Lorimer informed my first year with the idea that human geography need not be too prescriptive and buttoned up, other academics were also to have their influence. Deborah Dixon encouraged me to think reflexively about my research process, particularly to be open to adaptation as and when the need arose, and to allow the research to inform and guide. Professor Harriet Hawkins (whilst she was a postgraduate researcher) first introduced me to creative research methods, which, among other things, can be employed when facing an impasse. The use of creativity can sometimes shake things up enough to kickstart the writing or research process.

My closely-guarded masculinist way of working and thinking was a tradition I had adopted but even this had been challenged during a Landscape Archaeology fieldtrip as part of my Masters degree. We were asked to (temporarily) discard our empirical knowledge-based way of looking at the landscape, in order to attempt a phenomenological approach. I was delighted and mildly baffled as we tried to see the site afresh, to view it from a broader, more imaginative and intuitive perspective. I do not make any pretence to understand phenomenology in this thesis, for it is beyond the confines of my study. In a general context, it is a philosophical approach to the study of the manner by which humans make sense of their experience of both the human and non-

human world (Castree et al., 2013). It was impossible for me not to have considered the phenomenology of landscape from an archaeological point of view, but this emerged organically whilst conducting my fieldwork in the Forest Garden and whilst I acknowledge this influence, I must be clear that I am employing it in a landscape archaeological context.

My entry to the field was not straightforward, as my own arrogant assumptions made their presence known. This is an aspect to the fore of a feminist critique, but humanist geography is also aware of such blunderings. Cloke et al. (2010) note that whilst a detached 'view' of the field is perhaps central to the practice of human geography, historically there were often assumptions, rights, and indeed arrogances of past geographers who believed that it was their place to visit far-off places and peoples, in order to make observations and judgements. To illustrate this point, Cloke et al. (2010) contrast the practices of the geographer Carl Sauer with those of Linda Mc Dowell. Essentially, Sauer had the luxury of being able to leave his office and everyday life behind in order to 'enter the field', simply observing, immersing himself and using intuition as a guide, whereas McDowell was vigilant and sometimes distressed by her efforts to render her geographical practice ethical (Cloke et al., 2010). Whilst Cloke et al. (2010) do not specifically criticise Sauer (indeed, they are at pains to point out that his work was- and still is- pivotal and invaluable to the field of geography), they alert us to more recent concerns about methodological approaches and caution needed with *not* assuming a stance of superiority (reminiscent to Western Colonial explorers of the past) over the 'research subject'. Bitingly, Cloke et al. (2010) reference feminist geographer Gillian Rose who:

> "developed a powerful argument that this version of an academic gaze reflects a distinctively 'masculinist' way of looking at the world- all of which are reckoned to be available and amenable to the gaze, transparent to the piercing intellectual eye- and one which also carries with it an inherent desire to possess, to subdue, the phenomena under the gaze."
>
> (16)

According to Rose, the masculinist academic gaze occurs when the world is likened to an exhibition, the geographers walking around, gazing upon the 'exhibits' as they please (Cloke et al., 2010). Cloke et al., (2010) do not seem especially comfortable with the assumption that the world is their exhibition ground, as they query some fundamental views:

> "For many geographers the belief that the world is *their* 'oyster' has never been questioned, and the possibility that large portions of it are really *somebody else's* world is not one that is often addressed."
>
> (13)

This particular masculinist ghost is one I identified with, and I rattled its cage when I entered the field, realising that I had a degree of assumption that I had a 'right' to research! Luckily for me as a researcher, with my own reservations (that I was unsure as to how to conduct ethical research) and revelations (that the ghosts of colonialism were alive and well within me), it is harkening to know that Cloke et al. (2010) ask us to pause and become a little more reflexive. They urge us to fully consider the implications of our field practices and not to rush into things, "we are talking about how the field- the specific places to be visited…. is somewhere that we should perhaps be more hesitant to enter than we have often been in the past." (Cloke, et al. 2010, 13).

The transition of the geographer actually being physically present in their field in order to encounter the sights, sounds and impressions of that place, coupled with the opportunity to observe ('gaze upon') the place and inhabitants of study, has long been afforded a high degree of respect in the discipline of human geography, and organisations such as the Royal Geographical Society have even produced field manuals instructing the geographer on the art of observation (Cloke et al., 2010). Historically, geographers have travelled in order to gain knowledge, a privileged activity harking back to the days of the European explorers (Cloke et al., 2010). Indeed, it could be said that geographers who chose to 'stay at home' were held with less exaltation than those of more adventurous persuasion, and Sauer believed that if you knew too much about a place beforehand, then discoveries might be more elusive (Cloke et al., 2010). Despite not travelling as far afield as the European explorers of old, I was delighted to find that my own work incorporated a great deal of spontaneity and unexpected activity.

Making use of one's local area was also a favourable activity especially for British geographers who developed a respected tradition of taking students out to read the 'landscape', and to also look closely at smaller areas in great detail (Cloke et al., 2010). It goes without saying that I was taken on many glorious field trips as a geography and archaeology student, particularly to my local uplands (the mynydd or Elenydd), and this practice educated and enthused me, but also, I imbibed this tradition without realising I would later to reproduce these methods for my own projects. I shall return to the notion of scrutinising small areas of the landscape when I discuss Lorimer, but it is important to note that there was much emphasis in this field of thought, particularly amongst mid-century British geographers who were keen to abandon their study rooms and get into the field, primed to observe, scrutinise, and to really 'see the landscape'.

A prevalent idea was that a geographer must primarily observe to gain knowledge, and that only after seeing, can one reflect and later synthesise those observations (Cloke et al., 2010). The skill of actually being able to see all that was in the field was most highly regarded by Sauer (Cloke et al., 2010), but in my own work, this aspect particularly frustrated me. There was so much activity in the Forest Garden and the Eco Shop, and due to my immersive practice, my field of vision often contracted to what was directly around me. Whilst I could gain an overview, what I saw was immediate, and very far removed from seeing everything. Had I been able to clone myself, and whilst I weeded beneath 'my' tree, I could get the second, third, fourth me to look after the books, steam the clothes or mow the grass, then my view might have been more complete.

Whilst in the field, I soon learnt that we cannot pretend that the doing of human geography comes without a multitude of ethical and moral considerations, and we need to be aware, responsive, and sensitive to the simple fact that to varying degrees, our presence as researcher is an invasion of privacy (Cloke et al., 2010). 'Research subjects' may wish for various aspects of their lives to remain private and of course, the very presence of a researcher in someone *else's* place may be uncomfortable. Individuals may have deep personal attachment to a place and may view the researcher's presence as unwelcome, especially if they are a stranger, and an incursive one at that, if they are taking notes and photographs (Cloke et al., 2010).

I definitely believe this was true of my own experience, as to start with I was an outsider in the Forest Garden and I did not take photographs- not only because I didn't have permission, but also because I did not deem it appropriate at that stage. Instead, at the end of each work session, I drew an impressionistic, experiential and affective account of what drew my attention that day. Months later, I came to be an insider - outsider and gained permission to take photographs, which I shot tentatively. This never felt especially comfortable, but I wanted some sort of record, so I persisted. It seems as though we must always be vigilant as geographers to check that we are not relying too much on ocularcentrism (gathering of data via what can be perceived by the human eyes- a scientific style of observation) and also never to assume our right to be in a given research environment, as Cloke et al. (2101) suggest:

> "Rather, the picture must become one of the researchers negotiating *access* to peoples and their places, both by formally liaising with the peoples concerned and by thinking much more carefully than hitherto about the politics of 'being there' as bound up with the differing origins, backgrounds, attributes and social standing of the human geographer relative to these people and places."
>
> (Cloke et al., 2010, 14-15)

This reminds me of two instances in my time as volunteer at the Eco Shop when other volunteers did make reference to our relative social standing. In the first instance, Helen jokingly commented that, "You've come to see how the other half lives", and I think she was at liberty to poke things in such a manner because in actual fact, we both come from similar social backgrounds. Another time, having worked out how to use the calculator to find percentages and showing the other volunteers, one of them joked that I was "the educated one". This was a nice instance of my relative privilege being addressed and also put to good use, as my stick-on instructions for the calculator helped the shop to run smoothly.

3.1b Ethnography

Ethnography is a methodology whereby, by becoming part of the lifeworld of the community under scrutiny, the researcher hopes to gain a deep and complete understanding of its social relations, power dynamics, rhythms, customs, beliefs and materiality, in a way which cannot be achieved simply through interview alone (Castree et al., 2013). The empirical evidence is gathered from a variety of sources; through the practice of participant observation, to conducting and analysing interviews, and from examining other evidence, such as the material and written culture of the community, often times resulting in the researcher keeping a field diary (Castree et al., 2013).

Typically, ethnographic work delivers an in-depth analysis that is more nuanced than might be expected from simply having observed an activity or situation, or by conducting interviews, and due to the immersive nature of the work, the researcher's understanding will likely change as they become involved with the group, and thus it is common for their research questions to likewise change once they have an enhanced understanding of the group and relations (Castree et al., 2013). Indeed, the reflexive process refined, rather than changed, my research questions as my understanding grew.

Participant observation is a methodology used in geography, appropriated (Author's verdict) from cultural anthropology (DeWalt and DeWalt, 2011) and it is the immersive method whereby the researcher joins in with the everyday life of the community, so as to comprehend the culture, ritual and routine (Castree et al., 2013). Cloke et al. (2004) tells us that participant observation provides us the opportunity to discern the difference between the things people tell us they do and what they actually do. Participant observation can be performed both covertly and overtly. Overt

research requires the researcher to fully inform (and seek permission) of the community, prior to commencement, whilst covert research is just that, the researched community remain unaware that the research is taking place (Castree et al., 2013). It goes without saying that there are more ethical concerns associated with covert participant observation, yet probably more gained in terms of research, as the community are less likely to modify their behaviour due to the presence of a known researcher (Castree et al., 2013) and of course, using covert participant observation, Crang (1994) bequeathed us fascinating encounters with the lifeword of Smokey Joe's in his classic paper. Informed by the desire to conduct research as ethically as possible, at my initial approach to the Forest Garden group, I stated my reasons for wanting to join, making it clear that I intended to study them for my research. Castree et al. (2013) inform us that whether one is conducting overt or covert participant observation work: "the researcher seeks to remain an impartial and neutral observer." (362), and it might be fascinating for the reader to see very clearly through my results and field diaries, that this was *not* the case for me, as I was broken down and pulled apart by the research process.

Once access has been established and the fieldwork begun, the researcher can only ask questions on topics already deemed 'safe', and if the research requires discussion on philosophy or religion, this subject might be out of bounds in the initial stages, but later on, with growing trust, intimacy, knowledge and confidence, the 'trickier' subjects might be gauged more appropriate (Moeran, 2007). Thus, a non-linearity is present in the way the researcher might circumnavigate their questions and aims, an in this way, the fieldwork has a "haphazard" quality (Moeran, 2007, 11).

Moeran (2007) points out that for anthropologists to go beyond the superficial and to access what *they* want to study, as opposed to what their "informants" wish to present, a key factor at play is the personality of the researcher themselves- this influences the degree of intimacy achievable and whether they will be apt or not to perceive a good opportunity when present and to exploit it. But, reading Moeran's (2007) questions regarding the initiation of carrying out organisational fieldwork (his definition of "organisational" being a group such as an institution, school or business linked to contemporary capitalism), my sense was that his were mainly of a practical nature, more than theoretical or ethical. For example, his questions were more, '*Will people want to answer your questionnaire and if so, will they be honest?*', rather than, '*How will you being there affect their daily lives? Will you enhance, change or diminish their lifeworld?*', which were my questions, coming from a feminist and humanist geographical perspective.

Whilst Moeran (2007) acknowledges that constant immersion may not be possible, the vital aims of comparison and observance of rules are the primary concern of the anthropologist- and they are non-negotiable. For geographers Carr and Gibson (2017), the key aim is understanding, via researchers who have "put their own bodies to work", aspects of the creative process which can only be uncovered via doing, rather than observing (2). My aim was more of a fusion of the two objectives, I wanted to understand how people-built resilience in practical terms (like Carr and Gibson) but also, I wanted to know how they functioned as a group, and I did end up observing various rules or sets of behaviours. Thus, my approach was not a purely anthropological one but more of an appropriation of their methods to fit a geographer's sensibility.

For Moeran (2007), there is a distinction between being immersed in a community's lifeworld, yet still perceiving the mirage of what the participants might want the researcher to perceive, as opposed to a researcher being so immersed in the culture of the community, that they can see things as they really are, because they have crossed a threshold and gone, "back stage":

> "What marks the shift from participant observation to observant participation, I think, is precisely the ability to see beyond the social front that informants present to strangers in their everyday lives, to know that there is a difference between … 'front stage' and 'back stage' behaviour, and to have ready access to that back stage."
>
> (14)

The idea of front stage and back stage is derived from the work of sociologist Erving Goffman, (1959) who developed dramaturgy, the notion that we live our lives as if we are characters in a play and must play our part. Sometimes we act out front stage- when we are 'on show' to others; when we get married, deliver a lecture, or perform our role as a good neighbour (Goffman, 1959). There is also backstage, when we exist in our private space, safe to be our authentic self, in which we have the chance to recuperate and prepare for the next time that we are frontstage (Goffman, 1959). This dramaturgy has an inhibiting effect upon us, as we face constraints in our social interactions, depending upon expectations, audience and situation, as Dell (2016, 571) elaborates:

> "In the manner of actors on a stage, they play roles specific to the setting and the audience. Their stage is what Goffman called "frame", it's what the actors interpret and agree to be the meaning of the situation."
>
> (571)

In terms of ethnographic research, Moeran (2007) believes that having crossed from participant observation (front stage) to observant participation (back stage), a new regime is entered and:

> "things are never again the same as they were before […] Moreover, your informants realise that you have learnt the rules and know the difference between front and back stage games and, as a result, they stop pretending when in your presence… This is immensely helpful in terms of the quality of research that you, as fieldworker, are able to conduct, and therefore the quality of analysis that follows."
>
> (14)

Looking back, I think this happened to me within three minutes of having entered the garden, although I didn't know it at the time. I think that by *not* wandering around the Forest Garden taking notes, chatting and asking people questions, but instead, having little choice (nor will!) but to have immediately started upon the hard labour of gardening; immersed in an earthly and visceral world- tugging at the grass, avoiding insects, nettles, brambles, too much mud and sore knees, I started out as backstage and went from there. The very same occurred in the Eco Shop as it was months before we undertook the walking and semi-structured interviews (although not long after my arrival, Amanda determined an interview herself, which I merrily went along with), mainly I "just steamed" the clothes. This 'back stage' work was dusty, exhausting, satisfying and focused. I didn't seek to interrupt, I simply did what I was told, including finding my own agency, as was expected of volunteers. The more I read, the more grateful I become for my own approach and fieldwork experience! I cried, laughed, sulked, joked, hid and hugged whilst on my fieldwork. I suppose I could have challenged Vangelis when he suggested that I just got on with the gardening like everyone else, I could have done it less enthusiastically and more aggressively pursued interviews or overtly made field notes. At the time, I sometimes wondered whether I should do that, but my instinct told me otherwise and I am glad that I did 'just garden' as a would-be maker-geographer, as opposed to anthropologist, it could not have been more perfect!

The way I proceed throughout this thesis is that when my observations had more of an objective quality, where, for example, I was working in the Eco Shop and I made an observation, I use the term, participant observant. But when the observation pertains more immediately to myself and my own embodied research, for example, when I was working in the Eco Shop and I became dusty and tired, I might deem it more useful to use the term, observant participant, after Moeran (2007).

3.1c 'Make-do' Methodology

Fascinatingly, in ethnography, the central research tool becomes the researcher themselves (Cloke et al., 2004), as they navigate between their usual lifeworld and their field of research. This is not

necessarily easy, and at times the researcher may need to be mentally dexterous (Author's interpretation) in order to navigate an unfamiliar, or even uncomfortable situation (Cloke et al., 2004). This certainly has been very true for myself, as various entries in my Field Dairies attest, but this interface between two worlds can yield rich data, as Cloke et al. (2004) suggest:

> "Here differently 'theorized' (academically and otherwise) and/ or taken-for-granted world views, ways of life, self-understandings, relationships, knowledge, politics, ethics, skills, etc., are accidentally and deliberately rubbed up against each other."
>
> (170)

It was whilst grappling with uncertainty in this in-between state, that I often found myself agonising: "Do I do this, or do I do that? What can or can't or should or shouldn't I say or do?" Although somewhat disconcerting, ultimately, I found it rewarding, for in surmounting these difficulties I had finally made some progress. I found encouragement in Lorimer (2006) discussing his ethnographic work with the Cairngorm reindeer herds, as he describes:

> "I draw on a 'make-do' methodology… walking a sentient topography of traditional grazing grounds; renewing encounters with charismatic animals through photographic portraits; consulting an archive of herding diaries; and mapping a hidden ecology of landscape relics."
>
> (497)

I found resonance in the fact that Lorimer (2006) is not afraid to employ "make-do methodology", as I too found myself muddling a mêlée of methods. Before I was comfortable enough to bring out my camera, I made do with sketching a series of impressionistic responses to the forest gardening activities. I conducted a walking interview, and also mapped the shop before I was sufficiently established as a member of the group and could finally take photographs of both the shop and Forest Garden. Thus, it could be said that I employed a 'make-do' methodology and I think these mixed methods help to create a more vibrant account of my work.

Whilst I cannot hope to replicate Lorimer's prose-like penmanship, I take inspiration from his subtle weaving of the visceral, affective aspects of his research into his methods paper. I believe he demonstrates beautifully that one needn't write geography in a starched manner, and that a sublime aspect can be present. Lorimer has a skill which breathes life into his ethnography, imparting an inward impression of softness with the hush of the forest, the damp of the moss, the chill of the air, all tangible. I can almost see reindeer breath on a cold morning, and I am left feeling

that I can touch their fur and smell the air. Within this considered and sensitive approach to fieldwork, there is a lyricism to his writing, as he states:

> "But you have not studied with your own eyes the long upward sweep of the land that lifts sheer at the northern corries and then once on high stretches out across the granite expanse of the northern plateau… And, since I cannot take for granted that you know this topography and its peculiar brand of local information, these responses require careful animation."
>
> (Lorimer, 2006, 497-98)

I have found solace and encouragement in these works, as they have emboldened confidence in my own ethnographic process, and my own somewhat leftfield, unorthodox methodology.

Lorimer draws from anthropologist Tim Ingold (who spent time living with the Skolt La community of Northern Lapland) and it is non-Western and indigenous people who inspire his world view. Ingold asks us to reconsider our typically Western ways of understanding our human placement in the world (Lorimer, 2006). With relation to humans and non-humans (plants, animals and inanimate objects), we are urged to contemplate a relationship whereby these non-human elements are part of the matrix of life itself, have a life and are somehow part of our being, as we are part of them too (Lorimer, 2006). Animacy is the way in which humans, plants, animals and objects can be seen to co-exist in a manner which is alive. The human acts as a central point and the plants, creatures and things of and around the human, gain agency. My understanding is that human-plant-animal and object are all interconnected as part of life, each other and the whole, and the human acts as a torch. Thus, the metaphorical torch (the human) shines their light on a possession (a chair, bag or a plant) and in doing so, the object becomes enlivened. Or, to quote Ingold as Lorimer does:

> ""The liveliness of stones emerges in the context of their close involvement with certain persons, and relatively powerful ones at that. Animacy, in other words, is a property not of stones *as such*, but of their positionality within a relational field which includes persons as foci of power. Or to put it another way, the power concentrated in persons enlivens that which falls within the sphere of influence. Thus, the animate stone is not so much a living thing as a 'being alive'… It also explains why animacy is attributed to artefacts (like kettles and pipes) that are closely bound up with the lives of persons.""
>
> (Ingold in Lorimer 2006, 511)

Unless unnoticed, Lorimer (2006) hasn't specifically mentioned the idea of interconnectivity, but it is there nonetheless. The idea that we are detached from our environment is challenged by Ingold

and in turn, Lorimer (2006), who urges us to reconsider the way in which we view ourselves and others, for instance, as geographers we could consider non-Western perspectives (such as an animistic word view) and ways of being in the world. In other words, if, as an ethnographer, the Forest Garden claims you and 'makes you part of it', as happened to me, validity is now bestowed upon such an experience. Perhaps I am now part of the Forest Garden in a similar way to which some indigenous people see themselves having a fuller and more sensory experience with their environment than Westerners perhaps typically allow? (Lorimer, 2006).

Lorimer (2006) is given permission to allow his methodology to be "make do", as Ingold's wisdom is that the way emerges, we remember how to do it once we set out upon our path, and things become familiar once we immerse ourselves in that practice. I view this as permission to embrace reflexivity and even intuition during research. By illustration, a pre-determined course of action can be adjusted or even abandoned on actually entering the field, as it becomes clear that a slightly (or radically) different approach is appropriate. This tallies with what Cloke et al. (2010) said about Sauer, to get into the field and then find out what's going on. It was Amanda who encouraged me to "push where there is a bulge", which led me to more fully engage with both Helen and Amanda's textile-based activities in the shop (as they were both joyful and enthusiastic to have me join in with their activities), rather than my original plan of pursuing as many different activities as possible.

Lorimer (2006) asks us to reconsider the way in which we view the landscape as geographers, as he encourages us to make return visits, be introspective, become familiar with things found on the ground and consider knowledges from embodied experience or oral tradition. I made repeat visits to the Forest Garden and curiously enough, generally gardened (if at all possible) in the same area each time, 'my patch' if you will, which was quite close to the gate. Instinctively, this practice made sense to me as I became familiar with a smaller portion of the garden, rather than attempt to move around each session. I didn't have a rational basis for this tactic, however, but seeing as my activity was embodied rather than cerebral, this didn't concern me. As Lorimer (2006) affirms the value of ethnographies which do not take an objective viewpoint, but which display intimacy, affection and embrace subjective encounters; he galvanises my belief in my experimental ethnography, which is subjective, intimate, uncomfortable and delightful.

3.2 Feminist Methodologies

During the first year of my PhD, I was excited with the notion that if I undertook feminist research, and did so well enough, it should not only be unusual and elucidating, but also of benefit to my study group and hopefully even humanity or the environment. I wanted my research to have impact. I wanted it to have value, rather than being simply an exercise in 'taking' knowledge from my research subjects to further my own ends. Many questions as to the exact nature of feminist research and geography plagued my early methodology and (to a decreasing extent) bother me still. Moss (2002) asks:

> "What makes research in geography *feminist*? If you're a feminist, do you *have* to do feminist research? And if you're *not* a feminist, can you do *feminist* research? … Can the *practice* of geography research actually *ever* be feminist?"
>
> (1)

I reflect on these questions, for whilst my work is influenced by a feminist approach, I have been aware of masculinist ways influencing both my work and my interaction with participants (sometimes I prefer the term 'research subjects' because use the term 'participants' can be hypocritical- denoting my wishes *rather* than the reality of human interaction). Moss (2002) queries the very nature of seeking exact answers to the above questions but she has embraced not knowing as she points out: "I'm comfortable asking questions about research that have no "right" answers" (1). Nonetheless, she was motivated to discuss the realities of conducting feminist geographies, noting that whilst there was a movement within geography to conduct a feminist analysis, which dated from the 'radical movement' days of the 1970s, it was not until the 1990s that discussions around methods began to be published (Moss, 2002).

Moss (2002) believes that a feminist approach to geography will impact the research process, not least because the researcher will agitate around ideas of power and knowledge, which in turn influence the methodology. I was hoping that this approach might remove the tendency to enter the field blind, but this was not the case with my work, as I was initially unaware of my own ghosts of masculinism and colonialism (see sections 3.2f and 3.4) (Butz and Berg, 2002). These ghosts induced my assumption that merely knowledge of the fact that I was a research student, and at an esteemed institute, would entice people to talk to me about my work and to gladly share information about their forest gardening activity. How wrong I was. It arguably produced the opposite effect!

Scholars such as Moss (2002) and Seager (1993) argue affirmatively that a feminist approach can uncover data otherwise elusive and that the work can be very rich. I believe that my own work falls into that category, as it seemed very much as though, once I had endured various rites of passage, I was rewarded by some incredibly fascinating semi-structured interviews, which tended to be intricate, complex, deep and insightful. People were willing to talk to me at length about complicated and nuanced ideas and the belief systems that informed their approach to their own situation, as regards humans and the environment. I wonder whether I would have been privy to such illuminating data had my masculinist ghosts not been challenged? I feel honoured and humbled that people were eventually happy to share their thoughts with me.

I would like to rewind and think about feminist geographers whose approach is masculinist by default and also the query posed by Moss (2002), *Can geography ever be feminist?* Although this seems confusing, Moss (2002) explains that academic training is a masculinist process, and that an adoption of masculinist methods is required in order to survive in the academic field. Butz and Berg (2002) and also Seager (1993) agree with this sentiment and argue that many feminist geographers are actually unwittingly reproducing masculinist discourses.

Moss (2002), Lawson (1995) and Seager (1993) all vote in favour of undertaking a feminist analysis of environmental studies and they all agree that it is important for feminist analysis to court the discipline of geography, bearing in mind that:

> "Geography as a discipline has privileged a masculine subject position and reproduced binaries such as male/ female, culture/ nature, and object/ subject where more value has been placed on the first part of the dichotomy."
>
> (Moss, 2002, 7)

Whilst it may be challenging and problematic to use feminist methodology, there is also the argument that this approach can yield information or data otherwise less easily accessed, or even hidden (England, 1994) and the work is often interesting (Moss, 2002).

3.2a Positionality

Positionality is something else that some feminist scholars take seriously. Moss (2002), Butz and Berg (2002), and also England (1994), all earnestly grapple with their own positionality throughout the research process; indeed, Moss (2002) argues that all research students should question their

position, irrespective of whether they are feminist or not. She explains that there are different types of feminist stance, such as: being concerned with social justice; being opposed to oppression; or being pro-woman. Moss (2002) also consciously strives to avoid deeply held masculinist biases, as she explains:

> "Understanding how masculinity permeates the discipline has opened up ways of thinking about knowledge such that a feminist subject positioning can develop within geography as well as that the same, masculine-weighted binaries are not continually being reproduced."
>
> (7)

To answer the question whether geography can ever be feminist, we should at least attempt a feminist geography, lest the work be important and deliver otherwise unknown knowledge. As far as the agitation around feminist geographers who hold masculinist bias is concerned, we need to acknowledge that this bias may well be unconscious, and as such, it might make an unexpected appearance. What we must do is put this knowledge in our pipe of reflexivity and puff hard, contemplating its significance in the context of our own research, and then trust that Butz and Berg (2002) help us to understand this further when we come to their work later on (see Section 3.2e).

3.2b Reflexivity

A feminist or humanist geographer is likely to encourage reflexivity, but the level of introspection within academia varies according to approach or discipline. Whilst some scholars are none too concerned about reflexivity, others such as England (1994) can take things so seriously, that as they battle to be ethical, their fieldwork can become abandoned and declared ‘failed’. Moss (2002) views the spectrum as spanning right from the North American psychology tradition, which is fairly masculinist, through to geographers questioning both analysis and the very basis of knowledge. Moss (2002) reports that Mei Po Kwan takes quantitative methods seriously and believes that feminists should have a good understanding of them, in order to spot any lurking masculine bias. Additionally, various research methods have garnered certain associations within feminist geographies, with the study of marginalised women tending towards autobiography, cross-cultural research favouring ethnography, and focus groups often being used by majority groups to study minority groups (Moss, 2002).

As a feminist, England (1994) questions the nature of fieldwork within geography, as she notes that, “Feminism and poststructuralism have opened up geography to voices other than those of white, Western, middle-class, heterosexual men” (242). But despite there being more room for a variety of voices, as geography tries to be more inclusive, diverse, sensitive and empowering to ‘otherness’, England (1994) is concerned about how this can be done an ethical manner, as she asks, “And can we incorporate the voices of “others” without colonizing them in a manner that reinforces patterns of domination?” (242). Traditionally, objective research draws a firm line between subject and object, whilst the researcher guarantees that they will remain neutral and objective by positioning themselves as “an omnipotent expert in control of both passive research subjects and the research process.” (England, 1994, 242).

This is an approach which prioritises impartiality and detachment, as the researcher encases themselves in a cocoon of aloofness in order to guard against accidental subjectivity or bias (England, 1994). Not surprisingly, perhaps, England (1994) disputes these ideas, embracing concepts from Opie and Hondaghey-Sotelo that in truth: the only certainty the researcher has, is of unpredictability and unreliability, because we live in a social world, we are social beings, and our world is not certain. England (1994) agreed with Stanley and Wise, who viewed the treating of people as mere ‘research objects’ (as people are used for the knowledge they can yield), to be immoral and exploitative, and this echoes Butz and Berg’s (2002) dilemmas with self-positioning in the research process (see Section 3.2e). England (1994) planned a research project about lesbians in Toronto and in the end, through her reflexive process, she declared it abandoned, even, ‘failed research’ as she was not happy with the power relations and she believed she would be guilty of exploitation and appropriation. She then questioned the very nature of geographic fieldwork, as she wanted to guard against accidental colonisation or academic neo-imperialism, and she talks about the biography of the researcher being important and she positions herself as a white, straight English woman (England, 1994). Lawson (1995) concurs that biography and positionality should be taken seriously and additionally, England (1994) argues that fieldwork, by nature, is personal. Despite her work being dubbed ‘failed research’, England (1994) claims that many of the participants found the process to be cathartic, so she deemed it not necessarily always negative. This exploitative aspect is something which troubled me in the field, despite my efforts to make a constructive contribution to the Forest Garden and the Eco Shop by getting stuck in and working alongside my participants.

3.2c Subjective Methodology

In Holland's (2004) book, *Alternative Femininities, Body, Age and Identity*, she relates her undertaking of in-depth, subjective, semi-structured interviews for her PhD research. Although subjectivity is a departure from the intentionally objective nature of sociological research methodologies, to Holland (2004), subjectivity meant to be impassioned and intertwined with the subject at hand. Interestingly, by using a feminist methodology we can sometimes allow for instances whereby it is acceptable, if requested and fitting, that the researcher speaks about their own personal experience (Holland, 2004), and I'm glad I encountered these ideas in my early readings, as my fieldwork certainly did get very 'real' and subjective at times. The feminist geographer is concerned with both power relations and the emergent 'voice' of the 'research participants'. We wish to hear what they say, think and feel, without dominating or subjugating in any way (England, 1994). Whilst there may seem to be a somewhat pedantic emphasis thus far, upon grappling with ethics, positionality and reflexivity, we must not dismiss these issues, as Holland (2004) reminds us:

> "Feminism has been the inspiration for my own (late) academic progress and provided both method and motivation for my work, so it is vital to acknowledge the importance of its stress on methodologies and hearing individual voices."
>
> (3)

Traditional sociological research requires the researcher to remain as distanced as possible from the research participant but in contrast, using a more subjective methodology yields an exciting way of thinking about and conducting research. Feminist analysis requires the re-phrasing of some terminology and we see a switch from the term, 'subjects' to 'participants', as Holland (2004) explains:

> "The use of the term 'participants' was used to contest the objectification of the women I interviewed. As Furman (1997), Reinharz (1992) and others have argued, allowing participants to 'speak for themselves' is a way for the feminist researcher to enable the participants' subjectivity as much as possible in a context which otherwise provides little scope for their voices to emerge clearly."
>
> (4)

Whilst I started out embracing the term, 'research participants', I now use it somewhat hesitantly (or even sardonically!) as, although I acknowledge the original intent behind the term, and the voice of my participants rang clear and true (I hope), it still begs the question of whether they truly participated in my research and were not 'used' in any shape nor form? I struggled to convince myself that this was not exploitative in some way, and I have to answer, that regardless of my

intent and careful methodology, the fact is that I will be using interview data to further my own needs, by completing my thesis and writing research papers. Therefore, I believe the term 'participants' to be valid, if only to donate intent and to serve as a reminder to strive for a benign research process.

A challenging aspect of a feminist research project is that it strives to go beyond typical academic practice in that the ideology must be grounded in the adoption of a real stance dedicated to help bring about the empowerment of those oppressed, such as women and minority peoples (Lawson, 1995). If we are to bring about these changes, we first need to undertake research to ascertain whether the existing social arrangements are meeting those needs such as healthy families, safety, and equal opportunities (Lawson, 1995). I genuinely cannot confirm that my research met these aims, so perhaps, rather than 'feminist research', it is more 'inspired and informed by feminism'. Much as I tried to ensure that my contribution to the group was beneficial, I am confident that without my presence, all would continue just as well without me. Furthermore, I would say that the women involved tended towards a high degree of autonomy and emancipation.

3.2d Qualitative versus Quantitative Methods

At this point, I would like to discuss the virtues of qualitative versus quantitative methods within feminist methodologies. Whilst qualitative methodologies can be revealing, as participants might feel free to open up and express themselves, they are not, according to Lawson (1995), necessarily anymore, "feminist than quantitative methodologies are essentially masculinist." (450). The crucial argument for using qualitative techniques within a feminist analysis are that, according to Lawson (1995):

> "Specifically, many feminist geographers have argued for the importance of these methods because they provide access to women's interpretations of gender relations and to women's voices, which have been silenced in masculinist scientific practice, and because they access previously neglected scales of analysis such as the intrahousehold sphere."
>
> (451)

I wonder however, whether all voices are stifled with quantitative methodologies? And of course, as feminist analysis has tended towards qualitative methods, this has caused an imbalance (Lawson, 1995) which some might want to redress. Lawson (1995) reports that in the North American academic departments, whilst the quantitative revolution was in progress, qualitative methods were dubbed, "soft, subjective, irrational, and opinion (inferior)", whilst quantitative methods were

regarded as being, "rigorous, objective, logical, and scientific (superior)" (451). If qualitative research is to this day marginalised, it thus becomes the territory of 'other', with all the connotations of lesser, subordinate, inferior (Campbell and Kean, 1994). Lawson (1995) believes that the actual methods used within both quantitative and qualitative work have more in common than we care to believe, and that with both methods, there is "considerable objectification"**.**

I find it fascinating to contemplate that women have been judged by some feminist scholars to hold more knowledge than men, the reason being that their marginalisation bequeaths greater comprehension, as Lawson (1995) explains, "From this perspective, since women are the excluded and oppressed other, their understandings are judged to be more inclusive than those masculinist knowers**"** (452). If this is true, we could conclude that scholarship which catches lesser-heard voices is not to be overlooked. Lawson (1995) also recommends that we take a keen interest in what goes on in our own academic departments, in terms of which speakers are invited or not invited; which mode of research attracts the most funding; what peer interrelations are like; and, in the context of the qualitative/quantitative dualism, which ontology is favoured.

This gave Lawson (1995) an idea of what research was acceptable and legitimate in her department, and she recognised some difficulties with using quantitative methods in her own work as she found 'counting' to be laden with power issues (455). Lawson's (1995) use of the word 'counting' is interesting, as it might conjure innocent and childlike sensibilities, perhaps purposefully employed to query the supremacy of quantitative methods? As to the ontology of my own department, I would find it hard to say. Whilst this discussion may seem to have digressed, I'm happy to indulge this path for a while for sake of my own positionality, which we have established is important in feminist work. Certainly, my own work has not garnered funding, but this does at least ensure a degree of freedom and autonomy for which I am grateful. I am not sure that any dedicated feminist members of staff remain, but issues around power, colonialization, post-colonialization, subjugation and exploitation are never far from the table, as many seem deeply concerned with unequal relationships. It appears as though the greater part of human geographic work in my own department is qualitative in nature, whilst the more affluent side of the department (my own guess since their offices have double glazing and nice carpets, but the human geographers shiver with single glazing and asbestos tiles for company), the physical geographers, are engaged with quantitative and empirical work, yet fortunately they are feminist enough to have employed me to teach Environmental Earth Science laboratory techniques. Whilst the male members of staff far

outnumber the female members, nonetheless, I very much feel at home in my department, as a female student and occasional staff member.

To bring the discussion back to qualitative versus quantitative, Crang (1994) delivers an unusual and persuasive paper, 'It's showtime: on the workplace geographies of display in a restaurant in southeast England', which demonstrates the power of qualitative research in revealing details normally obscured by quantitative methods. Reminiscent of England's 'failed research', Crang (1994) is not convinced of the ethics of his research. Nevertheless, this is a classic paper where the researcher went semi-undercover, documenting social interactions he observed whilst working as a waiter (Crang, 1994). Crang's route into this research was unconventional, as he reports, "This situation was far from ideal, both ethically and practically." (1994, 676). But despite pointing out what he saw as the inherent flaws, it is accepted that the performative nature of his research meant that the insights that he obtained were remarkable, and significantly, were not something which could have been obtained via quantitative methods (Crang, 1994).

3.2e Duppy Feminism

Butz and Berg (2002) were hesitant and reluctant to write the essay, 'Paradoxical Space: Geography, Men, and Duppy Feminism', declaring it a 'failure', as it reproduced the qualities of a masculinist text. They identify some of the problems faced by male feminist geographers, particularly that of male privilege, as they point out, "men, who are the (usually unknowing) benefactors of patriarchy and sexism, have a much more difficult time identifying the sources of their own male privilege in society" (Butz and Berg, 2002, 90). But despite an awareness that they were still haunted by masculinist phantoms, they also acknowledge the potential usefulness of their privilege, if approached in the correct manner (Butz and Berg, 2002). Likewise, I have comparable dilemmas, as despite not being directly in receipt of male privilege, it could be argued that I benefit from the ghosts of colonialism. Much of my ancestry is white, both parents worked for highly masculinist institutions in the defence industry, and I came from a highly aspirational environment. Sadly, some feminists believe that masculinism is just so entrenched that a text produced by a heterosexual male feminist will be accidentally and unintentionally sexist and androcentric in part (Butz and Berg, 2002), and I believe that this could apply equally to female feminists such as myself.

So, what's the solution? Well, inspired by a Bob Marley and The Wailers song, 'Duppy Conqueror', Butz and Berg (2002) suggest the following: that to begin with, masculinism is defined by

conquering territory, thus duppy feminism might be a viable way forward. But what is a duppy? It's a Caribbean ghost or malignant spirit, which Bob Marley himself was troubled by, as documented in hair-raising accounts of his nightly encounters with a duppy so strong, it managed to throw him out of bed one night! (White, 1991). Butz and Berg (2002) suggest that men who imagine themselves as a 'duppy feminist' could be less invasive in their feminist practice. For this they recommend that we view patriarchy as duppy-like, and as such, something that exists in liminal, ephemeral space*:* "Duppies, like other ghostly phenomena, find their homes in the uncertain spaces between consciousness, social relations, and material social practices." (120). In societies comfortable with concepts such as duppies, they are always lurking, ever present in the wings- awaiting opportunity- niggling away at the mind (Butz and Berg, 2002).

Furthermore, one might take inspiration from the tactics of a duppy, as according to Butz and Berg (2002), the Rastafarians have done. Usually, male feminists who undertake feminist scholarship go for the obvious route, the safe choice, the path well-trodden. Instead, Butz and Berg (2002) urge the duppy feminist to seek out the unusual spaces, the undercurrents, the periphery, to be a guerrilla feminist and if possible, spend that damnable male privilege! They go on to suggest that one might frame questions differently, gather data and select participants differently (Butz and Berg, 2002). Butz and Berg (2002) also suggest that Bob Marley rejects the 'Babylon system' yet also recognises the duppy within- he is half conscious. Likewise, men must realise that despite their best intentions, they will always fail to spot every single spec of patriarchy within themselves. They need to accept the demons and to work with them, which could translate as a pragmatic tactic of difference; listening more, exerting a greater suppleness and reflexivity, and to adopt more feminist ways of working, as opposed to simply conducting an analysis of patriarchy (Butz and Berg, 2002).

According to Butz and Berg (2002) male privilege is about territory and they claim that male geographers cannot "abdicate male privilege" (101) although they do not explain why this is so. A practical suggestion they make is that male feminists make their own boundaries more permeable, so that there may be a flow into their territory (by the process of osmosis) and their male privilege may be less bound up to themselves if they open up just a little (Butz and Berg, 2002). But can this stance help feminist men? Perhaps- male privilege can be imagined as The Duppy Within, if you will. By that, Butz and Berg (2002) are attempting to simultaneously recognise their male privilege and embedded masculinism and also to try to deal with them, confront them and not add to the problem.

I argue that in view of my own paradoxical stance- I appreciate some masculinist ways and practices and acknowledge they can be used in ways which can benefit those of less privilege, yet I also aspire to undertake a feminist analysis- just because I inhabit a female body does not mean I am without the ghosts of masculinism. As such, I would be hypocritical were I not to declare my own degree of value placed on certain masculinist practices as one of my very own duppies and so I am agitated to discern whether I too might be best positioned as a Duppy Feminist?

3.3 What I Actually Did

Following on from readings on social-ecological resilience, feminist methods and duppy feminist geography (namely Hopkins (2008); Folke (2006); England (1994); Butz and Berg (2002)), I set my intent to ascertain how to build resilience, be reflexive and spend masculinist privilege. Filled with good intention and a multitude of research thoughts, intrepid and ignorant, I plunged into the field expecting some sort of fanfare upon arrival. It was not at first a success. In fact, I felt thwarted and was somewhat beaten back, largely due to my own blundering assumptions and incorrect imaginings. In my previous incarnation as a physical geographer, I was perfectly content in wellington boots, spade in hand, hacking away at the turf- there was no need for pause, one just sampled. This brutal approach starkly contrasts with the sensitive methods of the landscape phenomenologist in Brück's (2005) paper, *Experiencing the past? The development of a phenomenological archaeology in British prehistory*. However, as Butz and Berg (2002) point out, sometimes the ghosts of colonialism and masculinist culture are inside us as human geographers. Certainly, I had an unspoken, unconscious bias, with the expectation that all I had to do was announce my presence at the Forest Garden as a human geographer studying resilience building, and I would be welcomed with open arms and instant access to numerous semi-structured interviews. It had not occurred to me that people might be wary of someone from Aberystwyth University joining in with their activities, let alone a stranger.

Over several years (I was a part-time student), I conducted multi-sited ethnographic field work in west Wales. In order, my initial fieldwork comprised working as a volunteer in the Forest Garden, subsequently in the Eco Shop and eventually as a collaborator co-piloting a mini-series of upcycling workshops, under the auspices of 'Rags to Rugs'. I conducted eleven semi-structured interviews between 2014 and 2015 and participated in immersive field work, as a volunteer in the Forest Garden for six afternoons between September 2012 and November 2013. I subsequently worked as a volunteer in the Eco Shop for fourteen afternoons from February to July 2015, and

then as a collaborator running four workshops in 2016. As part of my field work, I also benefited from six informal visits to the Eco Shop when I wasn't volunteering. Between 2014 and 2015, I conducted semi-structured interviews with local people involved in resilience building activities, yet who were not explicitly affiliated with the Forest Garden nor Eco Shop. Finally, I also contributed behind the scenes documents for the Eco Shop, Forest Garden and Rags to Rugs in the form of poster creation, map creation (with the proficient help of departmental cartographer, Antony Smith) and writing a letter of support.

Below are my fieldwork activities summarised in table format:

Summary of Fieldwork Activities		
Date	**Place**	**Activity**
September 2012- November 2013	Forest Garden	Volunteered as a forest gardener
April 2014- July 2015	Various: cafes, workshops, Eco Shop	Semi-structured interviews
February- July 2015	Eco Shop	Volunteer in the Shop
August- November 2016	Eco Shop	Collaborator on Rags to Rugs workshops

My work was ethnographic in nature and I employed a variety of methods, depending on what seemed to fit the situation the best. At times I found myself gardening in silence, writing notes up into a field diary at the end of the day, whilst on other occasions, I was occupied in creating posters for forthcoming upcycling workshops using my limited desktop publishing skills and overflowing enthusiasm. I end by concluding that the seemingly insurmountable challenge, being riddled with a plague of reflexivity, in actual fact ended up being a sweet and fun process. I eventually managed to follow my essential nature, by relaxing and delivering resilience building, whilst concurrently spending masculinist privilege simply through using creative research methods and opening up to people emotionally.

3.3a Research Questions

I prepared an interview crib sheet (See Appendix 9) which asked the same questions to everyone but had a supplementary section for volunteers at the Eco Shop. With the current popularity of home baking, sewing, gardening and crafting being so visible in the form of television programmes, specialist websites, events and magazines (Etsy, *The Great British Sewing Bee* and *Mollie Makes* and so on), I wanted to discover whether people who were involved in this 'scene' were also actively building resilience in other ways, for example growing their own vegetables, or working with community?

I wanted to talk to these people in addition to members of the forest gardening and Eco Shop community, not least because I was curious to know whether patterns of engagement emerged, or otherwise. For example, does one need to be a forest gardener in order to be fully engaged with resilience building, and conversely, if one volunteers in the Eco Shop, does this confer sustainable lifestyle choices at home? By extension, are people who knit for pleasure only interested in knitting, or are they also thinking about post-capitalist transitions? When people *were* building resilience, I asked in what ways they were actually doing it- I wanted some practical examples and I hoped to learn about both problems faced, and solutions found.

A notion from my readings fascinated me and it was that ecofeminism spoke about interconnectivity of all beings (Adams, 1993; Orenstein, 1993; Ruether, 1993; Gadon, 1995). Ethnographers mention an animistic (and interconnected) world view (Lorimer, 2006) (see section 3.1l), whilst concurrently, fundamental to social-ecological resilience thinking is the idea that humans, societies, economies and nature are all completely interrelated (Walker and Salt, 2006; Folke, 2006, Gunderson, 2009) (see Section 2.3j). Additionally, whilst non-linearity and unpredictability are factors in ethnographic work (Moeran, 2007) (see Section 3.1b), they are also key features of resilience thinking (Walker and Salt, 2006) (see 2.3e). This un-prescriptive and less conventional nature piqued my interest: could it be that for example, gardeners also embraced the unexpected, or did they plan for optimization? Another facet of resilience thinking pertinent to my enquiry was the less studied back loop (see Section 2.3l). I wondered how this might manifest in resilience building. Whilst some of these aspects are rarely discussed, I hoped they might be a glimpsed in my interviews. I wanted to know whether holism and interdependence was informative (or not) to those undertaking resilience building activities. It goes without saying that I also wanted to know what motivates people to undertake resilience building activities in the first place and whether a sense of (or belief in) interconnection actually informs activities, outlook or philosophy,

or not? I was keen to know to what extent (or not) spirituality, philosophy or world view plays a part in outlook and the activities undertaken.

I tried, as far as I could, to keep the questions as open as possible, hoping they would nudge and facilitate discussion and ponderings. I wanted to allow the conversation to unfold somewhat in the direction that the participant wished, whilst agitating around my topic, rather than provide a rigid set of pre-determined ideas. Whilst it was necessary for me to try to answer my research questions, thus I needed some structure, I hoped the interviews would allow data I hadn't previously considered to emerge, and which I could subsequently analyse. I wanted my questions to 'trigger' more than dictate and it took some revision before I was happy with my interview 'crib sheet', not least because I was at pains to avoid leading questions. In the broadest sense, at the start of my enquiry, my meta-question could be surmised thus: In terms of resilience building, why and how do you do what you do? And, do you act in isolation, or are you part of a community of resilience builders?

As the reflexive process unfolded when I was actively involved in the field, my questions became more distinct and more encompassing. Expanding on earlier questions, whilst narrowing the field of enquiry to closer investigation, a subset of questions emerged:

- What motivates their desire to build resilience? Does action follow theoretical debate and reading, or have they simply always lived this way?
- What actual activities are people involved in and is it just one primary activity, or a whole range of activities? For example, do they just bake their own bread, or do they also sew their own clothes and upcycle?
- How did they learn new techniques and do the teach others?
- Do people who are engaged in resilience building undertake this as a solitary activity, or are they involved in a community group, or both?
- Do ideas or philosophical outlooks which embrace holism, interconnectivity, spirituality, religion, nonlinearity and the unexpected inform their activities, or do they have a more prosaic stance?

I needed my 'crib sheet' to be flexible, dependent on whether someone was engaged with the forest gardening, the Eco Shop, both activities, or whether they were 'lone wolf' resilience builders, affiliated in activity or outlook, yet acting on their own. My working sheet with various applicable sections is shown in Appendix 9.

3.3b Research Ethics

Before entering the field for the case study part of my field work, I gained agreement from the 'gatekeeper' of the Forest Garden group and I obtained approval from the University's Ethics

Committee. I developed three forms, as found in appendices, and didn't proceed with interviews until the Informed Consent Forms had been signed and I had explained my role and particulars to the participant; such as what I was using the data for, what sort of questions I would ask, what I *wouldn't* ask, and that they were free to remove themselves and their contribution from the research at any time.

For w while, I wasn't sure I'd gain any interviews from the forest gardeners, so I cast my net wider and approach people in west Wales involved in resilience building but not affiliated with the Forest Garden nor Eco Shop. This worked and, after following the protocol of explaining my research and getting the forms signed, we proceeded. I was often at pains to explain to people my research dilemmas; that I wanted the interviews to be non-exploitative and reciprocal but in truth, most people waved my cares away and indulged my questions. Ffraid did take me up on the offer of reciprocity though and we had a wonderful time making ceramic tiles together as is discussed below (see Section 5.4a). But as time went by, I grew in confidence and doors started opening for me. I started volunteering at the Eco Shop and then the interviews with the volunteers there occurred.

3.3c My Field Dairies

My first step in trying to get out into the field was to approach the Pobl yr Afon Forest Garden group and to ask their founder (gatekeeper), Vangelis, whether I might be able to conduct some fieldwork with them. At this stage, it was my intention to conduct semi-structured interviews, and at the same time, be non-exploitative or even reciprocal in my approach. I had little idea how to do it either, and I certainly did not foresee the ensuing immersive ethnography! (In short, I was well intentioned but inexperienced in these matters- this was my first foray into the world of human geography). I received an affirmative response and went along to the subsequent forest gardening session. I packed a picnic, wellington boots and some gardening tools, and found my way there, and I was at last, literally in a field!

The beauty of the garden was something to behold and from the onset, I couldn't think of a better place to be conducting research. When I arrived, the group were busy gardening and I was shown by Vangelis how to join in and I also started introducing myself to a few members of the group, telling them about my research and my desire to conduct semi-structured interviews. I received a vague 'yes' but the general impression I received was that that I was viewed as a stranger. This was,

of course, because I was a stranger! Not only that, I was a very uptight stranger, with preconceived ideas of how my research was to pan out, all of which needed smashing to smithereens before I could embark upon the task in earnest! Another factor was that whilst I had discussed my work with Vangelis and received his blessing, he did not formally (as I might have expected) introduce me to the group because, as I was later to understand, this was not his way, nor the way in which the group functions. It tends not to be hierarchical and so it follows that a formal introduction would not have been authentic. It took me quite some time to understand that the dynamic was egalitarian and autonomous, and dare I say it, a structure to which I had to grow accustomed!

I found that I was happily occupied with the tasks at hand in the forest garden, which included a lot of weeding and mulching, and whilst getting on with these jobs, I sometimes managed to chat casually with the other gardeners. I continued like this for several months, as I gave many hours hard labour as a volunteer, often literally on my knees, getting my hands (and clothes) dirty. These work sessions generally occupied the last Sunday afternoon of the month, but were occasionally more frequent when the growth was frenetic and the jobs plentiful, such as in early summer. During this period, I had some amazing chats with people, but no explicit nor clear agreement to interview, and so I decided to carry on as a participant observant. At times I felt frustrated as I wanted to be distinctly overt but on occasion this was impossible, and I found the easiest strategy was to carry on gardening in a more covert manner. I say this because whilst I was beginning to form relationships with three or four group members, with whom I would freely talk about my research, sometimes people whom I didn't know would join in with our activities and it was *less* strange, *less* intrusive for me not to mention the purpose of me being there.

Overall, throughout this early phase, I became thoroughly immersed in the forest gardening activities and carried on regardless of lack of interviews. I practiced a mix of methods, overt and occasionally covert, participant observation, immersive ethnography, and creative research, by way of actually gardening, keeping a field diary and also drawing pictures (cartography) of my impressions of the day. The actual gardening work consisted of many hours spent on my knees, tugging at voracious weeds, mulching paths and wheelbarrowing the mulch about the place. Sometimes I carried out pruning or harvesting tasks and often I finished the session satisfied, tired, hungry, muddy and invariably cold. At the end of every session, I produced an 'artistic' response to my impressions as well as a field diary entry (see Appendix 1, 'Coloured Drawings of the Forest Garden').

The reason that I drew these 'artistic' responses was that in the initial stages of my fieldwork, permission to take photographs had not been granted and I thought this 'artistic work' would serve as an ethical response. I soon realised that this was a blessing in disguise, as my drawings embellish my field diary considerably, whilst also enriching my data. I also later realised that these drawings convey aspects of the forest gardening work which otherwise would have stayed hidden, as I note happenings, items or connections which might not make it into a photograph or text. In my grandiose moments, I should like to think they convey something of the '*affect'* of the garden- the sights, sounds, weather, season, vegetation and ambiance.

From a landscape phenomenological perspective, I believe they are a valid response, as they are not a prescribed set of ideas ('take a photo of the shed and the volunteers'). Instead, through this creative endeavour, my drawings attest to what I found to be memorable that day- what *affected* me! The range of coloured pens available was finite, yet I endeavoured to be 'seasonably sensitive', by way of trying to convey not just the colours of the plants, sky and earth, but also the feeling in the garden that day. I like to think this is especially compelling in Visit Number 4 (see Appendix 1), when the burgeoning spring flora, leaves and exuberance is conveyed, in contrast to the contemplative and hushed Visit Number 10 (see Appendix 1), which was in November, when nature was coming to a still point. The Midsummer visit, Visit Number 5 (see Appendix 1), conveys almost a sense of despair or overwhelming, as the vegetation had grown so very much that it was more jungle than forest gardening, and the task seemed too much for just a few volunteers with hand tools alone. The relief on Visit 7 when Vangelis had gone against the ethos of permaculture and bought a petrol mower was palpable- the joy of being able to once again traverse the garden!

3.3d Forest Garden Plan

Although the act of forest gardening could be classed as creative research, at that stage I was not sufficiently established within the group to have been able to simultaneously use snippets of conversation or understandings as part of my research. I was yet to build a good enough rapport to have had my Informed Consent Forms signed, and so my first Field Diary has proved to be an invaluable record of my initial entry to the field. This setup continued for some time, and one day I started to map the garden (thus again employing creative methods), not only because I revere maps but also, because I had been chatting to Vangelis who mentioned that various people had tried but failed to produce a map.

Keen to be of use (and galvanised by the challenge), I decided to make an attempt and with generous assistance from the cartographer from my department, Antony Smith, we produced an attractive map. The method used was that I produced an extremely rough first sketch and showed it to Antony, who took pity on me, and using specialist software, found an aerial photograph of the site and was thus able to produce a scalar skeletal map. I took that down to the garden and walked around, adding plant species and features with a colour code and fed this back to Antony, who digitalised the whole thing beautifully (see Appendix 2). It goes without saying that whilst I wanted to deliver something useful for the group, my motivation was not solely altruistic, as producing a map would animate my project.

3.3e The Eco Shop

Whilst I was gardening, I became increasingly aware of and intrigued by the other activity of the group, perhaps the 'bigger' one- that of running the Eco Shop. I started to realise that the proceeds from the Eco Shop funded the Forest Garden, as well as local planting schemes, and I wanted to know more. I began to wonder whether volunteering there would be useful and I'm so glad that I went on to pursue this, as it radicalised any hitherto tentative relationship I had with the group and indeed, to my project. It was to not just passionately bond me to the garden but also to the people, the community group, of whom I am now extremely fond. The path was, as ever, less than straight forward, and I could not have predicted how much my involvement with the shop would help the research process. It gave me access to new volunteers, a fresh dynamic (a whole new basin of attraction) and a much-improved understanding of the flows of resource and labour of the group. It was the key which would fully open the door!

Whilst it was abundantly obvious that the forest gardening was a resilience building activity, things were more nuanced as regards the Eco Shop, thus not only did I wish to know how it worked but did it also build resilience? Working as a volunteer proved extremely elucidating in this regard as early on, I could be confident that the activities might actually build resilience as defined by Hopkins (2008a). Crucially, people worked in closer physical proximity to each other and perhaps experienced more times of a lull than in the garden and there was thus a greater opportunity to chat, which eased my fears- not immediately but ultimately and certainly. Despite this positivity, it would still be a while before I had the bulk of my interviews, but I had not been in the shop long before the trickle began!

Once the idea of volunteering at the Eco Shop seemed viable, I briefly discussed it with both Vangelis and my main supervisor, both of whom were in agreement that it was a good plan. Vangelis was happy to have the assistance and Professor Whitehead correctly predicted that it would not only give me greater insight into the workings of the group but would help me to get to know people. Vangelis explained that most volunteers did either a morning or an afternoon a week (whilst a few did more) and I chose Thursday afternoon. This turned out to be fortuitous once I met with Amanda and Helen, who would conspire to be good allies in our collective bid to build resilience via the reselling, repurposing and upcycling of textiles, something I was already engaged in at both a theoretical and personal level.

I didn't really know what to expect when I arrived at the Eco Shop, which was occupied a considerably more impressive venue than its previous location, when I very first approached Vangelis. Not only that but it had gone from a modestly stocked shop to something positively overflowing at the seams and around the edges. To say it was spilling out would not be far wrong! To witness this hive of activity was something to behold. The welcome I received from both Amanda and Helen was warm and enthusiastic- not only were we all seemingly 'singing from the same song sheet' in terms of environmental ethics, concerns and understandings, but we found the three of us shared a passion for textiles. Amanda and Helen were struggling with the workload however and it was rapidly agreed, with a degree of glee, that I would join them on their 'textile team'.

The main problem was that so many old clothes and fabrics were donated on a regular basis that with volunteers all having their own areas of interest and autonomy to follow that (ranging from art, to cameras, to woodworking tools) and only two sessions per week dedicated to textiles, the backlog of unprocessed donations was considerable and a little daunting. In a corner behind the counter were bin bags stacked to the ceiling, whilst more still waited in the back room, some of which were estimated to have been languishing for a long time. Additionally, there were clothes on the rails which had been out for many months yet had not sold, the rails were fit to bursting, sagging under the weight and at times, I was told the mountain of rags in the backroom awaiting the 'rag man' was quite enormous. I discuss the 'rag man' and issue of textile disposal later on (see Section 6.9) .

To have an extra pair of hands was something received with the utmost of gratitude by Amanda and Helen. Generally, Helen had been busy sorting through the new donations, firstly assessing

whether the items was suitable for sale or not, deciding upon a price, steaming and tagging the items and hanging them out in the shop. Amanda was more concerned with going through stock already on display, a goodly portion of her time and energy dedicated to clothes but she had many other matters to attend to as well, such as the plants, tools (for DIY, gardening and woodworking- ranging from new, to reconditioned, to old), books, toys and homewares. I soon learnt that Amanda, with her energy, inspiration and knowledge, was a real driving force behind the shop. Helen and Amanda decided that if I was content to simply steam the clothes, hang them on hangers, price them and put them out, that this would ease matters considerably, and by and large this was to be the main task that I was to perform in the coming months.

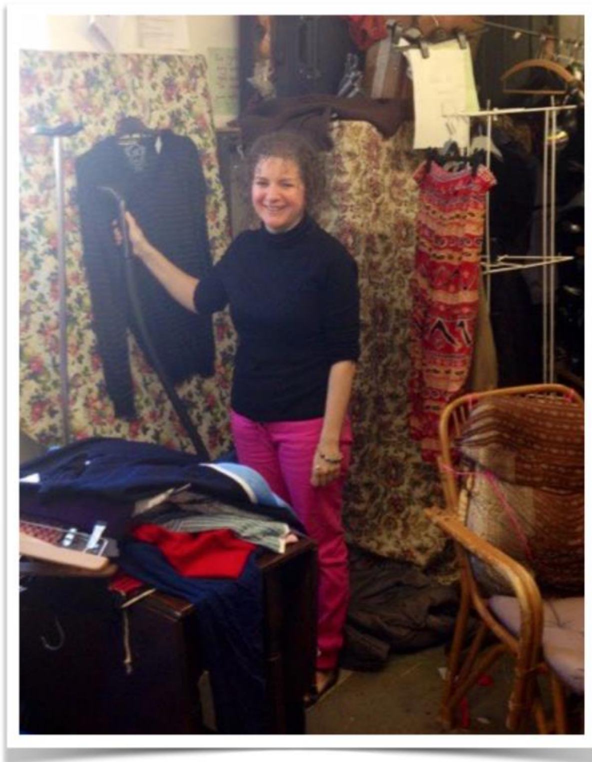


Figure 2, Author at steaming station

It was to be something I approached with a degree of determination and gusto and once I had found my own rhythm, I became quite adept at steaming and could process many textiles in a session. By the time that it came for me to think about my withdrawal, I and a few others were slightly concerned how the gap would be filled, as my labour had proved most useful. My supervisor rightly suggested that it would be useful to my project if I sampled as many different aspects of volunteering at the shop as possible but once I was installed, it was apparent that that would be less efficient and possibly even disruptive, and so I carried on steaming.

It's obvious that the Forest Garden delivers on the resilience building intent, as it provides food and resources for the future, but possibly not so clear as to whether the Eco Shop builds resilience, or not. Thus, I entered the Eco Shop wanting to know whether it did build resilience and through my observant participation, it became clear that it certainly delivered social benefits, in ways I had not anticipated.

Established wisdom was that conducting participant observation, the researcher remains at a distance from the 'researched' and interacts with as wide a variety of people as possible. According to Cloke et al. (2010), Rowles bucked this trend and allowed genuine friendships to develop between himself and participants, thus opening up the realm of otherwise hidden knowledge. Certainly, my relationship with Vangelis was more formal, whereas with Amanda I have been closer, and a friendship blossomed with Helen which has been distinctly interpersonal.

Socially, in my own research, I have not 'played the field' but have, like Rowles, focused on fewer relationships, of greater depth. Whilst Rowles attempted to rid his research of the intellectual gulf between observed and observer (Cloke et al., 2010), I am not sure that I fully achieved this, but to an extent, I would agree. Again, my research experience echoes that of Rowles, as to begin with he does not achieve the desired quantity of willing participants and instead, he chooses to focus on the five willing volunteers he does have (and to develop a much deeper relationship as a result) (Cloke et al., 2010). This was not his original intention, but it turned to his advantage, yielding (via a process of many, many hours spending time with his participants, sharing with their everyday lives and activities) illuminating data. Of course, this approach is not without critique as other geographers noted that Rowles was privy to an intimacy of knowledge that he should not have had access to, participants are self-selecting, and ethical goals are unrealised due to tension with public disclosure (Cloke et al., 2010).

Although I tended to knuckle down and 'just steam', concentrating hard on the task at hand, leaving little room for chitchat, nonetheless, the new set of dynamics of the shop did mean that it was much easier for me to get to know fellow volunteers. This didn't stop me being completely startled when soon after my arrival for my second session in the shop, Amanda announced that seeing as I was helping out, she would like to return the favour and hence she asked me to interview her then and there! I was delighted by the reciprocity and acknowledgement of my hard work, yet

unprepared, as I had all but given up hope of ever obtaining interviews, and thus didn't even have my semi structured interview schedule with me!

I grabbed my iPhone and we set to with improvisation, which in reality meant that Amanda led the 'interview', which was more of an outpouring of enthralling knowledge and exciting ideas. At first, I tried desperately hard to remember my research questions as written on my pre-prepared interview crib sheet, but relaxed as Amanda began to speak, furnishing me with some truly fascinating perspectives on resilience building. After that experience, the way was paved for me to approach other volunteers, as my confidence had increased, I had relaxed considerably, and I had the advantage of being able to start things off by saying that I had already interviewed Amanda.

3.3f Spending that Masculinist Privilege

Whilst feminist (and humanist) readings gave me the impetus to attempt ethical research, it was within the ethnographic literatures that I found myself recognising shared experience, particularly Cloke et al.'s (2010) discussion of ethnography, and reading their comments on Western's ethnography conducted in apartheid South Africa proved inspirational. In short, Western was challenged by Victor Wessel, the banned Unity Movement leader (a South African) to use his academic (and dare I suppose male) privilege, and to use all of his skill as a writer in order to assist to further the fight against apartheid (Cloke et al. 2010). I wanted to find ways to copy or mimic this ethos, but before I'd even read about these inspiring geographers, I used my masculinist position to good advantage by seeking professional help from Antony Smith, to produce the digital map of the Forest Garden (see Appendix 2).

When I showed Vangelis what Antony and I had produced, he in turn showed me an old Wise Owl Permaculture leaflet (essentially explaining their founding work in London), which had been produced with funding some years back. He wanted something comparable for their venture in Wales, and whilst the original leaflet had been outsourced to professionals, which I could never match with my lesser skills and inferior software, I offered to produce what I was able and came up with a flyer, which explained the connection between Wise Owl Permaculture, the Forest Garden and the Eco Shop (see Appendix 5).

Emboldened by reading Cloke et al. (2010), I also suggested that Vangelis exploit my masculinist privilege and that I might either talk to the Town Council on their behalf, or perhaps write a letter

of support in the capacity of a postgraduate from the Department of Geography and Earth Sciences, Aberystwyth University, which is what I ended up doing (see appendix 7). I explained that as an insider-outsider, I occupied a unique position. I said that while I didn't especially relish activities such as public speaking, due to my training it was not something I find especially daunting. Vangelis seemed surprised to hear what I had to say and was genuinely enthusiastic about the idea. Likewise, I couldn't think of a better way to spend some masculinist privilege, since I was proposing using masculinist methods, such as writing or speaking in such a manner to denote a degree of authority!

Cloke et al. (2010) go on to recount David Ley's ethnographic work in the early 1970s, which was comprehensive, ambitious, detailed and hailed as ground-breaking. What impressed me most was that Ley didn't just use secondary data and not only did he live with the community for six months but perhaps crucially, he made himself useful by helping to write community association proposals, and like Western, he put his scholarly skills to good use (Cloke et al., 2010). Whether it was because of my exploitation of masculinist privilege, I can't be entirely sure, but one thing was certain, after this episode, something changed, and I found myself in preparation for that illusive interview with Vangelis the very next morning.

Whilst I found Ley's (1974) work, 'The Black Inner City as Frontier Outpost: Images and Behavior of a Philadelphia Neighborhood', to be impressively comprehensive, surprising in part, but deeply illuminating, I struggled to feel a connection with it as regard my own ethnographic experience. I didn't feel the nature of the work resonated with mine, whereas Crang (1994), seemed closer to my own experience. Ley (1974) used participant observation methods, which by today's standards read very much like the work of a social scientist with strong emphasis on quantitative methods.

I found it contradictory, as whilst he unearthed an unimaginable degree of fascinating data that was rich beyond compare, it also felt distant and impersonal, as if conducted on the street, or in meeting halls. I had the sense that the umwelt of the domestic sphere (or perhaps the feminine perspective) was absent, or just not penetrated. Unlike my own work, Ley (1974) travelled across an ocean to stay in his field, and unlike myself, he gathered an unimaginably massive amount of quantitative data. By comparison, I travelled twenty miles or so, every so often, dipping in and out. Unlike myself, he didn't just venture into another world which made him 'grapple' with ethics, and 'feel uncomfortable' but he truly ventured into unknown territory- a white British male, deep in the Black Inner city of Munroe, Philadelphia (Ley, 1974). Perhaps unlike Ley (1974), I was privy

to some very privileged and candid interviews, and I was to an extent, allowed access to the (more 'feminine' and 'vulnerable') inner worlds of some of my 'participants'.

I am guessing that Ley's (1974) comprehensive work is mainly quantitative by nature. Comparing my own work to Ley's was dispiriting- he has possibly over a hundred questionnaires or interviews, dozens of spatial graphs and analyses, and the history of the community is thoroughly documented. Yet, for all his time spent immersed in a community very different to his own, the exquisite detail of his work, I couldn't help sensing a disconnect, as if he was never really admitted to the more emotional selves of the people who lived there. I felt as though he was forever walking a gritty sidewalk, occasionally gaining access to a residents' association meeting, yet never getting behind closed doors. I couldn't help but to compare the style of work to Crang's (1994) applauded, and at the time, unconventional work at Smokey Joe's. When I read Crang's (1994) paper, immediately I was drawn into the restaurant, into the kitchen, behind the scenes, I could imagine the people, the tempers, the laughter, the smoke from the frying food, and a sense of discomfort less he be found out. Crang (1994) drew me in, not only from the street and into the restaurant but right into the kitchen and into a living, breathing life world. Perhaps Ley stayed frontstage, yet Crang went backstage (Goffman, 1959; Moeran, 2007).

Crang's (1994) work was distinctly qualitative by nature, in parts un-ethical, and it revealed aspects of life which I think could never be exposed no matter how many months were spent working in the manner of a social scientist. I should like to declare that I do not suppose that either approach has more value than the other, just that the differences are clear, and that a whole different data set is unearthed, depending upon the personality and approach of the geographer. What is demonstrated is that very different knowledges are produced, which depend upon the circumstances, personality, and methodological approach of the geographer. A different person doing my PhD, talking to the same people and visiting the same places would no doubt produce a very different piece of work. Would the two be recognisable?

My first tangible experience of creative research methods was the delightful walking interview which Amanda, Helen and I performed around the Eco Shop. Almost like three excited children, we discussed the plan and then walked around the shop, me with audio recorder in hand, Amanda and Helen seeing items in the shop, which sparked explanation and conversation. It was rewarding and enjoyable for all concerned and is a methodology I found very satisfying in terms of ease of social interaction and data collection. Amanda and Helen found themselves talking about facets

of the shop's life that they had not anticipated, and Helen remarked that she learnt a lot about the shop in that short space of time. It was a definite success.

The unexpected and diverse tracks that this method threw up reminded me complex adaptive systems (see Section 2.3). As Folke (2006) points out, "Theories of complex adaptive systems portray systems not as deterministic, predictable and mechanistic, but as process dependant organic ones with feedback among multiple scales that allow these systems to self-organize" (256). This certainly seemed to be happening during this walking interview, which like the adaptive cycle, was often erratic and nonlinear (Gunderson, 2009). I found the walking interviews quite brilliant, fun and elucidating, and I could not help but draw more parallels between the work of Western (1981), Ley (1974) and myself. In Cape Town, Western becomes an "accidental humanist" (Cloke et al., 2010, 177), and in Deheubarth, I became an accidental ethnographer. Ley and Western both have 'busy and eclectic' methodologies (Cloke et al. 2010), whilst I used immersive ethnography (volunteer in the Forest Garden, the Eco Shop and with Rags to Rugs), along with creative research methods, and my own artistic response pictorial creations, the semi-structured interviews, photography, map drawing by hand, and desktop publishing in creating the Eco Shop flyer and Rags to Rugs posters (see Appendices 5-6).

3.3g Rags to Rugs

Eventually I reached the stage with my work in the Eco Shop that I had to go on hiatus because I was simply getting too behind with my other PhD work. I had transcripts to transcribe and field notes to write up, so I spent a while catching up and reflecting. My companionship with Helen was deepening though as, we have much in common and we met up outside of the shop environment to discuss ideas for collaborating on a series of reskilling and upcycling workshops for the public, to be hosted in the Eco Shop, which would be known as Rags to Rugs.

The name was Helen's and I though it rather brilliant, as we would be taking washed but unsaleable T-shirts, cutting them into continuous yarn and crocheting them into pleasant rugs, which would look nice beside a bed, a hearth, in a hallway, or perhaps in a bathroom. As well as meeting up, Helen and I shared, and still do, much in-depth email communication, generally discussing our thoughts regarding upcycling and textiles. We could even be described as 'friends' more than acquaintances and I am fairly certain that we will continue to work together at least occasionally in the future in some capacity or other. According to Carr and Gibson (2017), maker-geographers

have a particular set of fieldwork ethics, whilst being able to form long relationships with others and benefitting from the privilege of being able to indulge in reciprocity. Once again, I find myself on someone else's pages!

What happened with Helen was that during our afternoons spent sorting through the clothes, we got chatting, often on the subjects of; resilience building, permaculture, knitting and crochet, shamanism, and one of Helen's main concerns, waste and landfill- in particular the problem faced by the Eco Shop of unsellable textiles which ended up either in landfill or being incinerated in Germany. This problem got Helen thinking and her response has been to take some decent 'rag' T-shirts home for washing and then to store them in the back room of the Eco Shop, awaiting a second life. Thus, there was an incredible resource just waiting for an opportunity. This was to be a permaculture principle in action, where the problem becomes the solution!

It was obvious to us that pooling our resources and talents was the only thing to do and so we set to deciding upon a plan of action. I volunteered to donate my physical energy in order to help organise things for the workshops (bringing heavy bags of washed scrap T-shirts down the stairs, setting out tables, clearing a space and so on), and to also design posters for the event using Helen's draft as a starting point (see Appendix 6).

Helen meanwhile had a lot more experience and skill in terms of knitting, crochet and crucially the making of rag rugs, which can be made in various styles, perhaps the most accessible of which is to simply use a giant crochet hook to crochet the T-shirt yarn together. I had gathered a collection of photographs suitable for the posters and produced posters in various colour waves, letting Helen decide on the ones to be displayed around town. Helen had the idea to go with the theme of 'Keep Calm and Carry On' and both of us agreed that there was more than one link to be made to World War Two, a subject that was variously discussed during the workshops and afterwards.

It was this work which was to provide me with the deep sense that all my previous struggles with fieldwork and access had been more than worth it, and additionally, the sense of completion, or full circle was glorious. Our workshops were a modest success and enjoyable sessions, I think for all concerned. We attracted a variety of ages from children to elders, and once I have finished my PhD, I should like to restart and perhaps expand on the initiative. I did find it hard gathering data from our workshops though, as I wasn't leading them, so I was unable to step forward from the onset and be explicit about some of my aims and desires.

None the less, our activity could definitely be described as resilience building, as collectively, we shared stories and skill, teaching each other how to knit or crochet, sharing ideas and inspiration, with myself disseminating a YouTube method of quickly making one continuous piece of yarn from each T-shirt, and Helen displaying a variety of techniques and methods which could be used to make rag rugs. As an experiment, during one of these workshop sessions, I pestered some participants into jotting down a few thoughts relating to some of my research questions on brown cardboard luggage tags (a method nefariously stolen from Twigger Holroyd's own work where her participants knitted on an i-cord and then hung notes on luggage tags).

I didn't however manage to capture much data, such as an interview, nor did I record the general conversation which freely occurred, as I only had part ownership of the session and did not wish to dominate. If ever I were to use a group making session for future research, I would need to explore ways in which data could be harvested but despite the constraint I faced in that regard, I viewed the sessions as the start of something wonderful. Carr and Gibson (2017) suggest that the symbiotic relationship that exists between academic work and maker-pursuits, means that maker-geography can illuminate the process in both directions, and by taking a step back through making, the academic can "reflect" upon the difficulties of academic work and vice versa- which then helps illuminate the labour process, and I certainly feel a resonance with this sentiment from my own experience.

To have simultaneously answered the demands of the research process and to have found a pleasant way to have reduced researcher privilege via testing out creative research methods has proved highly inspirational to me and I would like to take these methods forward in future projects. Also, another joyful aspect of this kind of research is that it allows the researcher to participate in a tangible process, and I now have a jolly rag rug nested beside my bed to show for my labour and learning.

3.3h Creative Research Methods

As creative research methods are an emerging approach, the literature is on the ascendent and the workshop days to which I shall refer constitute part of this emergence, but in essence:

> "Creative research methods are approaches to research where participants are invited to express themselves in non-traditional ways, such as through making a physical object or collage, or sharing an experience."

(Creativeresearchmethods, 2013)

Partway through my fieldwork, I had the fortune to participate in a two-day workshop on Creative Research Methods, delivered by the fun and inspiring Professor David Gauntlett and Dr Amy Twigger Holroyd, hosted at both the University of Birmingham and the University of Westminster. The above definition appears on the Creative Research Methods blog, which details the events of these workshops with photos and case studies. I found these workshops incredibly inspiring, and I have employed the unconventional methods throughout my time in the field. Attendees of the workshops included fellow academics (both would-be, such as myself, and actual, such as lecturers) and professionals, all keen to discover whether creative research methods could assist their research, or even solve workplace problems.

Participants explored themes such as the benefits bestowed through use of creative research methods, ways in which these methods could be applied and of course, what ethical concerns or problems may arise? Various activities and discussions were on offer, including hand drawn responses in answer to a question, solo walking around Birmingham whilst recording one's thoughts and impressions into an audio recorder, making things from Lego, and a group session on knitting on an i-cord (a long thin knitted cord). By the end of the first day I was excited about the potential of creative research methods to answer some of my own research dilemmas, as the participants had identified various beneficial outcomes. Naturally there were some concerns as well but first I shall discuss various useful facets of the methodology.

The walking, making and drawing exercises demonstrated that as soon as one commences such an activity, a shift inevitably occurs- permission is granted to walk, make, explore or draw and often the activity serves as a welcome break from mundane activity and experience. Some reflected that they became playful, which as a busy adult was a well-received gift. Crucially, the activity can also be used to change the dynamics of the researcher- participant relationship, the researcher spends some privilege, as they momentarily descend from their ivory tower by meeting the participants halfway in the shared activity. This dynamic is almost diametrically opposed to the typical interview situation wherein, no matter how informal the setting or semi-structured the script, the researcher generally sits opposite the 'participant' and coupled with the dynamic of an interviewer and interviewee (one who shares and one who receives), it can't help but recreate a hierarchical relationship to an extent. Many participants at the workshop were firm in their belief that creative research methods act as a leveller because the superiority of the researcher is automatically reduced

when they end up 'getting their hands dirty'. Thus, it was evaluated that creative research methods can serve as a bridge between researcher and participants. I need not labour this point but I hope the reader can understand why I was so enthusiastic, Butz and Berg (2002) left me wondering "But *how* can I spend this damnable privilege?" and creative research methods had just provided a practical answer- do something creative together with the participants that neither of you usually do.

Another interesting observation was that the participant may experience a heightened awareness during the session. During 'walking' I noticed things I don't normally notice, and I also became more aware of my subconscious. This was fine for me but could be uncomfortable for some, thus could constitute a 'risk'. If making something as part of creative research methods (for instance a poster or Lego creation), the item is temporary and ephemeral, thus the maker is liberated from caring too much about the outcome, which can be enjoyable and therapeutic. Sometimes the creative act- perhaps knitting or making a poster- is not necessarily to be part of the research itself but is used as a tool to facilitate a relaxed setting, a feeling of safety, fun or euphoria even, which serves to make the research less intimidating. With some creative research sessions, less is predetermined, and as it is hoped the session will gain a life of its own to a certain extent. Gauntlet (2013) spoke about an "emergence", it is hard to predict what the end result will look like. Your results could well be unexpected, and to make an analogy to resilience thinking, I believe there that multiple basins of attraction exist and there's no guaranteeing which basin you'll end up in!

3.3i Semi-Structured Interviews

Within qualitative research, the most commonly used method is semi structured interviews which, if done well (by being attentive to data collection methods), can deliver credibility to the results (Johnson et al., 2016). Semi-structured interviews are useful and flexible, as they can be applied to group, or individual sessions, and they can be made more, or less, structured, depending on requirements (Johnson et al., 2016). A key question for the researcher when planning the interviews is whether the aim is to gather general or more in-depth data, and this is a balancing act between obtaining a rich understanding of the topic, yet avoiding the questionable ethics of gathering data superfluous to the study (Johnson et al., 2016). One way I avoided this was to be mindful of keeping the interviews on 'track', by informing participants before we started that I wasn't interested in their personal lives, that I was only asking about resilience building activities. If the conversation naturally wandered, I simply didn't record that part of the interview. If personal

details did accidentally creep in, there was a third safeguard in place, in that I skipped over these sections in the transcription process.

Johnson et al. (2016) raise queries regarding the literature on semi-structured interviews. They bemoan the sparse accessible instructions on the design of interviews and the paucity of clear methodological guidelines for associated research. They created a five phase process for developing an interview . Rabionet (2011) suggests a six stage interview procedure:- from deciding what type of interview to use, making ethical considerations, creating an interview process, doing the interviews, the transcription stage, and finally, disseminating the results. I carried out these six stages in my research, opting for semi structured interviews over questionnaires, as I wanted a rich understanding of my topic.

Throughout the interview process, the researcher needs to exercise reflexivity (Bennett et al., 2002). Additionally, once the interview process begins, it isn't uncommon for the focus of the research to change, as participants make the researcher aware of hitherto unknown areas of important study (Bennett et al., 2002) and can, in this manner, influence the direction of discussion (Johnson et al., 2016). Bennet et al. believe this is a valid approach, as long as the researcher is diligent to document the process (2002). With a semi-structured interview technique, there is room for participants to express themselves verbally. Rabionet (2011) praises semi structured interviews as "a flexible and powerful tool to capture the voices and the ways people make meaning of their experience." (2011, 563) but she does state that it is vital that researchers gain experience and undergo training in interview technique (Rabionet, 2011). For Rabionet, qualitative interviews are more than a research device, they provide a view to the 'stories' of her participants' experiences (2011).

The interviewers should have prior knowledge of the subject and the questions should be carefully constructed ahead of the interviews (Johnson et al., 2016). I did this and had them checked by my supervisor, so to avoid leading or unethical questions. The aim is to produce a focussed structure for conversation but to remain open to meanderings through the reflexive process (Johnson et al., 2016). The majority of my participants answered all questions on my crib sheet (see Appendix 9) but when a participant had something important to say that was on topic yet not anticipated, I followed their lead, which always resulted in fascinating data.

Having initially feared that I was ill-prepared to 'be an interviewer' and being bundled-up in my tricky feminism, worrying ere I exploit my participants, I set to my task. I was glad to discover that not only did I enjoy interviewing people, but I sensed most people were glad to talk about themselves and their activities in some depth also!

The majority of my interviews were conducted in a traditional manner- sitting opposite my participants in a coffee shop. However, the experimental walking interview in the Eco Shop and the creative ceramic tile making session with Ffriad in her studio (see Sections 3.3f and 3.3i) were the most enjoyable ones. In future, I will offer people the option of a more active interview style as a compliment to the sedentary method, lest my participant be a kinetic personality type, as Franklin et al. (2011) noted that many of active community members furthering Stroud's sustainability projects have an enthusiastic, pioneering and 'do-er' personality type, while Sandover (2015) noted the visceral and embodied nature of community gardening, it follows that certain temperaments might be more likely to be involved in sustainability projects than others. These details (whether a participant may prefer an active or sedentary style interview) may seem trite, but I believe them important in helping both the researcher and the 'participant' to feel at ease and for the interview to 'flow'.

I found the interviews to be an extremely rich data source and have to note that humour often emerged throughout the process, with laughter frequently occurring. Whilst one of my participants was somewhat retiring, others were very forthcoming, some practically running the interview for me and even giving me research ideas!

During the latter phase of my research, I was to experimentally and very deliberately enjoy an immersive experience of creative research when I interviewed and collaborated with a ceramicist, who was also involved in resilience building. She had agreed to an interview, and I had offered reciprocity by way of helping her out with a funding application, which gave me a chance to spend my masculinist privilege, as by writing a letter of support and helping with the wording on the form, Ffraid managed to secure a successful arts venture application. However, the most valuable aspect of this research occurred when I conducted a semi-structured interview in her studio, whilst she taught me how to make decorative ceramic tiles.

The venture was a great success, as the session was concurrently fun and productive. It did last longer than usual because it led onto me spending extra time helping her in in the studio by way

of reciprocation, making a few small decorative clay tiles, which she will go onto sell. I used my interview crib sheet as a guide, but as the creative methods unfolded, Ffraid was also prompted to talk about her work by various objects around her studio. I noticed an old milk churn that she had used in a performance and she picked up some dried railway verge grasses and explained how by using them as part of the tile design, she was referencing a community resilience building venture, namely the bid to re-open a regional railway line. We achieved a great deal of collaborative work and to me at least, it seemed as though I occupied a much more comfortable space with less researcher privilege than usual. Carr and Gibson (2017) delight me by saying that interest and engagement with maker cultures in the material world is growing. I'd like to think that as I allowed my research to grow organically, that I have stumbled across this zeitgeist! Carr and Gibson (2017) state that geographers are sometimes choosing to rekindle an old (non-academic) interest in in skilful making activity, often "putting their own bodies to work" (2017, 1) and it certainly felt like I experienced this, and I found it to be freeing and delightful.

Figure 3, Author, hard at 'work', recording a semi-structured interview, whilst simultaneously making a clay tile and heling a ceramicist out in her studio, by way of reciprocity

The interview was just as rich in data as any others I have conducted, but when Ffraid asked me to help her out with her work, my heart skipped for joy, for I knew that we would be achieving reciprocity in the most delightful way. Whilst we can't always secure a willing ceramicist who wishes to talk about their resilience building and allow the researcher to help out with practical tasks around the studio, I can only endorse this experimental method. I finished the session with

a smile on my face, a blog post to thank and promote the ceramicist and a handmade ceramic tile for my table.

3.4 Reflection on Field Diaries

Revisiting my field diaries reveals that much of the social discomfort I experienced stems from my inability to socialise effectively and navigate the messy and unpredictable milieu of befuddling human interaction. It is painful reading but it's honest, and I genuinely found my fieldwork tricky, as I was very much removed from my comfort zone.

As I use my field diaries to situate the reader in my results chapters, I hope to provoke the reader with a few extracts from my Eco Shop Field Diary, in chronological order, to convey the struggle and eventual denouement I experienced. This extract shows me beginning to occupy 'liminal space' and to relinquish researcher privilege:

> "My work today consisted of steaming, pricing and arranging clothes. Before I got down to this task however, Amanda was keen to have an impromptu interview with me, so I set my iPhone recording and we got chatting. About halfway through, another volunteer, James, also joined in. The session was illuminating, fascinating, stimulating and a tad intense. I noticed that I occupied a rather un-masculinist place as I gave much personal information during the interview- thus my own boundaries were 'permeable', as is recommended by Butz and Berg (2002). I was happy to do so as my instinct that the session was raw and honest and as a result, rich and deep. Of course, I was caught on the hop and didn't have my question schedule with me, so things were more of a general discussion rather than semi-structured interview. This again might prove interesting. Some would no doubt severely critique my own lack of academic distance as I reveal much of my own life, some aspects which have been difficult. I think this is appropriate and good, however, as I occupy this liminal place. The session was impromptu and ad hoc, I hadn't anticipated that someone would be so keen to speak to me: I have been gingerly hoping for an 'opening' with other members of the group for a while now, but it has never happened, so this came as a surprise!"
>
> (Stewart, 2015, Extract from Eco Shop Field Diary)

The next extract came at the nadir of my observant participation work:

> "All was not well with me, however, as a culmination of feeing arose- those of insecurity around the acceptance or not of myself by the group, frustration that no one told me there was pretty much no point me turning up that afternoon, those of financial worries due to lack of field work funds, the premonition I was suffering from as my home life was just about to be turned upside down and my own resentful feelings that although I had been on and off diligently working with

this group for a couple of years now, I still only had one interview out of them! You could say, I felt cheated. The suspicion or caution with which I perceived (rightly or wrongly, I don't know) I was sometimes viewed, the hurdles I had been trying to jump in order to gain 'access', annoyance with myself for deciding to attempt a feminist methodology- certainly I wasn't exploiting anyone, but I did think that I was being exploited myself- all got too much and as I wandered through the back room to the toilet, I broke down in tears. I tried to stop the flow, but it was useless, and I was getting myself worked up into more and more of a state. As I returned to the back room, I bumped into Vangelis, who found me in tears. I didn't know what to do, but he did. He just stood there and put his arm around me in a gesture of solidarity and listened to a smattering of emotional outpouring "I don't know why I'm doing this research anyway- the University will benefit but I won't, I'll never get a job as a lecturer, I know that. I've been so brave with all the severe trauma that I have suffered this past year, I am falling apart now… my home life is completely messed up…. I don't have any field work funding and the petrol plus parking fees are affecting my finances negatively. My relationship with my nearest and dearest is probably ending…." Vangelis didn't say much apart from "Si, si… Si, si", which I presumed to be his native tongue. I thanked him for the emotional support, apologised for "being such a mess", asked whether at least I could take a bag of recycling waste away ("At least so that I can do one useful thing") and made my exit. I was sorry that I never wished James good luck with his new life but I didn't wish to tarnish his leaving do with my own woes and so I quietly left. Of course, as soon as I got into the car, I just cried and cried. Even writing this part of the notes up is difficult for me- I left it two weeks before I could face it again."

(Stewart, 2015, Extract from Eco Shop Field Diary)

On a happier note, this was from a time when I was bonding well with others:

"Amanda and Helen both expressed to me, "Oh, it's great, you're part of the team". I like working with Gwynfor as well. I must admit, I feel quite happy doing community work because I do like feeling useful."

(Stewart, 2015, Extract from Eco Shop Field Diary)

Finally, it was almost time to leave the field and I really felt like an insider:

"Having delivered on the Rags to Rugs project, the Letter of Support and the flyer and having maintained sporadic contact with the Eco Shop, mainly when I had donations, Vangelis kindly invited me along to a volunteer Christmas Dinner. I was touched and gratefully accepted and I thoroughly enjoyed myself. The irony of course being that finally I truly felt like part of the crew when my fieldwork was well and truly done and dusted. It was a delightful way to wrap up this episode of my life."

(Stewart, 2016, Extract from Rags to Rugs Field Diary)

3.5 Becoming an Activist Scholar

If the question were posed, 'What research have you done and what impact has it had in the real world?', I could resolutely declare that my work has been pragmatic and impactful, no matter the academic outcome. By becoming a volunteer at both the Forest Garden and the Eco Shop, I am proud to say that I have played my part in building resilience. I have helped tend the Forest Garden, a valuable resource now and into the future, which delivers numerous ecological services to both humans and nature, not to mention 'social services' by way of education for children, peace of mind and somewhere lovely to go for people.

I have served in the Eco Shop- helping to clean, sort and organise. I served customers, helped people out, answered questions, cashed up, brightened a few people's days. I have also written a letter of support, co-designed (with Anthony Smith, our departmental cartographer) the Forest Garden Plan and from that, designed a flyer for the Eco Shop and Forest Garden, the aim being to disseminate information about their activities, ethos and working dates to the public. I cannot forget that I have been an integral part of the launch of Rags to Rugs. I provided moral and intellectual support, desk top publishing skills, photography (and editing), design of visually powerful posters and the sharing of skills in the workshops where I disseminated information in very concrete ways- how to relatively quickly make one continuous piece of yarn from one old T-shirt. I also provided valuable manual labour by way of moving furniture around, carrying bags of textiles, clearing up and packing away.

Helen is now up and running with Rags to Rugs but still asking for my input as regards the conceptual design of the leaflets and she says that it is nice to talk with someone who 'gets it'. By that, I think she's referring to our mutual ecological theory conversations. She says that she has been influenced in part by me having frequently mentioned practical skills, and her workshops are evolving into a skill sharing session, something which is well aligned to a Transition Initiative activity. I have also delivered a letter of support to the Eco Shop as well (in the capacity of an Aberystwyth University post graduate student). My work has been of benefit to the ceramicist with whom I worked, part of my reciprocity being to help with a funding bid (and a second letter of support), which was highly competitive and which she won.

My accidental and deliberate use of creativity throughout the research process is, I believe, the key which allowed me to respond positively to perplexing situations. Whilst my first expressions of creativity were secretive and tentative- via my forest gardening 'drawings', by the end of my

research, I was bold and assertively displaying, demonstrating and sharing my creativity when I collaborated with Helen on Rags to Rugs. I came out of the closet as a maker geographer! I think this transformation reflects my journey as fledgling researcher- through the wastelands until I emerged as someone who implicitly knows how to make human geography work in a way which enables me to sleep well at night.

The remaining question is to what extent will my research benefit the field of geography, which remains to be seen but certainly, I have provided various techniques which can be employed by the aspiring Duppy Feminist or humanist geographer. I have also taken a grubby, dusty, teary and joy filled approach to the study of community resilience building projects, and I would hope that my immersive ethnographic approach is not unique but might be less common.

Although I didn't gain confidence and opportunity to fully embrace creative research methods until further on in my fieldwork (namely the Rags to Rugs workshops and helping Ffraid in her ceramicist studio), I can affirm that chatting around a shared activity sat easier on my conscience than customary semi structured interviews (where, as mentioned, I sat opposite my interviewee) and I would definitely like to use it as a future method. The sharing of skill, stories, knowledge, inspiration, fun and laughter around a table or next to a companion created a much more equal power dynamic, which satisfied so many of my early ethical dilemmas and produced sessions which were enjoyed by all. For myself as a researcher, using creative research methods is definitely the way forward as the set up naturally becomes more collaborative, less vicarious, less hunter- prey.

Where Butz and Berg left me signed up to the notion of being a Duppy Feminist, the pragmatic implementation of this stance was not immediately apparent but in retrospect, I have found a workable solution to the conundrum, via processes such as volunteering, using creative research methods and being open and adaptable to collaborative ideas with 'participants'. Attempting to bring collaboration and reciprocity into the research process forces one to be adaptive, creative and to think on one's feet, which may deliver unexpected results! Flexibility and spontaneity are needed, whilst not losing track of the focus of the work, which I feared could occur if I had too much fun! It is perhaps essential that new approaches are tested, off beat ideas tried and for myself, an ethos of 'you scratch my back, I'll scratch yours' in the end worked extremely well. I would only suggest this type of research for a researcher who by nature identifies with being described as creative, something of an oddball- someone who is willing to take a few risks and venture into the unknown. More staid types might find this approach stressful rather than invigorating!

McMorran (2012) believes that despite the interest geographers take in corporeal, embodied knowledge, there is a dearth of work on the body through participant observation in the workplace:

> "The body has been ignored in workplace studies precisely when interest in the body has grown among geographers in general, with embodied experience, situated corporeal knowledge(s) and bodily mobility at the forefront of many research agendas."
>
> (490)

McMorran (2012) also accuses human geography of tending towards methodological conservatism. I hope that this thesis goes some was to redress that balance as the methodology has been eccentric and unconventional, as I used my body to work as a volunteer in the Forest Garden and the Eco Shop, where I became part of the team and eventually helped run crafting workshops.

Humanist and performative geography readings have not informed my work to the same extent as feminist geographies and ethnography, but some of the ideas presented played a role in my approach to fieldwork. Whilst Tuan's (1991) *A View of Geography*, got me thinking of earth and home, Massey (1994) and Cresswell (2004) had me considering place, and Buttimer (1976) captivated me with the notion of the Lifeworld, the milieu, a 'matrix' of life, bubbling away. I knew these works would not form a major tranche of my thesis, but nonetheless, it seemed as though their input was both tacit and palpable, and was to influence, rather than wholly guide me.

Hayden Lorimer made a strong impression on my first-year self, as I ended up presenting in a session on the *Geographies of Craft*, at the Association of American Geographers, New York, 2012. I had no idea at the time that he was a well-respected academic, but I was somewhat awed when the time came for him to present his paper, and instead of taking the lectern or prowling around, he quietly sat down at the front desk and began speaking softly, in a prose-like manner. A hush descended and we all listened attentively. Thus, I came to realise, as it was effectively demonstrated to me, that there was more than one way of doing geography, and it clearly didn't have to be conventional in order to be effective.

Whilst various readings also informed me that a less conventional approach was valid, I lacked conviction. This was where Lorimer helped me to endorse practices that I otherwise might have renounced, especially as a naïve ex-physical geographer, landscape archaeologist and conservationist. I did not yet know that human geography would be far less bounded than I

supposed. Simultaneously, I was engulfed by various feminist critiques of some (generally quantitative) methods within geography, such as tightly structured interviews, numerous questionnaires or 'exploitative' methods with no reciprocity (see discussion in Chapter 3). Whilst I knew that it would lend gravitas to my study to obtain interview data, some feminist readings had terrified me, lest I unwittingly appropriated or exploited my 'research participants'. The fear was disabling, yet a strong ethic was emerging, that I wished my research to be nonexploitative and to even embrace reciprocity. Whilst this was to be a guiding moral code, I had no idea how to actualise this desire! The combination of my being both tentative and mindful of various feminist concerns, I believe I took the ideas of reflexivity, reciprocity and nonexploitation a bit too far. Indeed, I often thought *myself* to be exploited.

Beginning my fieldwork, I also felt like a charlatan to a degree, as I wondered whether I understood enough theory to be proficient 'in the field'? Yet once I relaxed and began to enjoy my work, I again reflected that this could not be right either. I was enjoying myself too much doing what came naturally; volunteering, forest gardening, helping people, and I quizzed myself as to how something so fun and satisfying could be serious research? I need not have worried though, as the process of settling into the community allowed people to get to know and trust me, which eventually led to interviews, reciprocity and eventual collaboration.

Whilst I have not deliberately taken a performative nor humanistic approach, I cannot fail to have been influenced by some of these readings, and no doubt something of affect has rubbed off on me. Of course, a humanistic approach shares some commonalities with a feminist approach anyway (Cloke et al, 2010). But, perhaps, in the end, I have become more humanist than feminist, although that's hard to ascertain. What I *do* know is that I struggled with a feminist approach, and I believe that I probably more fit the mould of a Duppy Feminist.

Chapter 4:

Resilience Building in Everyday Life

4.1 What Motivates People to Build Resilience?

Once I had left the field, I spent my time writing up my three field diaries. Next, I transcribed and analysed the semi-structured interviews. I had interviewed people who were all building resilience via embodied practices, such as making, gardening, or the day to day running of the Eco Shop. The practices ranged from forest gardening, to growing a few courgettes in a garden. From home composting, to creating a small permaculture subsistence haven. From knitting a scarf, to sorting through wares in the Eco Shop and helping customers. What each practice had in common was that it furthered self-reliance, it increased skill, and it required bodily engagement and a slowing down. These were all visceral practices.

Most of my participants lived in Dehaubarth but a couple hailed from there originally, now lived further afield and kept strong links to the place. Some of my participants were volunteers at the Eco Shop, others were permaculturalists, and some were just keen gardeners and makers. The chapter that follows details the first part of the themes to have emerged from the semi-structured interviews. The research questions asking how and why do people build resilience were answered.

When I came to analyse my results, I did not impose a cherished theory nor cherry pick quotes, as I allowed themes to autonomously emerge from my data by using the method set out by Gibbs (2011). I hand coded all transcripts and field diaries and then used MAXQDA to order my data electronically. It gradually dawned on me that in answer to one of my main research questions (why do people start building resilience?), I was seeing patterns and as I refined and revised these findings, using thematic clusters, I discovered three distinct areas of engagement and motivation arising. Broadly, we can place participants into three groups, which I call: 'Theory-led Resilience Builders' (see Section 4.1a), 'People-led Pragmatists' (see Section 4.1b), and 'Satisfied Resilience Builders' (see Section 4.1c). However, nothing is ever that simple, and instead of having three separate sets of motivation, we find three intersecting sets, like a tri-circled Venn diagram, where

there is a degree of overlap. Many of my participants display a mixture of these motivations, and I am in no way claiming an exact science in my groupings, but I do believe that they form a useful framework for interpreting my results and in acknowledging and addressing the different motivations for engagement in resilience building. This section reveals the responses of my research participants to the questions: *What motivates their desire to build resilience? Does action follow theoretical debate and reading, or have they simply always lived this way?*

4.1a Theory-led Resilience Builders

The most immediate group to arise were the Theory-led Resilience Builders, because they despaired at the lack of sustainability in the everyday world, and they wished to make a positive change. Perhaps they read books on aspects of sustainability or environmental stewardship, and typically they were part of a community who were environmentally minded. Myfanwy is passionate about permaculture and ecology, and she likes to live in accordance with her values:

> "But I think that somehow, I've always had an empathy for nature and when I was at University, I was always in *Save the Whale* campaigns and *Save the Rainforest* campaigns and that kind of thing…
>
> It feels like to me, that a lot of what we're doing in the world is unethical and immoral and even things that ordinary people do that they're not aware of, they're not thinking of…
>
> From a spiritual and moral point of view, I couldn't live with myself and do that because unfortunately, in some respects, once you've opened the eyes of awareness, you can't close them again, can you?...
>
> We're not perfect by any means, we have a car and all the rest of it but at least it feels like we're living our values, and that's really important…
>
> there's nobody else telling me to do it- and I think I do sometimes set too high ideals for me, or I feel like, 'Can my contribution … what difference does that make?'. On the other hand, that's another reason why I teach because I get a huge amount of inspiration from the students and people going off and doing things and it's like you are opening the door for them- that's what it's like for me."
>
> (Interview with Myfanwy, 2015)

Olivia first wanted to build resilience and live sustainability in the Hebrides. She was going to create a microclimate and improve soil fertility, just as she had seen in the gardens in Loch Maree. In the end though, she realised that she was constrained both by climatic and temporal factors. The climate was such that the growth rate of trees is very slow, and she decided that she would be much better off moving instead to Deheubarth where more light meant a longer growing season. Olivia has strong views on peak oil, and what she sees as the human contribution to climate change:

> "Well, yes, except the concept of peak oil, although phrased like that is comparatively recent, the idea that the world was going to come to a sticky end was pretty obvious to me from teenage years- just look at the amount we are consuming. I wasn't thinking specifically about oil, to be honest, I was thinking about everything that we consume has a finite supply and yet we appear to think it has an infinite supply. Those two concepts are going to run into each other, sooner or later and it looks as though it's sooner than I expected. The oil question, I think we've passed peak oil already. And as for climate change, well, I knew that the global climate was warming but so did anybody who read about it but it's a very, very slow rate. The rate that we were told when I was young was about a degree every three thousand years, that was an inevitable by-product of the sun's development so, to see the acceleration in the last decade has been heart-breaking because you realise that what's happening now is our intervention, our interference, though not deliberate, has actually put the environment under a strain which is it not going to be able to adapt fast enough to and cope with. And sooner or later, things are going to start going severely wrong."
>
> (Interview with Olivia, 2015)

The idea that the world might 'come to a sticky end' relates to planetary boundaries and if we transgress ecological tipping points, the change will be irrevocable (Brown, 2017). Amanda is a volunteer at the Eco Shop. She is the daughter of early self-sufficiency pioneers, and being brought up in that environment, she considers it her duty to live sustainably. She has some fascinating thoughts as to why she was happy to be interviewed as part of my thesis, and she was glad that her accumulated knowledge might become part of the academic body of work on sustainability. Amanda also thinks that our heavy reliance upon fossil fuels leads to some members of society finding themselves without a useful role to play in society, and that it actively creates people who feel useless, and who become sad and unappreciated individuals:

> "I think there's a lot of very unhappy lives through being able to use that stored energy in crude oil, and to spend it so, unthinkingly, so, wastefully. It ends up that there's a lot of people that don't have a role in life, they have nothing they're appreciated for and we've really wasted a very amazing resource and squandered it in a way that causes lots of difficulty and unhappiness."
>
> (Interview with Amanda, 2015)

She believes that there are two sides to resilience building, which may either inspire or inhibit people's enthusiasm to engage with it, but she shows the qualities of 'just getting on with it' that I have encountered again and again:

> "So, you look round and you think, 'Well, OK, what can you do about that then?'. And anything you do is stupidly small, and you look at it and it's not worth doing, and then you look at the other side of that and if you're not doing anything at all, it is even more stupid. So, you get up and just do something."
>
> (Interview with Amanda, 2015)

Amanda has a theory that humans are essentially herd animals who generally follow those around them, whilst the odd one or two will go their own way, either to meet a measly demise or to discover a new way of life. If the pioneer humans are successful, there's no point in their venture unless they then report back to the herd to tell them what they have discovered, so she sees her interview as part of the reporting back to the herd process:

> "the theory that we're herd creatures and that some of every herd don't follow the herd so well, and sometimes they get eaten by a wolf, and sometimes they find a great bit of new grass and then they can come back and get the others to come. You know, worrying about global warming and pollution, generally in the times before it was talked about and you know, the beginnings of the organic movement were in my childhood, which are now in supermarkets, so we're like pioneers and I'm happy to like do this interview. You know, as pioneers you have to report back and let people know what you found out, otherwise it doesn't work. Because you're pioneering, which is hard work and it is difficult to be a pioneer and sometimes very lonely, it's pointless if you don't report back what you found."
>
> (Interview with Amanda, 2015)

Franklin et al. (2011) touch upon something similar in their observations, stating that:

> "the majority of people involved in developing sustainability projects in Stroud were described as being of a 'creative', 'artistic' disposition. They were said to be 'full of energy' and 'naturally' strong at generating ideas for alternative ways of living."
>
> (354)

These types of people in Franklin et al.'s (2011) study are often described as being 'pioneers' of sustainability, pushing activities from the personal to the community level. Amongst my participants, Helen started Rags to Rugs, Myfanwy and Olivia have founded various successful and well-loved community projects, both together and individually. So, it appears that I have a few of the pioneers mentioned by Franklin et al. (2011) amongst my participants, including Vangelis, who founded both the Forest Garden and the Eco shop. Vangelis has a very clear ethical stance:

> "For a long time, I have wanted to make a contribution to sustainability, i.e. wanting to make a move away from things that are destroying the planet to working in a way that is protecting the planet. So, the shop really is a further extension, implementation of that aspiration in me … It was set up, really, to further sustainability. Also, looking around at all the empty shops, it just felt like maybe the community needed something different and also, making use of the empty premises, really, that were depressing to look at. And the other thing was, having a place where people could just drop into and the shop is open six days a week and it is staffed by volunteers. Basically, people can drop in and they can get some advice about something related to sustainability… they might need something doing in their garden or want to make something from wood or… and really, it was to have a place where people could come into fairly often, really."
>
> (Interview with Vangelis, 2015)

He is very conscious of his place within the environment, and his hope that more people take action:

> "Being alive. I suppose people do think about being alive and what the point of it all is … it's kind of self-evident, that things are not too good with the planet, nature is being eroded and destroyed... the Amazon, the forests are going, you know, less and less trees, soil erosion… it's kind of… I suppose some people don't think about it and then you wonder, where are they? Because, at the end of the day, we need air to breathe and we need food to eat and we need the Earth. The Earth probably doesn't need us, but we need the Earth. The Earth can probably do without us, so if you're alive… it seems a bit odd that people don't think about you know, how they can take care of the Earth, really. I mean, there is people who don't think about the Earth, that's why it's being eroded and destroyed, it's a difficult one but I think anyone that cares a little bit about even themselves and their children and other people, surely they would think about these things, about nature and messing about with the weather, which climate change is messing about with the weather, the planet is changing, the weather patterns are changing. Extreme events are happening more and more, some people are denying it but it's becoming harder and harder to deny it. You just hope that enough people will accept it and start doing stuff before it's too late."
>
> (Interview with Vangelis, 2015)

The idea of planetary boundaries (Brown, 2017) is also mentioned by Vangelis, when he states that the planet and the weather patterns are changing. Vangelis is perplexed about our reliance on fossil fuels, and our refusal to see the damage that is causing to the environment:

> "Well, yeah, there's the deniers, but it's getting harder and harder to deny climate change. Peak oil … the oil will run out... it's getting harder and harder now, but it's not going to happen tomorrow… if people really wanted to dig their heels in, it could last for the next fifty, maybe even hundred years, but to what cost to the human race and the planet? And if they don't switch, if they don't change, it makes you wonder, who are these people and what do they think life's about?"
>
> (Interview with Vangelis, 2015)

And he holds great faith in people getting together and doing things for themselves. This next quote has had a profound affect upon me as a researcher, and I often find his words running though my head:

> "I don't have much faith or hope in the government, in government itself. I think people need to get together in their own communities and get on with it, really. I'm hardly ever inspired by government, actually."
>
> (Interview with Vangelis, 2015)

Another pioneer, Helen is also a volunteer at the Eco Shop who is passionate about textiles. Here she describes her own motivations for building resilience:

> "Yes, I'm alive and breathing! It's a bit difficult to explain- I've got a commitment to try to work for positives rather than trying to combat negatives. So, I'm kind of aware of all that and on bad days I wake up and think, "Oh, shit!" but at the same time, what I believe we need to be doing is working towards

viable alternatives whilst we still can. And I do have a bit of a sense that we might be in a race against a mass extinction."

(Interview with Helen, 2015)

She credits John Seymour's seminal book *Self Sufficiency*, as giving her the impetus to first start, and despite what she's as impracticalities, she believes in looking to the past to help us build a better present and future:

"Originally, what happened was (this is going to be a smile), I read *Self-Sufficiency* back in the day. (Smiling). We bought a copy of it second hand quite recently, just for a giggle because there are a lot of things in it which I actually regard as deeply impractical, because I don't believe that the answer is to go back in time. I think it is doing stuff that we used to do but incorporating what we've learnt since … so this is almost like a homecoming, to be starting to grow stuff, knowing what I know now rather than what I thought I knew back then. So the desire to being part of creating a world that is sustainable has been with me from then really, which is what, forty odd years."

(Interview with Helen, 2015)

Ffraid is a talented local ceramicist, who is very articulate about her concern for the environment, her desire to make, and how she uses her making to serve political means:

"Well, I make things, number one, I first, initially came into making things from a purely expressional desire to express what I wanted to talk about. I wanted to make beautiful things that people could look at and require and I have been making things for twenty years, since I was 18. The first thing I expressed through clay was 'Why are we polluting the environment?' and it was dolphin and sea, coral, it was very sculptural and then I did an HND in ceramics and that theme followed, and I made these balls to look like fish and I imagined what the ocean would look like if it was covered in bottle tops. I knew about waste and plastics and stuff."

(Interview with Ffraid, 2015)

Ffraid is explicit that one of her reasons for running workshops is to subvert the narrative toward environmental stewardship:

"Every workshop we start with rolling out clay and chit chat, a coffee, talking about herbs, talking about my work. So, it is… I'm getting the word out about nature and that connection that I feel we all should have more of, into my workshops, so there is an ulterior motive and I'm making a living that is sustainable for me and my daughter … It's about finding ways to be resilient in this economic climate and the way the world is so, you're doing something positive to help people, to enable people to live more sustainably, or to understand how to live more sustainably, maybe?"

(Interview with Ffraid, 2015)

It seems that the primary motivation of Theory-led Resilience Builders is rooted in environmental awareness and *follows theoretical debate and reading*. For Ffraid, creating is part of environmental awareness. She explicitly states that her making is profound and that she has an "ulterior motive"

to further sustainability. Myfanwy, Olivia, Vangelis and Amanda are all really conscious of who they are and what informs their actions. Myfanwy perfectly sums up the factors which motivate Theory-led Resilience Builders, when she says: "we try to live permaculture and if I'm going to get upset, it would be because I am failing to live up to my own personal ideals" (Interview with Myfanwy, 2105). It is important for the Theory-led Resilience Builders to have some way of channelling their convictions, and it is amongst this group that we find the 'pioneers'.

4.1b People-led Pragmatists

The second group, whom I call 'People-led Pragmatists', emerged after I had described the resilience building activities I was interested in, and asked a very simple question, *"Which of these activities do you partake in and why?"*. Their response revealed some more visceral reasons for engaging with resilience building. Perhaps they saw a friend or family member doing something and they wished to emulate their behaviour because they had been inspired through seeing something tangible and physical happening. Possibly their nature is pragmatic and down to earth, they might have a strong connection to the material world and to waste resources simply makes no sense to them. Whereas the Theory-led Resilience Builders were motivated by theoretical debate, it is amongst this group of People-led Pragmatists that I found evidence to support the second clause of my research question: *Does action follow theoretical debate and reading, or have they simply always lived this way?*

Broceliande is a 'lone wolf' resilience builder who was clear that any resilience building activities he practised were not driven by wider environmental debate, or political concerns:

> "I do know about permaculture theory and an eco-conscious sort of theoretical thing but that doesn't drive me at all, I just act in a way that feels natural to me and I just think that any other way is a bit stupid really and if that happens to be good or beneficial to the environment and if that happens to go along with permaculture principles then. Really, it's just action first, that's what I've always known, and these theories have come along later, and I've gone, *Alright, yeah, that kind of makes sense, well, obviously, yeah* obviously I don't do things really hardcore permaculture style but… I have an interest, if there is a copy of *Permaculture Magazine* lying around, I'll read that, I like reading permaculture books, but it's not something that drives me to do anything, it's not a driving factor in anything that I do, really. I do things that I enjoy and like I said earlier, if they have a positive impact on the environment then that's a bonus but it's not my driving force behind anything really."
>
> (Interview with Broceliande, 2015)

Rather than from attending courses, or consciously doing things to help the environment, his resilience building skills have in the main been learnt independently, or copied from his parents, grandparents, or others who inspired him:

> "I guess my interest was sparked by seeing things happen around me and wanting to do them, I suppose … Well my grandfather was a farmer, so when I was very young, I would follow him around. He was always doing things like mending fences, milking cows, I don't know, making something, fixing the tractor, whatever… doing something around and about so, from a very early age I always saw people do stuff and my dad used to do things all the time and so yeah, I used to watch him as well. And then when I got a bit older and I could actually do stuff, we had a polytunnel… I always loved nature and gardens and stuff but yeah, I got to grow lots of vegetables and even some fruit inside the polytunnel, which was amazing. So yeah, I've always tried to grow things from a really early age and then as soon as I could hit stuff with a hammer, I did of course."
>
> (Interview with Broceliande, 2015)

He also has his own compost heap, because he can't comprehend anything else:

> "I think that's just because, why would you throw vegetable matter into landfill, it just doesn't make any sense, does it? And they would use it as well, on the garden. So, parents, grandparents, friends, friends' parents, you know, just everybody, that's just what they did, really. I guess being brought up in the countryside there's a lot more room for people to be able to do that, I suppose. That's just the way it is, in my experience. So that's just what happened, basically and I've carried on, not through conscious thought, or decision to help the environment but just because anything else seems ludicrous."
>
> (Interview with Broceliande, 2015)

Despite not showing the conviction of a Theory-led Resilience Builder, Broceliande is nonetheless, incredulous about what he sees as needless waste of resources: "when I first saw anyone throwing carrot peel into a dustbin that's going to go to landfill, I didn't quite understand what quite they were doing, because I'd never seen it before!" (Interview with Broceliande, 2015).

Like Broceliande, Whiskey Sanchez and Gin Jones both say that environmental factors are not a motivation in their crafting: "For me, it's just a leisure choice, a hobby, I never think about it in the context of how I'm living" (Interview with Whiskey Sanchez, 2014). Whiskey Sanchez and Gin Jones are good friends who love knitting and crocheting. They both insist that they use craft as a way to curb boredom, to be productive, and that they simply find it immensely satisfying, "otherwise you know- it doesn't affect the choices that I make, it's not that much of an ingrained thing" (Interview with Whiskey Sanchez, 2014). However, as practical people who implement resilience building skills for ostensibly superficial reasons, both Whiskey Sanchez and Gin Jones have some interesting things to say when pushed to think about wider concerns:

> "So a lot of people used to make their own clothes. I guess before mass manufacture and export and import and I suppose historically, Britain's woollen industry used to be huge, the whole world, and now it's kind of expensive actually. It's not cheap. Even though it's not cheap to buy good wool- you have to get it from New Zealand and stuff, don't you? Or… Yeah, or Scottish and Welsh and English stuff but

> they are quite expensive. But it's a lovely medium, it's a lovely material to work with… Yeah, it's pretty special, isn't it?"
>
> (Interview with Whiskey Sanchez and Gin Jones, 2014)

Having featured in my group of Theory-led Resilience Builders, Olivia, Amanda, Vangelis and Myfanwy also display people-led influences in their resilience building activities:

> "my father-in-law had an allotment and that really influenced myself and my first husband and we started growing vegetables and for the first time, when I was married, I had my own house and my own garden. That was one of the first times when we started to learn skills, was from someone who had an allotment and could grow their own vegetables."
>
> (Interview with Myfanwy, 2015)

Olivia uses a brilliant simile to describe being inspired by her permaculture friends: "Permaculture people say, 'I do it this way' and you think, *That's a good idea*, so it's a bit magpie-like" (Interview with Olivia, 2015), and Amanda sums up the characteristics of this group beautifully, by saying: "What's most inspiring is when you see someone else doing something, isn't it? That's what gets you inspired to go for it" (Interview with Amanda, 2015). For Vangelis, it was just:

> "Being around other people, I think that was … being around other people that inspired me, I think that's how it happened… vegan people that were into wholefood and organic… err… doing a lot of cooking…"
>
> (Interview with Vangelis, 2015)

Franklin et al. (2011) also noted that: "Understandings of sustainability and *involvement* in sustainability projects reinforced each other" [my emphasis], and that many of the people involved in sustainability projects in their study in Stroud: "felt that participating in practical projects was also the best way to gain confidence about participation" (356). This was identified as being very important in furthering engagement with resilience building activities, as once someone had some confidence, they were more likely to try other activities (Franklin et al., 2011). Like many of the responses from my participants, it was reported that people gained skills via direct involvement in an informal manner, almost as a biproduct (Franklin et al. (2011). This idea reminded me of Broceliande's experience:

> "OK, so my favourite bread ever when I was really young was my grandmother's bread, which she obviously made herself, so I guess I've always wanted to recreate that um, so yeah, that kind of got me into it, really, so again, it's just seeing things around me and wanting to do that."
>
> (Interview with Broceliande, 2015)

Franklin et al. (2011) suggest that this kind of interaction has the potential to engage people in resilience building, who might not do so otherwise, or who may not show any interest in attending educational courses. This observation seems particularly appropriate for those who do not fall into the label of Theory-led Resilience Builders, and for the People-led Pragmatists, it is almost as if the initial contact experience of putting their body to work served as a springboard or door-opener to increased engagement, knowledge and skill. Thomas is prime example of this, as he knew very little about environmentalism or resilience building until he volunteered at the Eco Shop:

> "There is a lot of things to do with the Eco Shop that I am only learning about now, that I knew nothing about before … Permaculture was all new to me and I still don't fully understand it, if I'm honest but I see that, whatever's happening in that shop, it's doing the right things. I love the way it funds the Forest garden, and I hear about how many different things go on up there. I've been up about three or four times I think, and each time has been interesting and it's great to see what's happening there."
>
> (Interview with Thomas, 2105)

The things that the Eco Shop were doing made good sense to Thomas and being around stimulating conversations then led him to approach the environment in a new way.

4.1c Satisfied Resilience Builders

I did not arrive at a distinct third group immediately. It wasn't obvious from my analysis for many months, until I realised that when I had asked the question, *What is your experience when you are doing these activities*?, a fecundity of positive feeling had arisen. I call this group the Satisfied Resilience Builders, as they share a sense of satisfaction, pride, peace, contentment and achievement, in particular when they had set themselves a challenge. Eventually I realised that this was an emotional or heart-centred response and I found this very exciting, as according to Hopkins (no date): "Transition Culture is an evolving exploration into the head, heart and hands of energy descent," and I could see the 'head', 'heart' and 'hands' perfectly illustrated. My Theory-led Resilience Builders signify the 'head', whereas my People-led Pragmatists epitomize the 'hands', and my Satisfied Resilience Builders embody the 'heart'. This was not something I had anticipated, but it was a wonderful surprise!

All of my participants shared the motivations of the Satisfied Resilience Builders, and I now believe that a sense of joy and happiness mixed with satisfaction at a job well done, is a powerful factor in engaging people with resilience building. To express the sense of joy coming through, this section begins with my participants' unmediated outpourings:

> "I'm a bit obsessed now! I don't really know why I do it, I don't know. I really enjoy it, it's um, it's quite therapeutic, it's enjoyable, I like the finished product. I like making stuff for other people- that's quite special, it's better than buying something in a shop. It's nice that you spend time on something isn't it?"
>
> (Interview with Whiskey Sanchez, 2014)

> "Yeah and it's funny, like, when you see it, a pattern on paper and you can't really imagine how it's going to work … but it's amazing to see it forming and it's like 'Oh my God, I've just done that!' and, you know… Yeah, it's amazing."
>
> (Interview with Gin Jones, 2014)

> "When I'm dancing, when I'm creating, when I'm singing… it does, it feels right. Yeah, that's what it does, it feels right that this is what you do and love."
>
> (Interview with Ffraid, 2014)

> "I do it for enjoyment, it's just what I like to do. I'd do that whether it was good or bad for the environment … It is a good thing that does make me happy, of course, yeah."
>
> (Interview with Broceliande, 2015)

> "I love making things … it gives me a huge amount of pleasure and a good sign is if I start humming to myself, or singing and it's automatic, it just happens. I don't think, 'Oh, I'll start singing'. When I'm really grounded and happy, I start singing to myself."
>
> (Interview with Myfanwy, 2015)

> "If you do a nice neat job you can get loads of years of satisfaction while you are looking at it every day, for years and years. It is good if you can get a good result."
>
> (Interview with Vangelis, 2015)

> "I do it more because I think it's a nice thing to do."
>
> (Interview with Helen, 2015)

The sentiment behind these responses reminded me of something I had read in David Gauntlett's (2011) *Making is Connecting*, in which he states:

> *"Everyday creativity refers to a process which bring together at least one active human mind, and the material or digital world, in the activity of making something which is novel in that context, and is a process which evokes a feeling of joy."*
>
> (76)

And that feeling of joy is something which my participants spoke of a fair amount, and it is something which I came to think was essential to an engagement with resilience building. One activity which seemed to incite joy amongst my participants was baking bread, apart from Helen, who used to bake bread when she was attempting to live self-sufficiently, but she came to regard it as inefficient. However, both Vangelis and Broceliande are home baking enthusiasts, who reported the actual process of baking as being enjoyable and therapeutic in itself:

> "You know what you're getting when you bake bread... it's very therapeutic … Well, people get quite hectic and busy and don't really take enough time to slow down and relax and I think that things like making bread can do that, can slow you down a bit. Also, you're doing something very satisfying, you're making something that you can consume- so it's a very satisfying experience. You make it and you can consume it and other people can eat it and it's quite satisfying. You feel more empowered, that you're taking care of your own needs, not relying on some … because you know, buying bread is quite tricky, buying the bread that you like."
>
> (Interview with Vangelis, 2015)

They also liked the process of being more knowledgeable about the actual ingredients used in their food, and the intimacy that this required:

> "I really like baking bread, I don't like buying bread very much, some bread that you can buy is OK, but nothing really beats doing it yourself because it's a whole process … if you actually knead the bread yourself and rise it and knock it back then I guess you have quite an intimate relationship with the bread and the thing that you're going to eat. So, it's more knowing where, you know, how your food is made, because you've done it yourself, so you've been through the whole process and making bread can be quite a big thing because it takes so long and it's such a big process. I just think it's really great, actually, I really like it."
>
> (Interview with Broceliande, 2015)

There is a recurring theme which resonates throughout the results in this Satisfied Resilience Builders group. Gin Jones and Whiskey Sanchez both work full time, and for them, knitting and crochet (or other craft work, such as paper cutting) is a relief, a respite from a day which hasn't especially fulfilled their need to be creative: "I think that a lot of us are stuck at a desk all day and it's not natural and it's not creative, it doesn't make you happy actually" (Interview with Whiskey

Sanchez, 2014). But the heart aspect of resilience building is something which really appeals to both of them: "The satisfaction is like a really big … Yeah, it's massive" (Interview with Whiskey Sanchez and Gin Jones 2014). Whiskey Sanchez talks about a deep-seated urge to create, and to gain a real tangible sense of achievement:

> "Maybe if you were going to think of a link back to something like the environment, you could say that doing a craft (which would have been something that we used to do out of necessity- we're doing it for leisure now), maybe harks back on some level to a need; sort of like a hunter gatherer providing for your family sort of need that people still have. That they satiate in other ways like spending money or filling their time with watching telly but actually that whole making things thing, maybe that's ingrained in some people quite strongly. I think it is. And that harks back to a time when you would have needed to do it and it would have been much more about your environment, so you would have had sheep, you would have had cold weather, you would have needed to make something and you know, evenings would have been taken up with it because of the way you needed to protect yourself from the elements and all that, so maybe, but it's not a conscious level.
>
> it's more of a leisure thing but we've got the luxury of time and it's a leisure thing, a hobby. I don't know though; I do think there's some kind of need in us to create something and make something that we can touch and see… and pass onto other people is a very important part of it. And I don't think until you've done it that you realise it – then you kind of feel how special it is and I dunno… It must be the same for people who garden or people who are really into DIY, the sense of satisfaction that you get after. Yeah, you could pay someone to do it for you but if you've managed to put up a shelf yourself and you've never done it before, you get something out of that and it's utilitarian, so it's going to improve your life- you didn't pay anyone else to do it, it's yours, it's unique. And every time you look at it, you get a little like smiley face (laughs)."
>
> (Interview with Whiskey Sanchez, 2014)

One thing which I gathered from the Satisfied Resilience Builders is that having the skills and knowledge is important but other, more emotional things are also vital. Franklin et al. (2011) observe that in creating sustainable communities, it is almost as if an emotional or values factor has to flow through, and in order to sustain what they do in practice- they have to believe in it and to enjoy it to be motivated and committed. They go on to add that their participants focussed less on the importance of someone's skills, and more on their temperament- which is what made the Stroud sustainability projects a success (Franklin et al., 2011).

4.2 How do People Build Resilience?

Moving on from the motivational side, I wanted to know how my participants actually built resilience in response to the research questions: *What actual activities are people involved in and is it just one primary activity or a whole range of activities?*, and: *How did they learn new techniques, and do they teach*

others? Most of my research participants were actively engaged in more than one resilience building activity, and some were doing things well beyond the scope of what I expected.

4.2a Growing Vegetables

Abatemarco (2018) recognises the radical potential of the production and consumption of local food as something which can bring a sense of freedom, and many of my participants express similar sentiments. Motivated by John Seymour, Helen tried to live a self-sufficiency lifestyle in Eire, but it wasn't as easy as she had hoped, because: "We didn't have enough ground to really have a small holding and it didn't work." But since moving to Wales, Helen has been trying to grow as much as she can:

> "It was just a piece of rough grass; I've now added soft fruit bushes- I've got blackcurrants, blueberries and late raspberries. Alpine strawberries that I started from seed, which aren't doing all that well at the moment, we haven't had enough rain in all the right places. And I'm gradually building raised beds, so at the moment I've got runner beans, peas, courgettes and a little bit of salad greens on the go. I've also got loads of herbs."
>
> (Interview with Helen, 2015)

Helen describes how she is slowly replacing her lawn, and she has an interesting strategy for getting the most out of limited space:

> "I like to garden, and I like having a garden there and I don't really see the point of growing a load of flowers that I can't eat. Also, at a deeper level, I believe that one of the things that needs to happen is for people to grow their own food, either in community gardens or something like the food forest, or just on your own plot. I think it makes a hell of a lot more sense to grow courgettes than a lawn. This spring, I've just eliminated a patch more of my tiny lawn … I'm not interested in growing things which are easy to buy, like carrots and potatoes and things … I haven't got space. So I would rather grow something higher value and a bit unusual."
>
> (Interview with Helen, 2015)

Like Helen, Broceliande doesn't think it's feasible for him to attempt to be self-sufficient, and he also prioritises vegetables which cannot easily be bought:

> "I haven't got room to grow big crops of carrots, parsnips, potatoes, cabbages and all that but if I had the room, and the time, then yeah, I would probably like to do that. But at the moment, no, I'll just buy potatoes and carrots and onions. Because I use them so much, in order to be self-sufficient, I would need acres and acres, which is not feasible ... and it's probably cheaper to just buy it in the supermarket really, much less effort."
>
> (Interview with Broceliande, 2015)

The climate has affected his sense of confidence and possibly makes him less inclined to grow vegetables, and he starts dreaming about sunnier climes:

> "I guess my approach to gardening would be a bit different because I would probably try to grow a little more, just because I would feel confident that it would actually grow. The trouble is, I don't actually like British vegetables all that much ... Um, possibly the south of Spain ... if I wanted to grow the amount of chillies that I needed, I would just have to have a whole field full of chilli plants and the heat and the warmth."
>
> (Interview with Broceliande, 2015)

He seems to convey a sense of having his gardening wings clipped by the Welsh weather, and he thinks a polytunnel would help: "Yeah, if I had a polytunnel in my garden, a big one, I would be using it all the time, as much as I possibly could." But Broceliande likes a challenge, and he was amazed that he grew Mediterranean vegetables in Wales one year, and like a Satisfied Resilience Builder, he found it fun and exciting:

> "I really like aubergines, peppers, chillies, that kind of thing. Tomatoes … I've got a small garden, so I like to grow things which interest me. I think that if I had a large extensive garden, or some polytunnels, then I suppose I would maybe quite enjoy the challenge of being self-sufficient in vegetables. Although, I'm not sure whether that would take some of the enjoyment out of the way that I like to grow things at the moment, which is; stick some mad things in and see if they grow… like, peppers and chilies … we actually managed to grow some peppers, which was amazing. We had a couple of pepper plants, they grew not to full size, but we just fried them in a dry pan, just like Spanish Padron peppers, and they tasted really amazing just with some salt on and that was great, really amazing. I hadn't managed to grow peppers outside in Wales before, so that was cool- that was last year … Enjoyment and novelty, I don't know… see if you can get a pepper to taste like pardons, see if you can get an aubergine that's big enough to cook (laughter), see how big your squashes can grow, see how much they take over the whole garden, that kind of thing really."
>
> (Interview with Broceliande, 2015)

Myfanwy has been far more successful than Broceliande in striving for greater self-sufficiency. Apart from the fact she is a dedicated permaculturalists, Myfanwy has a polytunnel which enables her to grow things she otherwise would miss out on in Wales:

> "The polytunnel is an absolute godsend. We thought we were going to have two and so we started off with one and then we realised that one was actually enough because they need a particular management because obviously the soil gets dry unless you water it and pests can build up, although we have had very, very few pests. And, to be honest, one of the godsends is that you can just go in there on a wet day, so not only does it give you a sheltered micro climate where you can grow things which otherwise would be difficult for us- things like tomatoes, but also winter salads, and unusual crops. That's one thing to mention, that we're both really interested in unusual crops, particularly perennial crops. So, the polytunnel gives us the space for that and also, somewhere where you can just go and potter when you just want a bit of daylight and it's raining … So psychologically, it makes a huge difference. And we use it for drying things as well. I used to use the polytunnel, before the solar space, I used to use it to dry my washing in. But we certainly use it to dry onions because we can't dry things."
>
> (Interview with Myfanwy, 2015)

Along with growing most of their own fresh fruit and vegetables, Myfanwy and Horace have used their skills to retrofit their home to be as energy efficient as possible, and they have also made a solar dryer:

> "we do like making things and making things work, especially things that don't use energy. So, Horace's trying to finish a solar drier, so that we can dry vegetables and fruit, I saw loads in Ladakh and of course they get plenty of sun. In our passive solar space, it does get warm enough and the solar drier just enables it to concentrate that warmth and the sunshine and then we could maybe, even, dry our own tomatoes and things like that … This is why I want Horace to finish the solar drier, because we can't dry things easily in a Welsh climate"
>
> (Interview with Myfanwy, 2015)

This kind of benevolent use of technology, is often advised in the Transition Movement, where people are encouraged, if they are able, to use technology in order to make their home more energy efficient (Hopkins 2008a). Myfanwy's solar drier also ties in with Pepper's (1993) idea of a post-capitalist future, in that technology would be reassessed under eco-socialism, so as to be a benign, rather than a damaging agent as it becomes: "adaptive to all nature (including human)" (233). Along with the practical aspects, Myfanwy also finds joy in her gardening, whilst seeing the importance of strategic planting, particularly of pollinator plants:

> "The veg beds do give me pleasure, I'm quite a neat gardener when it comes to vegetables, wildlife is everywhere but quite conventional organic rotations but the veg beds, yeah, they look neat, that's fine. But when you get into a three-dimensional space, like in a forest garden, because it mimics nature and because I'm gradually increasing the ground covers, so that there's loads and loads of pollinator plants (which is my big focus as well). Over the last couple of years, every plant we put in has to be a pollinator plant, if it's not directly a food plant. So, I was thinking the forest gardens do give us a lot of pleasure and psychologically, it just looks more natural. A sort of elevated form of nature, if you like, because there are more flowers in there than would be otherwise"
>
> (Interview with Myfanwy, 2015)

She also finds it satisfying to grow challenging plants: "like tomatoes, but also winter salads, and unusual crops. That's one thing to mention, that we're both really interested in unusual crops, particularly perennial crops' (Interview with Myfanwy, 2015). Olivia describes the many ways in which she consciously builds resilience with the skills that she's learned, and I find her story inspirational in the way that she used her knowledge of permaculture to transform a barren patch of land in a garden overflowing with produce:

> "And this blank piece of land, well, it had nothing in it, except a few beech trees, mostly just flat, overgrazed land, bare. So I just drew a plan in my mind, a belt of trees all the way around it and increasingly

> productive land nearer to the house. And twenty odd years later, that's what's there, in fact, it's getting too productive! I've got too much stuff going on."
>
> (Interview with Olivia, 2015)

And I couldn't help being impressed with her attitude of 'just going for it':

> "When people say, 'Did you do that on your own?' and I say, *Yes, why not?* And I realise that I've actually got a degree of independence from the system which is perhaps more difficult to achieve unless you've found another way of training yourself because, to use a chainsaw (I know, that's using petrol) is actually sometimes the only way that a person on their own could cope with the amount of work with wood that one has if you're heating your house with wood, cooking on wood, heating the water with wood-everything is wood, there's no other heating system in the house. So, the wood's got to be there and I built the woodshed out of the wood that I've grown I had to fell the trees and then I had to cart them, cut them to shape, put the joints in, all with a chainsaw and you know, it's not difficult, it's just that you have to know how to do it. I've only recently, the last fifteen years, become aware that it's actually quite a privilege to have that skill, which I learnt in business. But other skills, the gardening bit, was largely other people teaching me, asking questions, looking things up when I needed to."
>
> (Interview with Olivia, 2015)

A huge inspiration for Olivia was when she visited the gardens founded by Osgood Makenzie in Loch Lyn. She describes the process in detail, talking me through the decision-making process and practical implications:

> "The first idea was to, actually go to the most severe environment that I could go and try and make it work there, so I looked at the Outer Hebrides and I was fascinated by other people who had tried the same thing. I found one or two examples of people who had done exactly what I would have done if I'd been there. They had planted trees which changed the microclimate, changed the soil by carting hundreds and thousands of tonnes of stuff from one place to another, mixing the sands and seaweed and peat. The only really successful site I could find was Inverewe Garden, which you may have heard of? Osgood Makenzie in the early Nineteenth Century, inherited a barren island in the middle of Loch Ewe, which he turned into a tropical garden. It's famous because it's the same latitude as Moscow and you've got palm trees growing there."
>
> (Interview with Olivia, 2015)

What Olivia saw there, she decided to replicate in Wales, where the climate and growing season was more favourable. Showing her traits as a Satisfied Resilience Builder, Olivia loves a challenge, so whilst she does grow plenty of potatoes, she decided to attempt to grow the least expected crops for the given climate and she ended up with oranges, apricots and satsumas:

> "I thought, *What's the most difficult thing I can grow that's even possible?* And people could say, "You'll never grow strawberries there". Rubbish, I can grow strawberries easy! I thought: *what is really difficult? What do I like that I would have to import?* Answer, oranges … Well, how do you grow oranges then? I looked around a while and found no real solution then, you could say it was a bit of luck, a bit of inspiration, I saw a glass dome so in the end, with the last of the money that I had invested, it went on the glass dome, a geodesic dome. And they had never known anybody plant up one of their domes, people took orange trees in and

out, in the Home Counties (use it as an orangery) but I had to keep my stuff in there all year round. It's very windy on the marsh and all the earth inside it, once it had been built, had to be removed because it was glacial clay, most of it, with peat on top and so I was into the business of creating soil. Just like the Eden Project ... they have a project for making hundreds of tonnes of soil a year out of a mixture and I was doing the same and it's about four and a half feet thick now. And this year I have got two mandarins, a satsuma, a navel orange and a lemon, nectarine and apricot and basically, they are just growing like mad."

(Interview with Olivia, 2015)

And with her geodesic dome, Olivia has even found an innovative alternative to air miles and holidaying abroad:

"It's obviously a bit freaky to grow oranges in mid-Wales but I have several hundred a year. They are not as good as bought ones but there are no air miles in them and in terms of cost, these oranges, if you factor in the cost of building the thing in the first place, each orange is worth several hundred quid! Well, it was at first, the cost is going down year by year. But of course, I also save on holidays because I don't need to go to the Mediterranean, I can just walk down the garden and go in the dome. And I have a hammock in there and a wood burner and you're surrounded by the smell of orange trees so why would you want to go away? Holidays are just a thing of the past."

(Interview with Olivia, 2015)

Olivia is modest about her level of skill, and sometimes forgets that others might not all as skilful as her:

"It is, it's an instinct. And, of course, for the people that are doing it, it's so obvious that you wonder why everybody isn't doing it and you can't imagine why people do anything different. But of course, when you try and look at the world through other people's eyes and look at what you're doing, you realise that you are more than a little odd."

(Interview with Olivia, 2015)

Vangelis is clear that what he grows must be useful: "generally people have plants that you can't eat. I tend to go for plants that you can eat" (Vangelis). He grows things at home, and also has an allotment:

"we have an allotment so most of the vegetable growing happens at the allotment, really. But you know, I've planted fruit trees and fruit bushes and herbs at home. I am trying to go towards more edible/ medicinal plants when planting at home. I hardly ever go towards functional; I call it functionary garden plants … I'm not a specialist about the benefits of herbs, you know, so I don't know that much. I do use herbs, I'll use sage and thyme and marjoram, I'll try and eat more and more of things like that. I'll put some marjoram in the salad, for instance, or mint, and so on, really. I'm a lay person when it comes to herbs."

(Interview with Vangelis, 2015)

Like most of my participants, Ffraid combines her main creative skill with horticultural and culinary endeavours:

> "I compost, I've got my own garden, well, I will have, in the new house. I compost and I have a worm bin, so I can get some worm juice … Actually, in my new house, I am going to be upcycling a little bit, using my tiles for the stairs and I'll be painting the floors instead of carpeting them. I've painted upstairs, so I've painted the floors. I make my own sauerkraut, I make my own kombucha, I make my own kefir."
>
> (Interview with Ffraid, 2015)

Growing vegetables is a common thread which links most of my participants, but the Welsh climate is a limiting factor as to what one can grow and how easily. Those who rent (and thus have a less secure abode) along with those without a polytunnel, are more constrained as to what they can grow, which put me in mind of Sandover's (2015) point: "whereby conventional land-ownership politics are often entrenched in rural hierarchies", and that: "This defensive localism contributes to the perpetuation of systems that restrict access both to land for small- scale growing and to food" (153). Olivia reflects on a similar theme:

> "The freedom that I then had when I retired, it was implicit in my own mind, what I wanted to do was to get out of the system, to be unconnected. To be unconnected, as far as it was legally possible to be with the system, which of course involves being as self-sufficient as you can manage and again, there's a slight hypocrisy, well, quite a big hypocrisy in that it also involves having enough land to live on and there's not enough land in the whole country for everyone to have enough land to live on unless they work in groups and I am not a groupy person, I wanted to do it on my own."
>
> (Interview with Olivia, 2015)

There was certainly a contrast in outlook between those participants who were able to plan for self-sufficiency, and those who did not have that luxury. Sandover (2015) believes that in answer to the elitism, there has been concerted effort to make the "self-provisioning" of fresh food a reality via an increase in the skills needed to grow food, for example, allotments (153), and it was one of the aims of the Forest Garden to get people involved in food production. This is important, as according to Sandover (2015): "Learning to grow involves intimate bodily engagement with the material of the allotment that results in moments of consumption of the produce." (154). This idea fits very well with what motivates the People-led Pragmatists to build resilience. Additionally, the fact that many of my participants mentioned how much they like to grow 'unusual' crops for the joy of a challenge, which relates to the motivations of my Satisfied Resilience Builders. I get the sense that they like to push the boundaries of what can grow in the present west Wales climate, and the satisfaction they gain when something works is inspiring.

4.2b Skilling Up and Passing it on

Hopkins (2008a) believes that reskilling is essential for building resilience, and I wanted to find out how much reskilling, or 'skilling up' was going on. These results are in response to the research question: *How did they learn new techniques, and did they teach others?* Many of my participants are actively engaged in learning new skills, and they enjoy the process of passing those skills to others:

> "I was thinking last night, actually that once you've taught someone else and they start, that's quite special because that's never going to leave them, no matter if they really carry it on, or not. And then, you know, if they pass that onto someone else, that's quite a special thing, isn't it? Your mum taught you when you were little but then you didn't do it for ages, so when you started again, you taught yourself, did you? Yes, cos she lives so far away but I had some kind of… You had a muscle memory or something… I must have done! It was really weird because that must have been like, twenty odd years…"
>
> (Interview with Whiskey Sanchez and Gin Jones, 2014)

> "My Granny taught me to knit when I was five, my Mum taught me to crochet when I was about twenty-three or twenty-four, I've never really not done it. These days I'm knitting mostly in acrylic because I can't afford wool. I can spin, I can weave a bit, I learnt all that in Kerry".
>
> (Interview with Helen, 2015)

These responses are all very practically minded, describing a concrete application of skill sets. This is something that Franklin et al. (2011) pick up on, as they received responses that are similar in nature:

> "the majority also expressed doubt about the value of talking about skills in an abstract way and were critical of the extent to which such a discussion would be capable of capturing the complex array of factors which actually influenced people's engagement with sustainability projects at the local level."
>
> (354)

Olivia, who has a wide array of skills, makes a similar point:

> "some members of the permaculture group are complete junkies on training. I am sometimes in considerable awe of the skills they've picked up. They are much more scientifically and experientially based in what they do. A lot of mine is trial and error, suck it and see but one thing which I have, immodest I suppose, to say it like this, but it makes sense, it is true, is that I have more skill than the average in the use of woodworking tools at the macro level."
>
> (Interview with Olivia, 2015)

Many of my participants responses involved either having skills passed on to them from family members or teaching their own children. Whiskey Sanchez made the point that: "Well, yeah, I think kids pick up skills anyway but if it's fun, if the kids see you enjoying things, they want to have a go as well" (Interview with Whiskey Sanchez, 2014). In a similar vein, Sandover (2015) examines whether getting children physically involved in gardening, and then making their lunch from the produce that they have picked, can change the relationship they have with food and healthy eating for the better. The children who were involved with the allotments did some tending, planting, harvesting, cooking and eating, over a period of two years (Sandover, 2015). A similar project was undertaken at the Forest Garden by Vangelis, who taught local primary school children the basics of where apples come from and how to grow food, I appreciate the way in which he aims to involve the children in the whole cycle:

> "I've been bringing the school to the forest garden for the past five to six years and often I'll do my upmost to teach them about planting trees, how to... getting them to pick fruits as well, so they can see where the food comes from, show them the whole cycle…."
>
> (Interview with Vangelis, 2015)

Sandover (2015) points out that by allowing people to be engaged with the processes involved in producing food, through community food projects, it allows them to develop more grounded skills with hands on experience. Sandover (2015) explains that: "The food growing experiences had already developed the children's sense of being close to the earth and given them some appreciation of the process of growing food" (157). Getting children involved seems like an important factor if we want to build resilience, and Vangelis's work at the Forest Garden with local schools can only be a good thing in this process.

4.2c Community

When it came to my research question: "*Do people who are engaged in resilience building undertake this as a solitary activity or are they involved in a community group, or both?",* I rarely received answers in ways that I could have predicted. In combating the 'twin challenges' of peak oil and climate change (Hopkins, 2008a), Kenis and Mathijs (2014) state that the Transition Movement: "advocates the development of resilient local communities to deal with these challenges in an adequate way" (172). Whilst this is a key aim of the Transition Movement, indeed, Quilley (2012) states that there are: "in some areas schemes for shareholding and co-ownership schemes in relation to community farms" (23), it is noticeable that amongst my participants, not everybody responds positively, and many people

are more inclined to go it alone. One such example is Broceliande, who hasn't had much success with joining community groups:

> "Erm, I'm a bit of a loner so I'm not really arsed about social interactions, I just like to do things around my own house, in my own garden. I love the idea of a community that all works together and everything's great etcetera but, I don't know, I mean, it's hard for me to find (especially where I live), a group of people, maybe my own age. When I have sort of ventured into that kind of world, it's mainly be people a lot older and even that there's not meant to be, there's still a lot of hierarchy and everybody's got their own ideas about how to do stuff and I am not very good at kind of thing. The way I like to work, I just try to do what I want to do and if it doesn't work, I'll just try to do it differently, or try something different the next time. I don't like having to do stuff because it's like, the consensus or something, I just like doing things on my own, so I'm not really all that compatible with group community actions, community groups."
>
> (Interview with Broceliande, 2015)

Helen also expressed similar concerns, as she found that trying to join groups didn't really suit her:

> "It's been a long term wish to be more part of a community; at one stage I was thinking of actually living in a community. But this is about life steering you as well, anytime I've moved towards that, or tried to, it's kind of shied away from me. I certainly wouldn't want to live in something like an old-fashioned hippy commune or something, I think people need their own doors."
>
> (Interview with Helen, 2015)

I asked Helen about the way in which the Eco Shop functions as a community and she believes it is one, but in a relaxed way:

> "Well, I don't know, you've got people who volunteer in there that I've never met… and there aren't meetings or community events or, do you know what I mean? It runs and it is a communal activity, but for me it's not community in the sense of bringing people closer together, apart from around Amanda, so yeah, I suppose it is a community in the way it functions on a practical level. … That would be my perception, that could be me because I have a very large streak of loner and I've spent quite a lot of my adult life living on my own"
>
> (Interview with Helen, 2015)

Helen's perception of the way in which the Eco Shop functions is interesting, in that she believes it is a community, but that the people don't necessarily know each other:

> "No, I don't feel part of a community, I enjoy being in the Eco Shop very much, I like the Thursday thing, I enjoy being around Amanda and I think she enjoys being around me, which is very, very nice. I don't know to what extent the Eco Shop really is a community. There isn't a cohesive thing there, I detect."
>
> (Interview with Helen, 2015)

Whiskey Sanchez and Gin Jones tell me about their local community knitting and crochet group. They explain that whilst it is very communally-minded in the way that you might chat about a project and someone else would give you the perfect buttons, or help you out with ideas, but actually getting on with their crafting doesn't happen simultaneously. As it turns out, the group serves more by way of making acquaintance and companionship, and the real work happens when they go back home:

> "They bring whatever they are working on at the time, and they may not actually do much in those sessions when they meet up but it's a social thing- they get the chance to talk, like we have just been doing:- how they feel about what they're working on or they've got an idea for something, or swapping advice, or um, knowledge about the best place where to get something from, or it could be like, 'Oh, don't buy buttons, I've got a whole load of them', you know. So, it's swapping information, swapping materials, knowledge and it's like a really social thing, actually. Now, because there's no actual physical need for it, for what we produce maybe, this is completely social. But then they'll go off and do the actual making on their own. Because, when you're chatting like this, you probably don't get much done"
>
> "That's it! I went to a crochet class around the corner and cos I'd never done crochet before, I found I had to really, really concentrate and as soon as we would start on the little project she had set us off on, no one would talk, because you have to use such a different part of your brain, if you've never done it before … We'd all be sat there in silence! And I thought it would be chatty- kind of no! ..."
>
> (Interview with Gin Jones, 2014)

And Gin Jones declares herself an independent knitter:

> "I think I'm more of an independent knitter, but I don't mind teaching people I know, so I don't really go to groups, or anything like that because I don't know anyone who goes to groups and I'm quite happy to do it by myself, and if it's escapism, that's why I'm doing it- I can't chat and knit, I want to concentrate on my knitting, you know?"
>
> (Interview with Gin Jones, 2014)

On the other hand, Ffriad values the companionship of fellow artists and makers involved in a cooperative, as she likes brainstorming with them:

> "I felt a bit disconnected from artists, it was all in Aberystwyth or Cardiff, I wasn't really surrounded. But now, being in this cooperative, I feel a real connection with the artists and there's people on hand to talk about, 'What does this look like' or 'What do you think about…?'. So, that is really valuable as an artist, valuable for me, to be part of an artist community. The wider community comes into my workshop as well, so that's really nice."
>
> (Interview with Ffraid, 2015)

Whilst Olivia is an independent person, she relished the companionship she discovered amongst fellow permaculturalists:

> "And so, as a founder member thereof, I felt incredibly privileged because I'd suddenly found a group of people who felt the same way as I do! It was obvious, it was taken for granted … But in terms of what you originally asked about, community and so on, it was an enormous advantage to have been able to join up with other like-minded people in the permaculture group. I acquired a sense of community that I'd never had in my life, never, I'd always been a loner and I'm still a loner. But I'm not alone in being a loner and all the people who do the same thing, we understand each other so well, it's like being in a community. But it's not the community people can automatically point at and say that's in a specific place, it's a community of minds and a community of intention. And, of course, the Transition Town movement is very similar, it is more localised but you're very lucky if you've got all the people in the area to believe in it- quite the opposite normally, it's a minority sport, difficult work."
>
> (Interview with Olivia, 2015)

Myfanwy is one of the most community minded people that I interviewed:

> "I have my community of interest, that's the permaculture group, but I have other communities of interest, so I'm in a community woodland group, so that supports me a lot and what I realised, or re-realised, if you like, when I came back from Ladakh, is that there's a very strong sense of community still in Ladakh, even though it's being eroded by external forces … but, when Horace and I first moved to west Wales, we went out of our way to walk around the village, we had two dogs then, so we'd walk around and we'd say 'hello' to people.
>
> I'm not to say you shouldn't look outward and be outwards looking, but you wouldn't need so much external stimulation because it was all happening inside because of the diversity of the people and what they grow. And, that's what you find in the permaculture group, you know, not everybody likes each other equally in the permaculture group but everyone's interesting, everyone's different, everyone's got their own thing that they do and knowledge and skills to share. It must have been like that in the village once, where you'd go to one person who really knows how to do that and another person who knows how to do that and it saddens me because, as humanity becomes more mainstream and globalised, we lose touch with the fact that we can create that abundance for ourselves and that diversity."
>
> (Interview with Myfanwy, 2015)

In my Introduction, Greta talks about the necessity for community, and the absolute interconnection between villagers in Zagersdorf (see Section 1.3), but several of my participants only perform resilience building activities with others in order to accomplish a specific project, or sometimes for a looser sense of kinship and an opportunity to share ideas. In the Zagersdorf described to me by Greta, people *had* to pull together in order to function. But this was prior to modern-day luxuries such as plumbing. Nowadays we have the (many would argue temporary) luxury of independence as a result of modernized, globalized lifestyles and long supply chains.

4.2d Permaculture and Transition Initiatives

Olivia has completed a permaculture course and is a founder member of a Permaculture group, she is a strategic and deep thinker (my observation) yet in the garden, she is governed by instinct and doesn't always follow the rules:

> "I felt a certain degree of annoyance sometimes at permaculture as a system, in that it's so much, well it can be, so much theory. I'm interested to see that Bill Mollinson has recently been accused of denigrating theory by saying, 'You've got to do it by the seat of your pants, you've got to do it by instinct' because I always was, I'm not interested in guilds of plants, I'm not interested in doing things by a book, I just look at a site and think, *What will fit in there?* I do it backwards, I sometimes get it right, sometimes I don't. I've noticed that a few permaculturalists do it backwards, as well, which is interesting because permaculture seems like this great big theory but when I've seen people do it on the ground, they're just being quite instinctual."
>
> (Interview with Olivia, 2015)

Helen is very knowledgeable about sustainability and the cause and effect of environmental and social issues, yet she finds organised movements a bit lacking in an emotional sense:

> "I'd been very much trying to live out this whole self-sufficiency thing, which was very ideas based, it was very male, very sort of like, theory and ideas, you know? Permaculture has a bit of the same strand through it as well. It's not totally from the heart, yeah?"
>
> (Interview with Helen, 2015)

Vangelis has much the same feeling about the Transition Movement:

> "I think this area already had a lot of people doing stuff related to sustainability before the Transition Towns Movement came about, so, in a way, a lot of people just said, "Well, we're kind of aspiring in that way and doing as much as we can in that way, so do we really need to set up a new organisation?" Not really…."
>
> (Interview with Vangelis, 2015)

Connors and McDonald (2010) express a similar sentiment about the Transition Movement in Totnes, as they lament a tendency in the management style to be undemocratic, inflexible and top-down, in short, too masculinist in nature. When we remember that many permaculture principles inform the Transition Movement, this links both Helen and Vangelis's critiques, and Olivia makes the point that a top-down approach might really put new people off from engaging with resilience building, because for: "those who are already thinking like that, for them it is obvious but for other people, it's such a problem. It's because they are fed all this stuff from the media and from politicians" (Interview with Olivia, 2015).

4.3 Instinctive Resilience Building

Whilst various people are interested in the theory of resilience building, permaculture design and sustainable lifestyles, when it actually comes down to it, they often report throwing the book out of the window and just going for it. Some even say that the theory aspect is onerous, off-putting

and in other words, masculinist. All of my research participants are building resilience in one way or another, and all are actively engaged with the heads, hearts and hands, of energy descent (Hopkin, no date), yet they are not affiliated to any official Transition initiative. Despite this abandonment or non-engagement with Transition Culture, the 'head', 'heart' and 'hands' naturally revealed themselves from the results, without me having imposed it upon them. I believe that these results are central to my theory that on the ground, people were more willingly and actively engaged with 'transition culture', rather than 'Transition Culture', and many of my participants felt a sense of bemusement at the idea of the need to be 'educated' in order to fully participate in building a more resilient future. I would not go as far to say my methods were scientific, as with my background in traditional sciences, I feel it would be disingenuous. But there was a degree of objectivity at work of which I am extremely proud and which I believe lends a degree of credibility and even rigour to my findings. What I enjoyed most about the responses I received was that although there was naturally a great deal of crossover between my loosely defined motivational groups, most of my participants fitted within the 'Satisfied Resilience Builders', and the 'People-led Pragmatist' groups. The 'Theory-led Resilience Builders' are actively engaged because of a strong sense of conviction, but satisfaction is commonly cited as a motivation across the groups. The delight and pride in having accomplished something yourself seems ubiquitous.

Chapter 5:

The Resilience Perspective in Everyday Life

5.1 Flashes of Insight

Whilst coding and analysing the data from the semi-structured interviews, some unprecedented and striking themes emanated. Quite unpromoted by myself, these fascinating insights were way beyond the scope of my comparatively dull research questions, and I didn't realise these themes were in existence until I was immersed in the analysis process. According to DeWalt and DeWalt (2011), when analysing data (in this instance, field notes), flashes of understanding can appear to occur out of the blue, but these flashes occur because the subconscious has been processing all our careful notes, themes and categorisation all the while. This often results in a re-working of concepts, perhaps a return to text in order to test the new hypothesis:

> "While one aspect of analysis is the logical, sometimes tedious, building of descriptions and arguments by reviewing and organizing materials into categories and themes, some of the connections between observations and the insights that form part of the process of analysis take place subconsciously. What we experience is a "hunch", an "aha!" or "eureka!" moment, an insight into connections among various events. In a flash, things make sense, or, in a flash, what we thought seemed straightforward just yesterday become crooked and we see a new configuration. […] behind the flashes of insight is the careful categorization, organization, summarization, and review of materials. Once an insight surfaces, it should be treated like a hypothesis with a return to the data in order to build the clear and logical argument to support it, often with recategorization, organization, and review."
>
> (DeWalt and DeWalt, 2011, 179)

Galvanised by these words, I pursed these new insights, determined to do let my results take the lead. Afterall, as a feminist geographer, I had started out with the express desire to give less heard voices a stage.

Perhaps the most notable theme which people described in their own terms, was what resilience thinkers would not only term the omega (Ω), or release phase of the adaptive cycle, but also factors of the 'revolt' variable (which cascades up the nested adaptive cycles of the panarchy), which trigger

this release. Some people went on to describe the way in which the system will reorganise during the alpha (α) phase and indeed, how they envisage the new paradigm, regime or basin of attraction might look like. It should be reiterated here that indeed, some of my participants did know each other but most did not, they were more related by geography and activity than social ties, and this makes it all the more engaging when we see themes right across the breadth of the participant base.

More findings became apparent during analysis. I discerned that many of my participants where articulate on the interconnection between humans and nature and also, localisation and globalization; and these subjects are discussed in Sections 5.4a and 5.5. My participants had much to say on the conception that everything is interconnected, this came up repeatedly and although not overtly part of my research questions, it seemed important to include. Finally, this unexpected chapter now seems the perfect place for addressing the fourth of my guiding principles for motivation, something which is less often discussed in resilience literatures, but it seems clear to me that people possessed a philosophical or spiritual compass, and I wanted to investigate this further. Indeed, this was one of my research questions and through interviews I received incredibly insightful information about this aspect.

5.2 Participants Describe a 'Late K Phase'

As we enter the Anthropocene, it seems that we're running out of time with which to solve our manifold environmental crises (Brown, 2017; Folke et al., 2016). The concept of a looming regime shift is articulated by several participants; that society is heading in the wrong direction, unheeding warning signs and unwilling (or unable) to change and that eventually, something will happen that will force a change and after this event, people will find themselves in a situation of living within a different set of constraints, possibly one with fewer resources. I didn't know where this idea emerged from, whether it's in the collective unconscious, is based on religion, or is just part of the prevalent zeitgeist. Some participants trace their outlook to a distinct idea or point in time and are very articulate on the subject. Perhaps by way of clue, Helen recounts how in the 1970s, the prospect of a nuclear war was not completely out of bounds, "a lot of us were very frightened there was going to be nuclear war and western Eire would have been somewhere where, probably, we would have survived" (Interview with Helen, 2015), at which point she first started resilience building. More recently, Helen has other concerns as she is not comfortable with our current trajectory:

> "There were lots of other bad things going on when I was young, it wasn't a golden age, it was awful but at the same time, there's something happening at the moment which is not good. Not good at all. I would generally concur, I'm not really very easy with the social climate these days. I think that's putting it mildly, really. I suspect we are heady to some sort of crisis."
>
> (Interview with Helen, 2015)

She frankly discusses the possibility of the collapse, or omega phase, and whether we'll see a slow decline or something more sudden and traumatic:

> "Back in the day, back in the 70's, there was a lot of feeling that the existing way of doing things would collapse sooner or later because it was not sustainable. We hadn't got the word 'sustainable', we wouldn't have used it, but it would not continue. I kind of realised that we'd be better off with a long slow decline, rather than a sudden collapse because with a sudden collapse, people panic- they start robbing food from each other and shooting sheep, killing each other and all the rest of it. Whereas with a long, slow slide, there's a chance to get some alternatives in place but at the moment, I feel we're looking at what could be the beginning of an actual falling apart."
>
> (Interview with Helen, 2015)

This is really interesting, as not only does Helen describe her perception that our social-ecological system is in a late K phase but also, that we might face a disastrous shock or, if we are lucky, we might experience a gradual decline, where we might try to navigate through the chaos, or to manage by change, as espoused by Folke (2006). Helen traced her ideas back to the 1970s and Olivia has been uncomfortable with our current system since she was a teenager, and recently we have witnessed ideas around the environmental debate which bear a temporal element. We see the idea of temporality being expressed here by Olivia, who wonders whether we'll change our behaviour in time: "I think the world will force people into behaving properly in the end, but it may be too late when that happens, but I can't see any other agency causing that improvement." (Interview with Olivia, 2015). The Transition Movement began with a focus on the timing of peak oil and various high-profile environmental narratives warn that time is running out for us to halt climate change or species extinction (Brown, 2017). It is natural to suppose that this emphasis on time being limited may in part be responsible for participants talking about an unspecified event happening in the future, which will bring about a radical change in our circumstances. We are also living at a time when many believe Biblical prophecies have and are being fulfilled, one of those prophecies being Armageddon. I hadn't anticipated so many of my participants would autonomously 'articulate' similar ideas, as it was never a part of my research questions, I didn't think to ask people where these ideas came from and I only noticed it was a theme during the transcribing process. The idea that we only have a given amount of time left before something big and bad happens was voiced by permaculturalists, Eco Shop volunteers and individuals who grew

vegetables or simply knitted for pleasure. Not everyone was looking forward to this implied event, yet the people who mentioned it seemed believe it would be an opportunity whereby their resilience building activities would be more widely recognised to be useful and of value. But first we'll look at the temporal aspects, such as when Oliva talks about the looming crisis and the timing of this omega phase, as she believes it will come sooner than she previously worried:

> "Well, yes, except the concept of peak oil, although phrased like that is comparatively recent, the idea that the world was going to come to a sticky end was pretty obvious to me from teenage years- just look at the amount we are consuming. I wasn't thinking specifically about oil, to be honest, I was thinking about everything that we consume has a finite supply and yet we appear to think it has an infinite supply. Those two concepts are going to run into each other, sooner or later and it looks as though it's sooner than I expected. The oil question, I think we've passed peak oil already. And as for climate change, well, I knew that the global climate was warming but so did anybody who read about it but it's a very, very slow rate. The rate that we were told when I was young was about a degree every three thousand years, that was an inevitable by-product of the sun's development so, to see the acceleration in the last decade has been heart-breaking because you realise that what's happening now is our intervention, our interference, though not deliberate, has actually put the environment under a strain which is it not going to be able to adapt fast enough to and cope with. And sooner or later, things are going to start going severely wrong."
>
> (Interview with Olivia, 2015)

Olivia doesn't seem to think we are succeeding to manage by change, she thinks that our adaptability is compromised, and I find it fascinating to then listen to Broceliande who believes that peak oil has been delayed through practices such as fracking and thus we are ever extending our late K phase:

> "Well, I'm not really concerned about peak oil, as such- I'm more concerned that they keep finding loads more oil! It seems like peak oil, I don't know… is something that is really far away."
>
> (Interview with Broceliande, 2015)

Along with Bardi (2019) (see section 2.2f); Hunt (2016) also supports Broceliande's outlook, that peak oil does seem to have 'gone away', in part due to the United States utilising new technologies, such as fracking, which has increased oil supply:

> "the US was able to turn around a multi-generational decline in oil production with new technologies. And it does give pause to even the most cautious peak oilers because we now have very good proof that oil production can change and change big, in just a few years."
>
> (3)

This means that specifically in terms of 'energy descent' (Hopkins, 2008a), we may have managed to fend off the late K phase - for the time being.

5.2a A 'Regime Shift' is Coming

I was fascinated to note that people had even gone so far as to have a term for this event, their language connotating their feelings about it. Olivia called it a "when society disintegrates" and a "sticky end", Helen calls is a "falling apart", a "collapse", a "crisis" and a "long, slow slide", Amanda calls it a "catalyst", whilst Gin Jones and Whisky Sanchez told me about a "zombie apocalypse". In resilience thinking terms, some can see a stuttering happening in our social-ecological system, which is a precursor to a release phase or late K phase, as Folke (2006) points out: "Recent work suggests that complex systems ""stutter"" or exhibit increased variance at multiple scales in advance of a regime shift" (262). I believe it is this 'stutter' that my participants have observed, such as when Olivia talks about the warning signs:

> "The amount of extinction that's going on through climate change is already one instance, the spread of deserts, the increase of climate violence, the enormous storms, the things which are going wrong in Africa in the climate, nothings predictable anymore. But if you look historically, I mean prehistorically, of course, it wasn't predictable over those periods either. We've been living in a comparatively cocooned period of a thousand years or several thousand years in which the climate varied but not that much. We're now coming up against the end of the inhabitable period of the Earth, unless we do something really serious about what we are doing, the way we live."
>
> (Interview with Olivia, 2015)

If Olivia is right, we should all be 'shuddering', or expressing adaptability (Folke 2006). But whatever terms my participants use when describing this forthcoming event, they all concur with a resilience thinking perspective. They appear to be predicting the adaptive cycle release phase, when a catalyst (perhaps a small forest fire) sparks a much more impactful event and a regime shift occurs; when thresholds have been transgressed, resources are released, and the reorganisation phase is entered, and nothing will ever be as it was henceforth (Walker and Salt 2006). At a superficial level, Whiskey Sanchez and Gin Jones appear to be joking about a possible "zombie apocalypse" and much laughter was shared all round during the interview. I couldn't help feeling there was a smidgen of serious undercurrent however as they mention survival skills, self-defence, and the fact that being able to knit and crochet would be quite a valuable skill to have, especially following an omega phase:

Whiskey Sanchez	"It's quite a skill to have, even if you weren't just doing it for yourself, I think it's quite a good skill to have, like, if there were an apocalypse, or something."
Gin Jones	"Yes! We're useful!"
Whiskey Sanchez	"You'd be a useful person to have around, wouldn't you?"
Gin Jones	"I always talk about this, when the zombies…"

[laughter]

Whiskey Sanchez	"You're going to be the person making jumpers!"
Gin Jones	"That'd be really useful"
	[laughter]
Whiskey Sanchez	"Yeah! Exactly! And knitting needles can be used as self-defence too"
Sanchez and Jones	"'cos it's a skill."

(Interview with Whiskey Sanchez and Gin Jones, 2014)

5.2b Permaculture Lifeboats and Communal Living

As fascinated as I was by what had been already been said, when both Oliva and Amanda revealed that they were already managing through change in order to try to face this regime shift in best way they can, my level of engagement with these ideas intensified. We'll see that while both individuals are already actively preparing for this eventuality, Amanda is more optimistic about it than Olivia is. Helen has already mentioned her fear of a sudden collapse and people turning violent and stealing and Olivia is worried that thieves and bandits will come upon functioning permaculture homesteads, which she calls "lifeboats". Instead of cherishing those who have the know how to grow food, will steal the food and possibly destroy the set up. Olivia is worried about bands of robbers arriving, whom she sees as a threat. She supposes they will lack the knowledge of how to tend the garden and will plunder and destroy the resources, and she is already preparing for this future time it by allocating extra room to grow food. She tells me that other permaculturalists are doing this as well:

> "I'm aware of the fact that life is quite possibly going to get more difficult for our society as the different constraints close in on our economic system and you have to have a sense of what is important and what is not and of course the most important thing, apart from being kind to each other, is getting enough food, that's the number one thing, shelter is the number two thing but shelter's not as difficult. Food is the really important one. I think a lot of permaculture people regard themselves as a kind of lifeboat, I know I do. But I've actually, within a seven-acre plot, I suppose it's not that big amount, but I've put three acres down to food. Of course I don't need that much, I just let the birds have a lot of it but it's there and if there is a need, I mean for instance, I can put a fence or a net over it and I can take an enormous amount of surplus off the land, which won't do the land any harm but it will feed extra people. And I've got extra growing space for people, for people who want to come in, if they ever do. My horror is that what will actually happen is that when and if society disintegrates, the people who are creating these sorts of environments are actually just going to get expropriated by robber bands who will not know how to keep it going. They will just take the produce and destroy the source of the produce. That is a possibility, but you'd just never do anything if you thought that all the time."

(Interview with Olivia, 2015)

This very much reminds me of Kenis and Mathijs's (2014) idea about localisation, which to some people: "acts as a local haven of refuge against ""the coming storm"" (178). Amanda explicitly talks about "a catalyst" as the trigger point for the regime shift. Unlike Olivia, who is worried about the thieves, Amanda welcomes them into her hearth and reasons that in order for them to have found her hideaway in the first place, they must have a good degree of wherewithal and thus could be put to good use as part of the community! In fact, she is enthusiastic about this future event, as she believes it will bring about the changes necessary for more people to live sustainably. This is reflected not only in the vivid way she describes this future scenario, but by her choice of language as she specifically calls it her "fantasy future", and her metaphor implies she is willing this event to occur:

> "In my fantasy future, the world's gone, the catalyst has happened, and we've got a lot of people looking for food. It's gone very basic and I've got all this bedding and lovely carpets at home and I spread them out, Moroccan style and lots of people can come and sleep. We tidy it all up in the day and everyone all meets in that same space and if someone comes looking to steal, or what have you, you can welcome them in- by the time they've managed to get here, they must have something about them (laughs)! You give them a tool and they get working the land because, actually, we're short of, what I personally am short of is muscle power."
>
> (Interview with Amanda, 2015)

I find it illuminating to compare the four post-peak oil (the timing of this event notwithstanding) scenarios described by North (2009) of which we could have a mix. The first scenario is an elite strategy of neo-conservatism, in which we see climate inspired conflict featuring a military and political struggle for resource domination (North, 2009). The second scenario, also an elite strategy and favoured by climate change sceptics, envisages a technocentric 'cornucopia' whereby problems will be solved creatively by technology, someday in the future (North, 2009). In this scenario, future generations will be better equipped to solve climate change problems and also, the very same creativity that produced the recent digital evolution will produce the technical solutions to climate change (North, 2009). The third scenario is, like the second scenario, fairly optimistic, except the emphasis is on grassroots-led local solutions, localised economies and communities, which are relatively resource poor yet rich in enjoyable livelihoods (North, 2009). This is where transitioners and Transition Culture find their niche and it is here that we see Oliva and Amanda's energy is placed, and I note that North (2009) acknowledges a culture rich in satisfying livelihoods, which is discussed in Section 5.5. The fourth scenario is like the first scenario in that it is reactionary and pessimistic, in that it predicts the total end to travel, and sees those who have

resources as the victors (North, 2009). This scenario imagines social struggles, fuel poverty, societal breakdown, and fighting local tribes, much like in the film, *The Road* (North, 2009). And so, North begs the question, "is localisation just a form of survivalism that stresses gardening rather than guns?" (North (2009, 587). It is very fitting to think about this with regard to what Helen, Olivia and Amanda have all said about the arrival of post omega phase thieves.

I adore the fact that Amanda and Olivia have clearly spent time thinking about ways in which they envisage the future and are both actively putting practical systems in place in order to prepare. This reminds me of resilience thinking, as when social-ecological systems undergo disturbance, Folke (2006) suggest that this "is part of development, and that periods of gradual change and periods of rapid transition coexist and complement one another", and so the very process allows new and reconfigured connections, and new relationships between elements within the system to emerge, and to develop resilience (259). I like the way Amanda has already imagined the triggers and how she would respond to such an event. Not only that, but she is also looking forward to it and she frames it in a happy way, she even calls it her "fantasy future". I find it fascinating that she envisages people who would come to steal as someone to be welcomed. I am amazed that Olivia also thinks about this scenario. As far as I know, Amanda and Olivia do not know each other, yet they express exactly the same idea, but Olivia views it as a threat whereas Amanda see it as an opportunity! This difference could come down to personality and life experience and perhaps it does, as Amanda has considerable experience of communal living, and she articulates the idea of 'community glue'.

5.3 Community Glue

As this was a reflexive ethnographic research process, I allowed myself to be guided by insights form my participant observation experience whilst I was in the field, yet I was miserable because what I had read hadn't helped me as much as I had hoped. I was feeling stuck, but one day, whilst working in the Eco Shop, Vangelis said that he didn't have much faith or hope in the government: "I think people need to get together in their own communities and get on with it, really. I'm hardly ever inspired by government, actually." Something about this statement struck a chord. I perked up immediately and decided that for a while, I'd stop reading the literatures I thought I was 'supposed' to read and instead, I'd meander the paths I found truly inspiring and uplifting. This brought to my attention, Glen Ochre's interpretation of 'community glue'.

Ochre (1996) co-founded a sustainable commune in Australia and from her experience she writes that whilst we already have the solutions needed to live benignly on the Earth, we lack the ability to live harmoniously with each other. The missing ingredient is what Ochre (1996) terms 'community glue', which she describes as "the 'stuff' that happens below the neck. It's very important yet much of it is intangible." (12). Fundamental to Ochre's (1996) understanding of community are two words, interdependence (that we all are essential to each other to some extent) and intentional (that our belonging is something we choose). Ochre (1996) sees community as something which is nowadays still existent yet incomplete, moreover, she believes that we may have a collective memory of it and that we're seeking ways in which we can restore healthy and full community, "Community is the belonging that at some level we all long for. We had it once and, in part, we've still got it. It is as if we almost remember it, perhaps from hundreds of years back. In a way, we're trying to go back to find those connections and that belonging and to find new and relevant ways to live it." (Ochre, 1996, 12). In fact, Ochre (1996) sees this connection as going back to our ancestors and she believes that it persists, bonding people in a deep way. In order to make viable communities and to forge better ways of living, Ochre (1996) thinks that we need to kindle this ancient people-to-people connection, our ancestral kinship.

Without using the term, Amanda refers to the concept of community glue; she realises there needs to be a social factor to bond people and she has imagined what it would look like in her fantasy future. She refers to this twice, firstly via the nightly community performances and secondly when she recollects the community she experienced amongst women when she lived in Morocco for a time. She imagines a future where, like William Morris's (2008 [1888]) vision, people share the irksome and less desirable tasks of daily life. In my interview with her, Amanda explains how the community is enriched by having its own stars, not needing to seek external celebrities:

> "The thing is, that in my fantasy future, that holds them, holds the people that have come- that holds the loyalty and the joy and that keeps life you know- having done something quite gruelling and difficult, in wet, cold conditions, or whatever it is. The children have organized a show for the evening and there's celebration and family and they're the stars of the show, the people that you live amongst, so your pop stars are the people that you live amongst and everyone can be a star in their own way. So that's sort of validated that side of life."
>
> (Interview with Amanda, 2015)

She then reflects on her experience living in Morocco, where the community among women was strong and again, people bonded through the sharing of manual labour:

> "I lived in Morocco for a little while and I didn't have a lot of shared language with the women and the worst bit of that was not being able to understand the gossip when we were washing clothes and you know, it was definitely a group activity. We sort of had a sign for washing clothes, "Come on we're washing clothes". And also an opportunity they gifted me, 'cos I had a little baby on the tit and you know, I'd get half way through and she'd want a feed and then I'd sort of be doing that and then they'd finish their washing and take over my shitty, snotty, bloody washing and do it for me and that was like a really sisterly sort of bonding thing to happen."
>
> (Interview with Amanda, 2015)

Essentially, Amanda is talking about the community glue of Ochre (1996) but her ideas also tally well with Morris's. In his utopian novel, *News From Nowhere*, Morris (1951 [1890]) describes the way in which people share the less pleasant tasks and make them more enjoyable by working together or treating them more as something like a sporting event.

5.4 Everything is Connected

Both ecofeminists and resilience thinkers 'talk about' the concept that everything is connected, or all is interconnected- the idea that humans, nature and animals all exists in a web of life, one affecting the other, that nothing happens in isolation (Adams, 1993; Orenstein, 1993; Ruether, 1993; Gadon, 1995; Walker and Salt, 2006; Folke, 2006). This interdependency is acknowledged by ecofeminist scholar Adams (1993), when she tells us that: "Acknowledging our embodiment directs us to our interdependent relationship with the human and nonhuman world and the uses we make of other people and the rest of nature" (8). Adams (1993) suggests that we come to accept when we embrace our corporeality, which of course, we might do, through activities such as resilience building and making. Astonishingly, this very notion was spontaneously mentioned by five participants, Helen, Vangelis, Myfanwy, Olivia and Ffraid. In general, participants describe a common-sense observation of interconnectivity. Helen moved from England to Eire in the 1970's, in order to lead a simpler life but she soon discovered that she was just as connected to the wider world there as she was anywhere else. Eire had recently joined the European Union and many farmers were in receipt of farm subsidies and thus set about intensifying their agricultural production (with associated environmental problems such as over grazing and eutrophication of the rivers from fertilizer run off, she notes). Helen was taken aback to realise that she lived very much in a globalized world. She comments how this revelation has stayed with her ever since and informed much of what she does:

> "But the learning I got out of that time was how interconnected we all are and that's been a motivating thing for me ever since. Eire went into the EU, or the common market as it then was, the same time as Britain but embraced it a lot more enthusiastically and a lot of farmers were modernising with grants, and

> they were doing stuff that ultimately was quite destructive to the environment, like we had really bad nitrification of the rivers, for example, because people were putting on artificial fertilisers and there was run-off."
>
> (Interview with Helen, 2015)

This made Helen think about the interconnected nature of all things, as she sums up: "I thought I was going to this remote place and I realised it was just as much part of everywhere and anywhere else and that stayed with me over the time" (Interview with Helen, 2015). On the other hand, to Vangelis, it has always been quite clear that everything is interconnected, so sustainability is to him, the only thing which makes any real sense:

> "Well, I think everything is connected so I don't think one thing can be sustainable in isolation so, in a way, everyone needs to become sustainable, that's the only way it will work. At the end of the day, no one can be sustainable by themselves because we are all so interdependent…. Countries depend on other countries, people depend on other people… a really good community is one where people keep an eye on each other and there's a lot of contact with each other, that's a healthy community."
>
> (Interview with Vangelis, 2015)

Ffraid, talks about her connection to nature and how she weaves this into her ceramic work:

> "OK, well, it has come from my reverence of nature, I love gardening, I love growing herbs, I love the medicinal properties of them, I love the fact that butterflies and bees ... you know, we need the hedgerows to be abundant with all these flowers and we need to be coming back to nature a bit more. I also believe that there's an energy with these plants as well…. They just help us to live and it's that connection that I try and put into each tile. It's just amazing, you can't help looking at a lovely grass or sage and just smelling it and then put into clay and it has left that print forever."
>
> (Interview with Ffraid, 2015)

Ffraid's statement encouraged me to remember Gauntlett's (2011) idea, that: "When witnessing and appreciating the output [of creativity], people may sense the presence of the maker, and recognize those feelings" (76). This seemed a wonderful example of the power of making, in forging connections between people. Conversely, it also reminded me of my interview with Whiskey Sanchez, in which she discussed consumerism and throw away fashion, and she came up with an idea to test people, as she believes we are so blinded by labels and status symbols that we can't recognise well-made product when we see them:

> "You should do a test, like, have three similar jumpers, or something and sew a label into some of them-have one that looks homemade (doesn't have any labels in), one that's got a Primark label, one that's got a Gap label, one that's got a Gucci label, or something, you know, so like, go up the ranks and just see, you know, which ones people gravitate towards and say they prefer. It'd be a really interesting experiment

> because actually they're all made by the same person, with the same materials and take the same amount of time. Just see in some kind of focus group which one people say they prefer, and why?"
>
> (Interview with Whiskey Sanchez, 2014)

Returning to the interview with Ffraid, she started to talk about the connection between glass milk bottles and re-localization, and how local connections have been lost through the process of globalization:

> "I'm going to go into a whole new range of creating ceramic milk bottles. Yeah, the fairies showed me this one (Wow!!). Yes, I needed some guidance and I asked, and I went to a tree and sat under it and there was a milk bottle, and I was thinking about milk, because I was thinking about my project. I was thinking, 'what shall I do? Shall I do this milk project, or shall I carry on just singing the line...?'. Well, of course, they're all connected, you know... freight and transport and walking and industry and loss and heritage and community – connecting … These pieces, there's a lot attached to them, they're not just pieces of clay, there's a whole story behind it, there's that connection with the land, there's connection with the railway and with who I am as a person"
>
> (Interview with Ffraid, 2015)

Finally, whilst Myfanwy doesn't directly mention interconnection, she sees her resilience building activities as part of the whole:

> "So, I suppose, if I'm thinking about it philosophically, by each of us doing our own little bit for localisation and resilience, we are contributing to that whole mosaic, to that much bigger picture of those many yeses, which does help to hearten you, really."
>
> (Interview with Myfanwy, 2015)

In Chapter 4, we saw how people were motivated to undertake resilience building activities through reasons of the head, heart and hands. When I analysed all these striking quotes about connecting and interconnectivity, it came to my awareness that not only did my participants mention connecting in a practical sense, such as the connections within the biosphere, but that they often alluded to the unseen or spiritual forces of life. At first, I tried to fit this in to the 'head' part of motivation, and then I wondered about the 'heart', but both seemed disingenuous. It was as though as an author, I was trying to shy away from the fact that several of my participants were talking about spirit, but eventually I reasoned that it deserved its own category below.

5.4a Holistic Perspective

The overriding sentiment that is expressed in the previous chapter (see Section 4.2d) resonates with my own critique of the Transition and permaculture movements, in that, they lack an

emotional component, or something I can really *feel* into. I've been mystified as to what this lack is, but when Myfanwy and Olivia started talking about the need for a rich culture (see Section 5.5), it clicked into place. What is missing for me personally is the visceral, soulful aspect, and I suspect the feminist perspective is missing. I mused on this and remembered one of my research questions, "*Do ideas or philosophical outlooks which embrace holism, interconnectivity, spirituality, religion, nonlinearity and the unexpected inform their activities, or do they have a more prosaic stance?"* and I started to question was being answered. That there is something ineffable, possibly sacrosanct even, which is driving resilience building activities among my participants. When I thought about all the literature I had read as part of this thesis, the only ontologies I could think of which acknowledged spirit were humanist geographies, anthropology and ecofeminism, particularly in the writings of Adams (1993), Orenstein (1993), and Weil (1993) (See Section 2.4c). Weil (1993) certainly makes the case for spiritual matters to be given more prominence:

> "because I ascribe to the feminist belief that emotions, intuitions, rational thinking, and spiritual insight are all important sources of knowledge and should all be respected and honoured for their validity, power, and truthfulness."
>
> (312)

It became clear that my participants thought along similar lines, as they not only acknowledge an interconnectivity on a physical level (in much the same way a geographer might look at flows between the components of a system), but we also hear reference to the mystical, unseen and spiritual aspects of life. Helen notes interconnection in her personal life, Ffraid is mystical with her belief in help from nature spirits and Helen also connects her ideas to those of shamanic practitioner and author, Jez Hughes. As we weave making, the environment and spirit together in this section, it seems fitting to begin with Helen, who mentions how in her own life she followed a spiritual path and also an ecological one, yet for many years, the two strands were disparate. Sometimes one thread would not be active in her life for many years even. These days however, Helen is experiencing a greater inter-connectivity as her spiritual path and environmental path are becoming interlinked, and feels very reassured by this connection:

> "The two strands had started weaving back together in sort of the last five years, something like that, in a way that feels great because there are feelings of homecoming, of getting the two things that have been important to me back in the same space."
>
> (Interview with Helen, 2015)

Myfanwy told me about how she and her partner Horace's understand the interconnectedness of 'absolutely everything':

> "Well, spirituality, I would say to people I'm spiritual with a small 's', we both are, you know. And I think that for us, our spirituality and my spirituality is about everything being connected. I don't use the term, 'God', if I'm trying to explain it to someone, I might say The Universe, or Higher Self, but they don't quite do it for me, but it is this sense that everything, absolutely everything is connected. And so, whatever I do links into that, for better, or for worse."
>
> (Interview with Myfanwy, 2015)

When I interviewed ceramicist Ffraid, we both made ceramic tiles in her pottery studio as we were experimenting with creative research methods. We made clay tiles and then reverse embossing them by rolling dried grasses over the clay. The tiles were looking great and suddenly Ffraid surprised me by taking a dried sea urchin and running it over the clay, to imprint it with the spines. Whilst she was doing this, she spoke about the connection between the land and the sea and she explained how by using the dried grasses to make imprints into the tiles, she was infusing them with the spirit of the plants and as she rolled the dried sea urchin across the clay, she made 'woosh' noises and showed me how she infused her creativity with spirit:

Ffraid "Yeah. This is my spirit, it comes from the plants! Ha ha ha! Shhhuu, shuu, shuu…"

[*putting the spirit marks in with the sea urchin*]

Me "Oh, wow, look at that! It's spirit. Wow, OK, cool, Ffraid. Wow, that's your spirit! It's beautiful, isn't it?"

Ffraid "Yeah. It just does something, it just…"

Me "It totally does something. OK, so, we're putting Ffraid's spirit in the clay tiles now!"

Ffraid "It's a connection. It's channelling the plant's spirit in the leaf when I do it, and it's the connection with land and water. It also connects with the sea, actually because it's a sea urchin."

(Interview with Ffraid, 2015)

Thus, she connected creativity with plant spirits, and identified her own spirit's connection to her performance of making, and to elements of the Earth, such as the land and the sea. In this way, she demonstrated the notion that everything is interconnected, particularly in a spiritual sense, as she describes how she connects with the fairies, before focusing more on human connection:

> "I do feel that the fairies and connecting with that spiritual realm has bought peace into my life, you've just got to go with it. You've just got to go with it and your heart and what you feel like, I have taken time out with meditating and seeing what comes and maybe writing it down and writing what I'm grateful for and what I want in life, that really helps…

> Right now, I'm feeling like I'm at one with the Universe, you know that what you said. This connection of what you're doing and what I'm doing and that connection between people. We've known each other already but we've never done this before, so it's new and it'll grow."
>
> (Interview with Ffraid, 2015)

In this way, Ffraid's comprehension of interconnectedness seems akin to an ecofeminist perspective, particularly as she continues:

> "OK, well, it has come from my reverence of nature, I love gardening, I love growing herbs, I love the medicinal properties of them, I love the fact that butterflies and bees ... you know, we need the hedgerows to be abundant with all these flowers and we need to be coming back to nature a bit more. I also believe that there's an energy with these plants as well…. They just help us to live and it's that connection that I try and put into each tile. It's just amazing, you can't help looking at a lovely grass or sage and just smelling it and then put into clay and it has left that print forever."
>
> (Interview with Ffraid, 2015)

A similar response was gained when I asked Helen what motivated her to start resilience building, as one of the things she mentioned were her innate spiritual gifts and the fact that, she attributes her ancestry to bestowing the second sight upon her:

> "I'm half Highland, my father's parents were both born in Aberdeen and they're both from west of Scotland origins. And my grandmother and my aunty Jean both have or had, in the case of my grandmother, The Sight, and I've got little bits of it, The Sight!"
>
> (Interview with Helen, 2015)

It may seem disconnected from what I was asking, but I think she was trying to get across to me that she had always had a spiritual nature and an animist world view:

> "I always had this feeling from being in western Eire, that we are all interconnected- which incidentally is very Buddhist, a sort of Tibetan Buddhist perspective (it's also very shamanic, which is animist, which is that everything is alive and spirited)."
>
> (Interview with Helen, 2015)

When I interviewed Helen, she made much mention of Jez Hughes, author of the book, *The Heart of Life: Shamanic Initiation & Healing in the Modern World*. Helen discusses spiritual beings whom she believes are trying to help us. She believes we need to connect to them in order to start to counteract the divide between humans and spirit, and she thinks this is the reason we are facing this late K phase in the first place:

> "And I believe that there are beings out there that would like to help us, probably some that want to harm us as well. Most of them want to help us and they are trying to come through a bit louder at the moment because we're in trouble and we can either chose to contact that, or to acknowledge it or whatever, or not. So yeah, it's pretty much seamless through the rest of our lives because there isn't a division. That's why I respond to Jez Hughes's analysis, because he's talking about that division, how that is at the root of why the current way of life is so destructive."
>
> (Interview with Helen, 2015)

I decided to seek out Jez Hughes for myself, and I found he writes passionately about the need for humans to connect to nature and spirit:

> "From a shamanic perspective, as with many other traditions, we are all connected, all part of a singular organism that is the earth. What affects a part of the organism will somewhere have its root cause within the whole. As holistic medicine seeks to treat the whole person; to bring true healing to individuals, we must then also seek to heal the wider living environment of which we are just a small part."
>
> (Hughes, 2015, 14)

> "There is a spirit that runs through everything, an invisible force that animates life. Like with the physical body, which is animated in a lifetime yet becomes lifeless in death, this spirit orchestrates and conducts the physical phenomenon we call reality."
>
> (Hughes, 2015, 1)

This ties in with ecofeminist thought, and especially with the work of Adams (1993), and Orenstein (1993), who both draw inspiration from engaging with cultures with different outlooks to the patriarchal West. This leads both Adams (1993) and Orenstein (1993) to argue that many environmental issues can be addressed by acknowledging and integrating a shamanic perspective, which reunites us with the natural world. As ecofeminism honours the diversity of elements, shamanism allows us to connect to the diversity of life, as Orenstein (1993) concludes:

> "Shamanism seems to provide answers for ecofeminists about how we can live in balance on the earth and, at the same time, develop a means of communication among the many different realms and dimensions of the universe, both via physical and spiritual methods."
>
> (173)

I had assumed that the spiritual aspect of interconnectedness was the reserve of ecofeminist thought, and so I pinched myself when I found that Folke et al. (2016) not only mention the idea, but stress its importance, when they argue that: "The biosphere underpins our future by providing basic resources like food and water, through to influencing the spiritual, aesthetic, and cultural

dimensions of our embeddedness in nature" (Folke et al. 2016, 1). Just as ecofeminist scholars such as Weil (1993), Adams (1993) and Orenstein (1993) convey a 'shamanic' perspective, in which sprit, humans and earth are connected (and several of my participants tell me the same thing), it was a real lightbulb moment to find that Folke et al. (2016) are talking about the inter-twined nature of human and nature relations, and the fact that the natural environment is vital to us, not simply due to the resources it confers, but also because it can exert affects upon us in cultural, spiritual and aesthetic ways.

5.5 Globalization Erodes Culture

A theme which emerged from my interviews is the idea of the vicious cycle of globalization which erodes culture, leaving people wanting and this gap is often filled with consumerism, which then leads to greater pressure on the environment. Concurrent with this notion is the idea of the opposite cycle, one where a rich culture and a good connection to nature is fulfilling and this promotes environmental stewardship or at the very least, less neophilia and more considered consumption. This rich culture might be achieved through fulfilling making activities, communal activity, connection to nature and also, connection to spirit. Whiskey Sanchez muses on our connection to the environment and crafting and she proposes that in times gone by, the need to make was necessary for survival and as such, is hardwired into us. Now that making is often a leisure activity, she supposes that we still have this (primal?) impulse but if not properly sated, gives us a perpetual hunger which we often fill with consumption of goods and television programmes, as she explains:

> "Maybe … you could say that doing a craft (which would have been something that we used to do out of necessity- we're doing it for leisure now), maybe harks back on some level to a need; sort of like a hunter gatherer providing for your family sort of need that people still have. That they satiate in other ways like spending money or filling their time with watching telly but actually that whole making things thing, maybe that's ingrained in some people quite strongly… And that harks back to a time when you would have needed to do it and it would have been much more about your environment, so you would have had sheep, you would have had cold weather, you would have needed to make something and you know, evenings would have been taken up with it because of the way you needed to protect yourself from the elements and all that, so maybe, but it's not a conscious level. Now it's like we live in… it's more of a leisure thing but we've got the luxury of time and it's a leisure thing, a hobby."
>
> (Interview with Whiskey Sanchez, 2014)

Along similar lines, Myfanwy believes that if our culture is rich, we need fewer external inputs, that we are capable of organising ourselves in such a way that life is fecund. She tells me about the way

in which the permaculture group has a diversity of characters, which is good fun and adds richness and I find this quote from her very inspiring:

> "I'm not to say you shouldn't look outward and be outwards looking, but you wouldn't need so much external stimulation because it was all happening inside because of the diversity of the people and what they grow. And, that's what you find in the permaculture group, you know, not everybody likes each other equally in the permaculture group but everyone's interesting, everyone's different, everyone's got their own thing that they do and knowledge and skills to share. It must have been like that in the village once, where you'd go to one person who really knows how to do that and another person who knows how to do that and it saddens me because, as humanity becomes more mainstream and globalized, we lose touch with the fact that we can create that abundance for ourselves and that diversity."
>
> "And I think the other thing is to just re-emphasise this thing about globalization chipping away at our rights, chipping away at our right to self-determination and that the globalization movement wants us all to be the same. That's the whole point of opening up world markets, so that we all drink Coke, we all wear Nike and it's eroding local culture. It feels to me that mainstream life is very much often about getting the next new experience and the media are full of that and yet, if you lived in a very rich culture, you wouldn't need so many external inputs. …"
>
> (Interview with Myfanwy, 2015)

Myfanwy is passionate about localisation, but she explains that unfortunately, to embrace localisation, one also needs to think about and act against globalization. Abatemarco (2018) observes that globalization and development erode local knowledge and diminish local food security, and this idea is something which Myfanwy mentions:

> "I feel extremely strongly that localisation is really, really important *and*, at the same time, we have to fight increasing globalisation because globalisation has given corporations the power to stop localisation and so local resilience, whether you like it or not, is intrinsically linked to what's happening globally. Local Futures talk about one 'no' and many 'yeses'. So, the one no is to really, the insidious effects of globalisation. The many yeses are what we're all doing in our lives to support localisation. So, that's really great, so you can feel good about making your own clothes, or growing your own food and not everyone can do everything, you know? So, you feel good about that, you find something that feeds you, feeds your soul and at the same time you're aware of, "OK, I want to be active against the trade treaties", for example, 'cos it's making it very, very hard for people to do the localisation thing. There was a guy, I think, in the United States, who was prosecuted for growing tomatoes in his front garden. Argh! It's just crazy, absolutely crazy."
>
> (Interview with Myfanwy, 2015)

Myfanwy is discouraged that globalization is damaging in so many ways and that it is making it harder to build resilience through localisation, and these are similar in nature to those discussed by Huckle and Martin (2001), who state that:

> "Globalization, with its new configuration of time and space, has involved the pulling away of power from the local, disempowering individuals and communities and constraining their ability to manage local environments."
>
> (157)

Myfanwy and Olivia in particular both delivered some powerful arguments as to why a healthy connection to nature at the personal level is vital for the ecological health of the planet. North's (2009) paper is useful here, as he delivers an overview of localism, which began with utopian idealists such as William Morris, and by the 1930s, there were some small-scale experimental societies; whilst 1940s and 1950s America saw the homestead, back to the land, and local movements emerge (North, 2009). By the 1960s, communes were established in Europe and North America at a time when counterculture experimented with different ways of living (North, 2009). Contemporary localism is touted by some as an appropriate response to climate change and peak oil, and has been advocated by various groups, from advocates of small is beautiful, to anti-supermarket campaigners, for example, the International Forum on Globalisation (North, 2009). Olivia has created such a wonderful garden that she's surprised to discover she is so fulfilled by it that she no longer desires to holiday abroad:

> "That's home and beauty and holiday and everything. It's not something I actually planned, it's something that I took for granted- you're only happy, you're only safe and you're only whole when you are integrated with nature. Our civilisation is an alienating one and it functions on making people need things and if people actually are satisfied with what they have got, our economic system crashes because there's nobody buying anything! But of course, then people wouldn't need to do so much work because they don't need to earn any money because they are getting the stuff by doing it themselves."
>
> (Interview with Olivia, 2015)

So, in effect, Olivia is saying that our present society actually depends on some people being unhappy as this fuels capitalism. In accordance this notion, Amanda challenged my assumption that we're relatively content due to our fossil profligate modern lifestyles. She thinks this way of being has actually resulted in much misery and many people who are unable to find their role in life:

> "I think there's a lot of very unhappy lives through being able to use that stored energy in crude oil, and to spend it so, unthinkingly, so, wastefully. It ends up that there's a lot of people that don't have a role in life, they have nothing they're appreciated for and we've really wasted a very amazing resource and squandered it in a way that causes lots of difficulty and unhappiness."
>
> (Interview with Amanda, 2015)

Thus, these people who do not have a role in society are excluded from and disconnected from our greater society. If the converse of Amanda' statement is true, that a culture less reliant upon

fossil fuels will provide everyone with a niche, we can suppose the present situation is reflective of a spilt, a division, as Olivia says:

> "If you love something as I love the Earth and if you feel totally at one when you are in a non-human environment, when you are alone, or with company, it works specifically when you are alone because that's when the chips are down. If you are alone in a woodland, on a desert, on a mountain, on a field, anywhere, if you feel uncomfortable in your own company, it's because you are not aware of the agencies that are there with you. I'm not talking about Findhorn type deities, which may or may not be true, I have no direct experience of that, what I do have direct experience of is being in company, even in an empty desert you are not alone, as long as you recognise that you are part of it. I don't think I ever set out with a desire to create that kind of philosophy, it just seemed obvious and its experience, of course. When I'm around trees (especially trees because human beings have a deep seated and absolute need to relate to trees, it's part of our evolutionary path), near trees, I almost feel as if I've got my friend there."
>
> (Interview with Olivia, 2015)

Olivia talks to me about the way we can experience life when we have a good connection to nature and how when we damage nature, we can also damager ourselves, she implies that we are inextricably linked to and part of nature:

> "I consistently feel that there is a kind of awareness, it's not, as I say, what I call consciousness, in the sense of being able to put into words who or what you are but an awareness that lifts something from the environment and processes it. So, if you're living in that kind of world, if that's the way you're seeing the world, of course, the way you behave in the world is affected. And the idea of doing what they are doing in Alberta and ripping up the land to get at the shale underneath (the tar shale), to create this moonscape, this devastated landscape, it's no surprise to me that so many people who work there go away almost shattered, never to come back because their souls are to be ripped out as they are doing what is evil!"
>
> (Interview with Olivia, 2015)

During our interview, we started talking about James Lovelock's Gaia hypothesis, the idea that the earth is a living and sentient being and Olivia believes it is a helpful way of viewing our place in the world:

> "For me, it appeals as a very fine metaphor, very fine metaphor, because it allows you to personalise the conception that if we damage the environment, it will damage us. You get what you put in, you get charged for your actions and if you are destroying the biosphere, it will chew you up and spit you out. So, Gaia is, in a sense, rejecting you and I like that as a concept, it makes good emotional sense. I think it's not what Lovelock intended it to be, I think he wanted it to be just as a metaphor, just as a way of explaining the interaction of all they systems and they are a totality."
>
> (Interview with Olivia, 2015)

5.6 The Re-Enchantment of Everyday Life

The very existence of this chapter is, I believe, a wonderful testament to the efficacy of semi-structured interviews. I aimed to gain answers to specific enquiry, which was fulfilled in Chapter 4, but equally, I aspired to formulate my questions in such a way as to nudge, provoke and draw hidden and surprise knowledge from my participants, and this was a resounding success. The richness of these interviews supports the claims of Seager (1993) and Moss (2002), that feminist geography can be fantastically rich and deep.

As we have traced the voices and arguments through this chapter, we have witnessed participants with an implicit understanding of the resilience perspective and the 'dangers' of a late K phase. People have articulated what could be our social-ecological system uttering a 'stutter', or "increased variance at multiple scales in advance of a regime shift" (Folke, 2006) and some are even preparing 'permaculture lifeboats' or planning how people could live together in ways which are harmonious and fulfilling, by working together and creating 'community glue' (Ochre, 1996). I think it is time to catch a glimpse of the shy anarchist geographies, as the visions expressed in this chapter are very resonant with those of anarchist geographers, Elisée Reclus and Perer Kroptkin. According to Springer et al. (2012), Reclus envisaged a world where humans lived in harmony with Earth and all her inhabitants, all of whom merged and shared consciousness. This is a utopian dream, as Springer et al. (2012) explain:

> "In seeking to assist humanity to discover deeper emotional meaning by recognising itself as but one historical being in the flowering of a greater planetary consciousness, he bravely sought to abolish all forms of domination, which were to be replaced with practices of engaged love and active compassion among all animals, both human and non-human."
>
> (1595)

It appears that Reclus also, was expressing peaceful, connected and mystical relations between nature, humans and cognizance, that humanity is part of the planetary consciousness. Springer et al. (2012) state that although Social Darwinism was prevalent at the time Kropotkin wrote *Mutual Aid: A Factor in Evolution*, he actually believed that cooperation, not competition was more of the natural way, and he attempted to be scientific about this. Like Reclus, his vision involved a decentralised and government-less mode of self-organisation, specifically involving a move to rural self-sufficient modes of production: "Kropotkin placed his emphasis on decentralized organization, rural life, agriculture, and local production, which he maintained would remove any need for a central government and would allow for self-sufficiency." (Springer et al., 2012, 1595).

Marxist thought was industrial, but Kropotkin believed in the *rural*, and his ideas concerned geography, as he believed that once production was localised and people became self-sufficient agriculturalists, there would no longer be any need for central governance (Springer et al., 2012). Kropotkin and Reclus both advocate decentralised and cooperative societies. Reclus orbited the notion of mystical consciousness, connection as part of the Earth, whilst Kropotkin was more pragmatic, envisaging rural food production but both see connection to nature as a vital part of the anarchism (Springer et al., 2012). Does this mean that my research participants are anarchist geographers? I don't know. It is stunning that the natural mystic future of Reclus and the more practical, rural self-sufficiency of Kropotkin seem to embody all the ideas we have been talking about in this Chapter, and this thesis, even, despite their ideas having been penned in the late nineteenth century (Springer et al., 2012).

When I began this quest, I wanted to know how people actually carry out the sort of resilience building in everyday life that Hopkins (2008a) writes about in his *Transition Handbook*. I also wanted to know what factors drew people or turned them away from leading a more sustainable lifestyle. In the results in Chapter 5, I have found that money and resources, time in particular, do play their predicted part but they're not the only considerations. Something more visceral is at hand and a re-enchantment is needed, I think people need to fall back in love with life again, to create a rich culture and to reconnect with nature as discussed above. Perhaps we could call this, 'Re-enchantment of everyday life'? To adore nature, to experience an inner richness, to be satisfied and fulfilled, which in turns leads them to seek less harmful ways. From my work, an identified factor of a consumerist lifestyle is a disconnect from nature and an impoverished culture. The solution is to enhance satisfaction and happiness, and this could be achieved through making things, and partaking in community activity and events. The soul needs to be re-engaged. Life needs to be re-enchanted and then people will naturally crave fewer external goods and will be more likely to look after the environment. I feel we need to fall in love with re-skilling, with permaculture, with resilience building, we need to become enchanted by it. This is where I set my compass for postdoctoral scholarship, I seek ways to re-enchant the everyday life, by way of infusing resilience building activities with something extra, something sublime, an experience of Kairos, so as to engage those who might otherwise be less inclined.

The notion of re-enchantment of everyday life lends additional legitimacy to crafting, if it were in need. Hopkins encourages crafting but more from the perspective of resilience building from a

pragmatic point of view. The re-enchantment of everyday life seeks to enhance the inner world, foster a rich culture which will slake some of the thirst which otherwise leads to excessive consumerism and destructive environmental choices. Morris (2008 [1888]) was wary of brutal Marxism, and his socialism was a soulful and artful expression, the antithesis to brutalism, and he is still quoted to this day: "Have nothing in your houses that you do not know to be useful or believe to be beautiful" (The William Morris Society, 2010). He believed in the happiness of the worker and that work should be enjoyable, then it follows a re-enchantment of everyday life is a whole rotation of the wheel, a full circle, it is what William Morris was always pressing for, right back at the end of the nineteenth century, along with Reclus and Kropotkin.

This chapter has explored some of the philosophical and spiritual thoughts of my participants. Through analysis of the themes to have emerged from the semi-structured interviews, we are given a body of work which is 'in addition' to my original research questions. This is a quality of the semi-structured interview technique, in that the researcher has prepared questions and then guides the process, but is also reflexive, and allows the conversation to flow naturally.

In social-ecologiocal resilience terms, my participants articulated the late K phase of the present and coming regime shift, which relates to the ecological concept of planetary boundaries (Brown, 2017). They anticipate a release phase, a catalyst, and possible societal upheaval. Some of them are creating permaculture havens (Kenis and Mathjis, 2014) as a way of managing the backloop (Quilley, 2011). We also touch upon ideas of anarchist geographers, who believe that the human connection to nature is vital for anarchism (Springer et al, 2010).

Other themes to become apparent are ecofeminist perspectives, which seek to thaw the reason/nature dualism and acknowledge shared experience between humans and Earth Others species (Buckingham, 2004). We consider the way in which globalization erodes culture and we postulate that this impoverishment might be cured through making things, coming together, and seeking out more enchantment in life. In the next chapter, much of which that we touched upon in this chapter in the realm of ideas, becomes tangible, when I put my body to work, become a maker geographer, and engage in commoning activities with others. We will anchor these ideas to experiential knowledge (Sandover, 2015).

Chapter 6:
My Immersive Ethnography

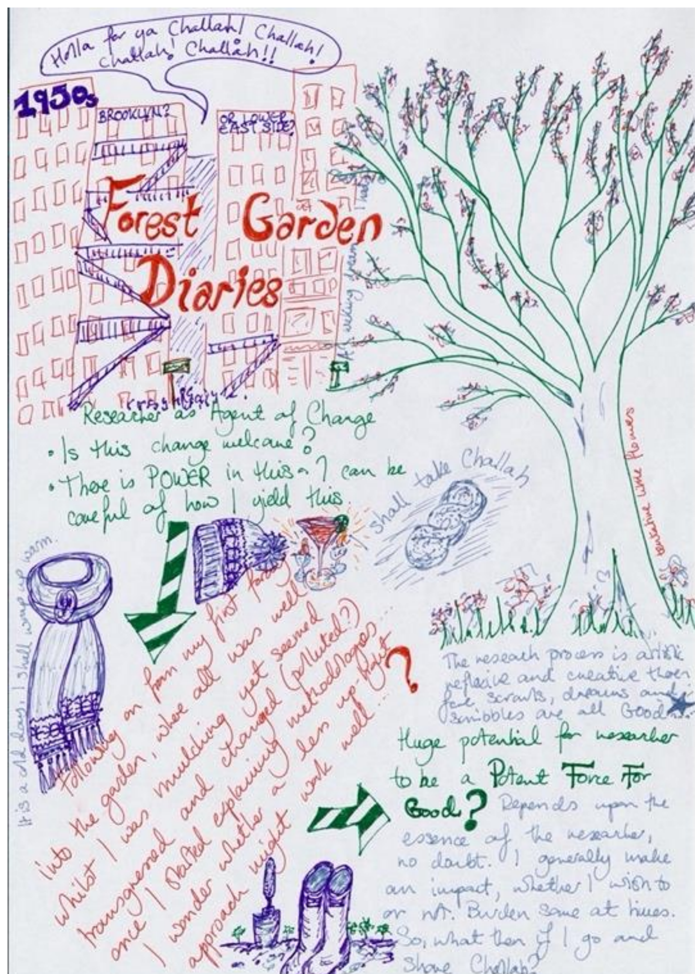
6.1 Case Study

McMoeran (2012) calls for geographers to put their body to work. Carr and Gibson (2017) hail maker geographers- those involved in the embodied practices of making, gaining skills, especially as we face such "volatile futures". This thesis forms part of the emerging work on sustainability and maker geography. I position myself as maker geographer, perhaps also activist scholar (Sandover, 2020) and this work as part of the body of work which is termed, "slow scholarship" (Carr and Gibson, 2017). Slow scholarship is the body of work in which maker geographers put their body to work via auto ethnographic and participatory methods- engagement with materiality (Carr and Gibson, 2017). This was played out throughout my fieldwork encounters in the Forest Garden and Eco Shop but spotlighted during my collaborative time as part of the Rags to Rugs team (Section 6.11). We hosted upcycling workshops for members of the public, where we took waste T-shirts, cut them into continuous yarn and communally learnt how to crochet them into colourful rag rugs. Due to the immersive nature of my fieldwork, some of the hidden waste of capitalism (Miller, 2011) was brought to my attention by Helen and it was these waste T-shirts that we used as we reclaimed the means of production (Pepper, 1993) and, with members of the public, we commoned together. We shared time, skill, knowledge, materials (Chatterton, 2016) and also, a good feeling, as sense of being in common, of being held by the act of commoning (Dawney, 2013). We were enacting one of Hopkin's (2008) resilience building exercises, as we didn't simply send the waste material off to a recycling plant, but we deal with this waste in situ; we kept the feedback loop small and we ploughed our resources (knowledge, textiles, kinship) back into the local community.

This chapter details my case study, starting with the time when I was a tentative volunteer at the Forest Garden, until my work concluded with myself and Helen running the Rags to Rugs workshops at the Eco Shop. The Forest Garden and Eco Shop are interwoven with each other,

as both were founded by Wise Owl Permaculture, a community organization, who were the first group to plant a forest garden in an inner city setting. The founding of the Forest Garden and Eco Shop came about when Vangelis, a founding member of Wise Owl Permaculture moved to Deheubarth. Some volunteers serve at both sites, but most do not, so there's a curious situation where volunteers from the Eco Shop may never have met volunteers from the Forest Garden, and vice versa. Likewise, it's entirely possible for Eco Shop volunteers to never have met one another, as there are few group meetings. As most people come in on a specified day a week, they are as ships passing in the night. The main form of communication between volunteers from day to day is either through Vangelis, who is there most of the time, or via the medium of a book which lives beneath the counter. Later, we'll see how Thomas is enthralled by the way this book pins the whole operation together and Helen comments on the way in which she perceives the community of volunteers as a 'loose community'.

At first glance, it seems as though it's a pity that I didn't manage to interview any of the volunteers from the Forest Garden, but for ethical reasons, I was not for transgressing any further than I already had and perhaps it is nice that my field work started in a tacit manner, in the sublime interface betwixt myself and nature, in all its fecundity and glory. As noted in Chapter 3, I entered the field fully expecting to have a look around and gain immediate permission to conduct semi-structured interviews. However, gaining access was tricky until I had navigated a way, built relationships and trust with the other volunteers and crucially, relinquished many of my ghosts of masculinist culture. At first, I was at a loss of how to proceed, but as Vangelis had suggested I start by gardening. I did that and went home to draw and sketch of my impressions of the sessions, and then began to keep a field diary.



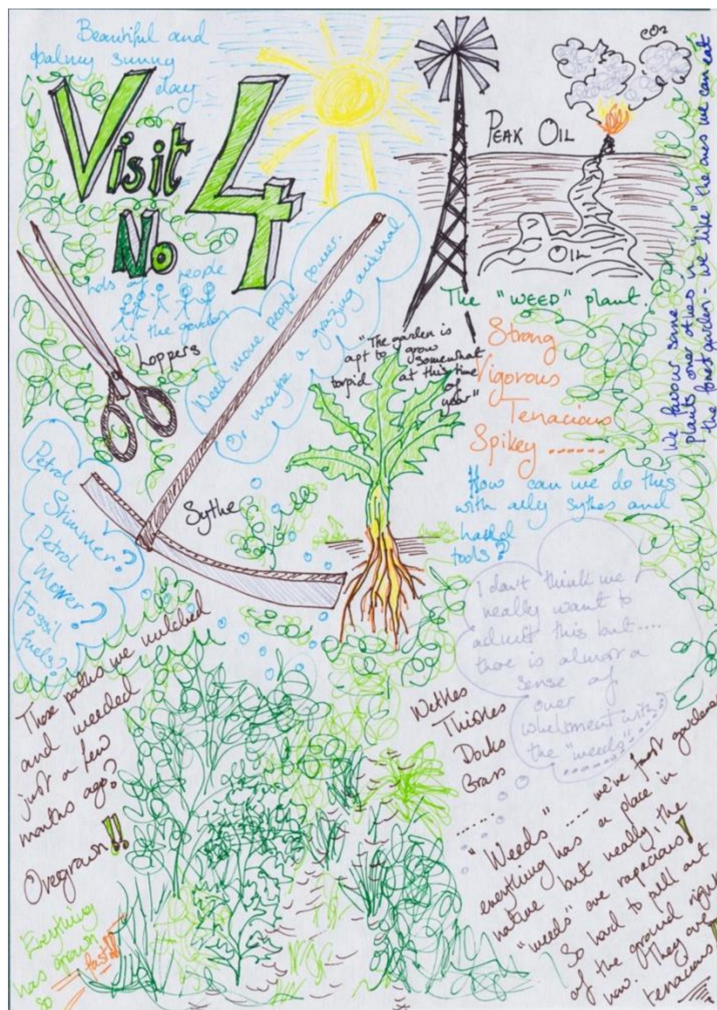
I not only became a forest gardener, became part of the garden, became part of the community, but I also gained fascinating semi-structured interviews from some of the volunteers at the Eco Shop. As Castree et al. (2013) observe, it is useful to perform participant observation field work to find the difference between what people say they do (as in semi-structured interviews) and what is observed by sharing the lifeworld with them. The unorthodox way my fieldwork began turned to blessing and has produced a rich and embodied knowledge of the practices and relations expressed and displayed by resilience builders in Deheubarth.

This chapter is devoted to my case study as a volunteer in the Forest Garden and Eco Shop, when I 'put my body to work' (McMorran, 2012). As I didn't gain semi-structured interviews from any volunteers at the Forest Garden, Sections 6.2 and 6.3 rely solely on my Forest Garden Field Diary. Sections 6.4 onwards focus on the lifeworld of the Eco Shop, the way it functions and its special characteristics. We then use the Rags to Rugs workshops sessions, which were a collaboration between myself and Helen, to demonstrate an embodied example of resilience building in everyday life, in which I answer a central research question, "*How do you actually build resilience in everyday life?*". I wanted to know what it looked like, how it felt, and I found out. I use extracts from my Eco Shop and Rags to Rugs field diaries, along with interviews from Eco Shop volunteers, so as the reader might gain a sense of place, and if we're lucky, a sense of the umwelt. As we listen to the volunteers at the Eco Shop, we hear what they have to say about the way in which the shop (and sometimes the Forest Garden) builds resilience. We are also privy to more nuanced thoughts from the volunteers, as they discuss the character of the shop. Between 1974 to 2004 gender and women's issues found their way into policy at the global and local levels (Buckingham, 2004). At the outset of my work, I assumed that gender would play a large role in this thesis, yet it has not.

My participants rarely, if ever mentioned it and although I did make some gender-based observations in my field diaries, they were too few and too flimsy for me to pursue this avenue of enquiry.

6.2 Descriptions of the Forest Garden

As stipulated above, I will try to give a sense of the lifeworld of the Forest Garden in this section and in the following section, we'll encounter the more grounded, everyday realities of how resilience building is performed. I will attempt this as if the two facets were separate entities, which of course they are not, as they grow into and around each other. I will set out three field diary extracts, designed to be read together, followed by a discussion:

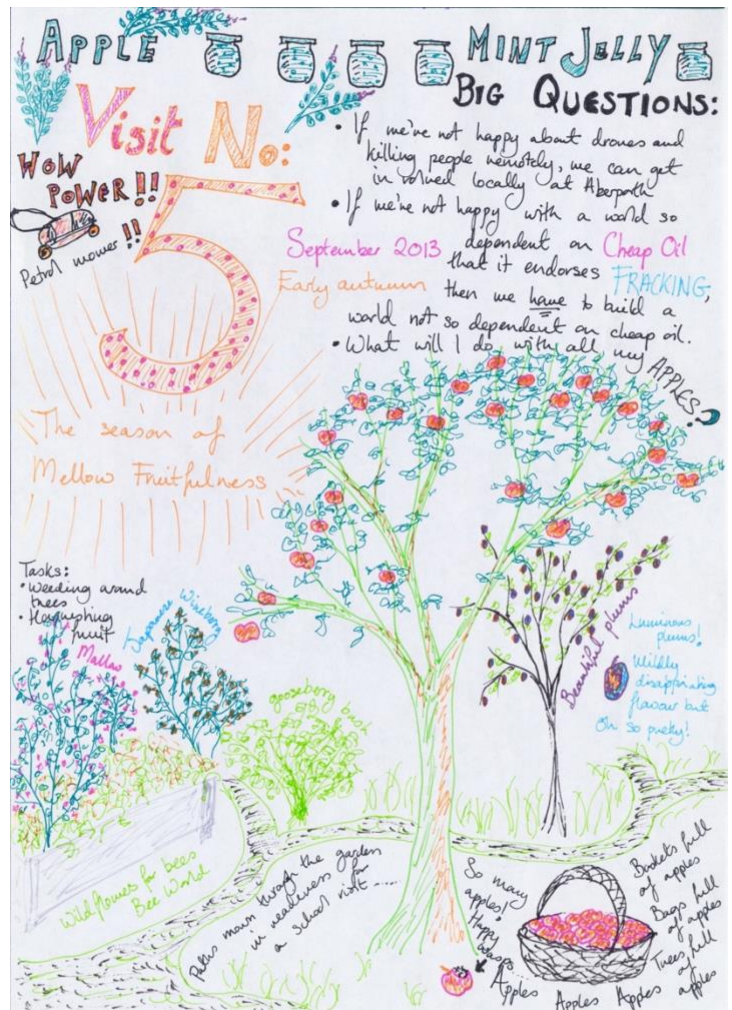


"Today there were around ten volunteers, perhaps more. The garden was almost overwhelming. Very abundant and vigorous growth was occurring or had just occurred. In May, many of the paths were 'tidy', easily visible and freshly weeded and mulched. By June, some of these very same paths were almost impassable! 'My' path was bordered by nettles and thistles, making it somewhat unpleasant to walk down in places. The day was lovely, people were happy, and it was T-shirt weather. Also, plenty of volunteers had arrived. So, you'd have expected this to have been a very happy gardening session and no, it wasn't unpleasant, but I don't know, it was challenging, I suppose. I pushed aside thoughts such as, *what was the point me having mulched and weeded that path for hours over two previous sessions on my hands and knees, if it is impassable just a few weeks later?* I didn't actually allow the thoughts to fully form but they were there, looming and nudging. I duly set to with weeding and mulching once more but the thistles pricked me, the nettles stung, and dandelions, docks and plantains were holding on tenaciously to their purchase, unwilling to give up. It seemed very much as though the garden somehow possessed such vitality that these weeds were even more vital and strong than the average weed, if there is such a thing. Well, they 'seemed' harder to deal with than the ones I encounter in my garden at home and they are bad enough! I heard talk on the breeze that they might need a strimmer or mower. I was curious as to what would happen, because using a petrol mower or strimmer goes against the whole ethos of forest gardening in many ways. I couldn't help but hope that some fossil

fuels would come to our aid as frankly, this was more like jungle gardening than forest gardening!"

(Extract from Forest Garden Field Diary, Stewart, 2015)

"The gorgeously balmy day in September brought with it an ample apple harvest. The mood in the garden was happy and chatty, as for most of us (not Vangelis- he was mowing), we were tasked with weeding, pruning (of old raspberry canes) and mulching (as ever), but also, harvesting apples. Harvesting apples was fun, although there were wasps to be avoided. It was fascinating to have a good look at what the wasps were up to, as they didn't seem intent on bothering us, more gathering en masse inside a particularly tasty apple. Perhaps there were twenty or more wasps per 'chosen' apple. So, we did have to be careful but there was more harmony between the humans and the wasps than there might otherwise be, as by and large, the wasps seemed 'occupied' and unbothered by the human presence. As so many different varieties of apple trees had been planted, there were many different types of apples to gather. Plenty of windfalls lay beneath the trees and more yet hung from the branches. We were careful to only pick apples which came away from the branch easily, with gentle twisting or slight pulling. If you have to tug too hard, the apple is not ripe. I would say a good ten big sized carrier bags were filled with apples, which were then shared out between the group members. The garden was beautiful that day."

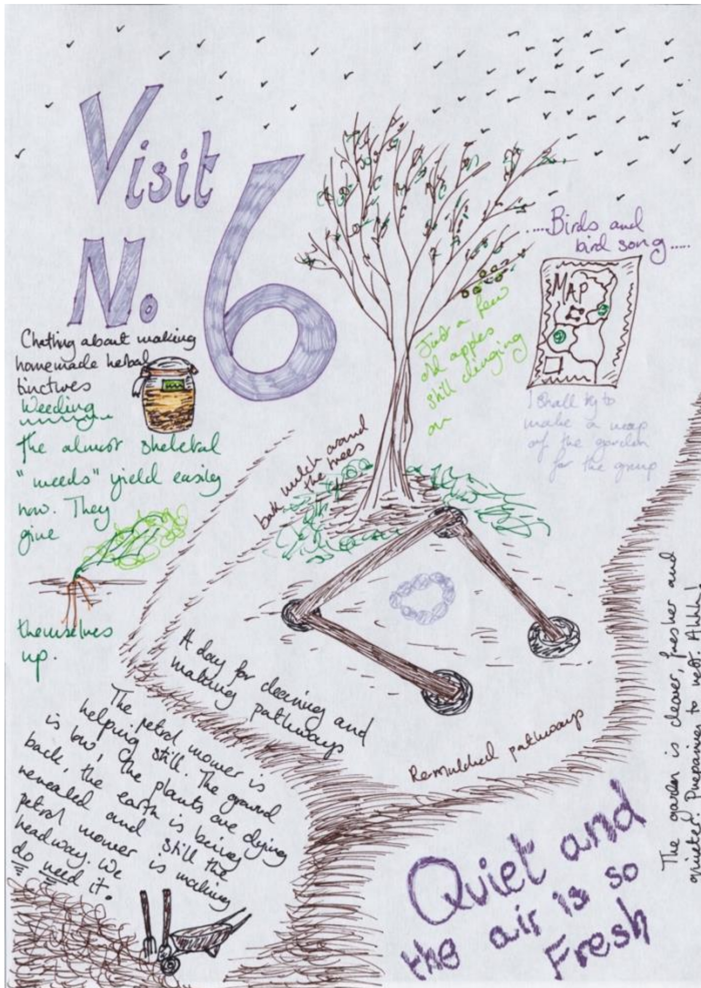


(Extract from Forest Garden Field Diary, Stewart, 2015)

"Today was a quiet low-key sort of day. The clouds hung low and misty- thankfully not menacing! It was cool but soft. The air smelt deliciously fresh upon entering the garden. Maybe it is the nearby estuary, but I like to think it was the freshness and vitality of the garden itself. Vangelis, Seren, Pipkin the dog and Delia were here today. It was a small gathering and the day was quiet. Very few apples remain hung from the now almost bare branches. Lonesome leaves remain, patchy, sporadic, here and there. The weeds yield themselves easily. They seem to have given up the ghost and can be pulled out of the ground with minimal force, certainly compared to the summer months when they were tenacious and vigorous. It is as if they are giving themselves up, they are compliant, they are on their way out anyway and we seemed to be going with the flow rather than against it at this time of year, as the vegetation is much diminished. Clarity is apparent by the way that the plants are now, the trees losing their leaves and the paths are clearly demarcated now that the nettles, docks and plantain are much suppressed. We pulled nettles, snipped rogue brambles and as ever, weeded and mulched. Delia was making a new path by hacking heartily at the grassy soil with a pickaxe. Using fresh bark mulch from a pile near the entrance, we loaded the wheelbarrows and

spread the mulch, making a brand-new path (or rediscovering an old one?). We need these paths as humans, they allow us to navigate the garden."

(Extract from Forest Garden Field Diary, Stewart, 2015)



The visceral practices I engaged in whist in the Forest Garden were instinctive and sensorial in nature (Sandover, 2015). I was tugging at weeds, pushing wheelbarrows around and encountering the materiality of the garden (Sandover, 2015). I gained knowledge of the Forest Garden via the same processes that Sandover used in the allotments, through experiential learning, as I 'responded' to the 'materiality' of the site (Sandover, 2015). This tactile encounter was brought to the fore when the thistles pricked me, the nettles stung, and the weeds were difficult to pull up! Gardening in this manner can be described as "allotment practices" (Sandover, 2015, 154) and Sandover explains how they can allow people to gain understanding about food production, "Allotment practices offer people the opportunity to access food in such a way as to accrue knowledge about production methods through experience." (Sandover, 2015, 154). Through my embodied engagement with the plot, I gained knowledge of the breadth of apple tree varieties in the garden and the behaviour of the wasps as we harvested the apples! We discovered that, in our guise of 'benevolent stewards' of the land (Pepper, 1993), the wasps were not aggressive towards us, despite it being late on in the year.

Benevolence to non-human nature is seen in the Forest Garden which reflects Pepper's (1993) desire for true communism- eco-socialism. Under true communism, we see benevolent stewardship of the environment and humans exert a transformational effect upon non-human

nature (Pepper, 1993). We witnessed this benevolent stewardship through the creation of the garden and the way in which not one volunteer tried to attack the numerous wasps. It's intriguing to see humans experiencing a less fractious interaction with the wasps in the middle entry than might often be the case. It may seem fanciful to suggest that the wasps in 'sensing' our spirit of 'benevolent stewardship' acted less defensively, but I can't offer another explanation, except that within ecofeminism, there is a desire to eradicate the human-nature dualism. I remember us approaching the wasps, not as a threat, but as an equal and valuable part of the garden, as 'Earth-others' (Buckingham, 2004). By refusing to view the wasps as pests or threats, we resisted three aspects of Plumwood's dualisms (Abatemarco, 2018). We did not background them (deny our interdependency with the wasps); we did not carry an attitude of hyperseparation towards the wasps (to deny all commonality); nor did we show incorporation towards the wasps (we viewed them as potential allies and did not see them in a negative light), thus demonstrating our ecofeminist principles at work, seeking to dissolve dualism (Abatemarco, 2018).

Despite our best efforts at benevolent stewardship, Pepper (1993) notes that constraints can be present and these manifested in the form of the vigorous growth of the weeds, which threatened to engulf both my enthusiasm, and the garden paths. The growth of the weeds relates to the adaptive cycle of social-ecological systems and my visceral engagement with the weeds highlights an ebb and flow of growth, tenacity and release, which is illuminated in the above field diary extracts. Early on in the year, their hold on the ground is unrelenting and they are cause of much frustration, yet by last entry, which was a November day, the very nature of the weeds has transformed, as they can more easily be pulled from their beds. I believe we witness the weeds at three distinct phases in the adaptive cycle. Firstly, in spring the paths were reasonably clear, as the weeds were in the r phase of rapid growth, yet soon they entered the K phase, and I found myself thwarted by them. But the wheel turned, and by November, they had lost resilience and I wrenched them out of the soil, in a barbaric omega phase act.

Do we witness attempts to live a more integrated life in this thesis (Abatemarco, 2018)? I believe we might, as, "The integrated life also connects to a desire to experience the rhythm of the seasons." Abatemarco, 2018, 1611). In the Forest Garden, I experienced seasonality in a way that resonated with Abatemarco's participants' experiences (Abatemarco, 2018). Distinct moods of the lifeworld of the garden are recorded at different times of the year. We read how I became overwhelmed by the weeds in the spring, how fecund and mellow the autumn visit was, and how

peaceful the garden was in November, when the weeds gave themselves up to my trowel. One of Abatemarco's farmers finds the spring stressful and she doesn't experience peace until later on in the year (Abatemarco, 2018). Another farmer is inspired by the spring, when a fresh chance has been offered upon the slate wiped clean from the winter (Abatemarco, 2018). One farmer enjoys the cooler months as she feels satisfied by accomplishments and the work is slower (Abatemarco, 2018). Abatemarco (2018) reflects that, "According to Ellen, the best thing about the seasons is that each brings with it different ways of being: getting energized in the spring, bringing in the harvest in the fall, and resting and planning in the winter." (1612). Although people encounter seasonality uniquely, there is an affinity between my own and Abatemarco's participants' reflections on seasonality, especially the sense that the year 'eased' as it progressed.

Finally, not only were we as volunteers close to the production of food in the garden but, as described above, the apple harvest was shared out between us, thus providing free food, which went some way to address the elitism that has been noted of AFNs, due to the high price of organic and local food coupled with lack of access to food growing land (Sandover, 2015).

6.3 The Performance of Forest Gardening

Here, I want to demonstrate physical aspects of what happens in the Forest Garden, as well as to highlight how these interplay with permaculture theory, along with additional insights into how people use the garden. The garden was founded on permaculture principles yet, as we see, these are abandoned or adapted if they don't seem helpful at the time.

I'll begin by describing the site, the flora, and of course, our 'battle' with the 'weeds':

> "The Forest Garden started out as a normal field about five years previously, when it was planted by Vangelis and others with a mixture of mainly fruit and nut trees. As the soil is pretty fertile, there is a prolific growth of nettles, brambles, docks, grasses and other weeds and my task was to remove these using hand tools (being careful not to dig too much- *Think about the trees' delicate roots*, Vangelis cautioned me), and to then top this cleared area with mulch, in order to provide moisture retention and to discourage future weeds. The group has started to make wavy mulched paths winding through the garden. Of course, it was a big battle to try to keep these walkways open and weed free. At least one path had been 'lost to the weeds'."
>
> (Extract from Forest Garden Field Diary, Stewart, 2015)

> "I tried to remember some of the plants I noticed; blossoming apple trees, periwinkle (good for arteries, they say), mint, comfrey, silverweed (around the fire pit), thyme (or marjoram), nettles, dandelion, thistles and plantain. Although I was weeding nettles, thistles and dandelion, they were referred to as 'weeds', yet are allowed to grow in most of the garden. They have various medicinal and nutritional uses, as does plantain, I have been told. Many of the plants here are extremely vigorous. I was astonished to see how the patches around the trees that I weeded and mulched (with

straw) back in February were by now completely overgrown!"

(Extract from Forest Garden Field Diary, Stewart, 2015)

Sandover (2015) describes activities on the allotments with school children being introduced to the plot and shown produce, taught how to identity plants by their leaves and allowed to explore. A similar process was conferred towards myself and any newcomers at the Forest Garden, as I mention above, when I was taught about beneficial plants and herbs. The first quote shows the way in which the garden is created following permaculture methods of planting fruit and nut trees to mimic a forest ecosystem, to incorporate plenty of mulch in order to supress weeds and to prevent water and nutrient loss (Whitefield, 2009), and additionally, to add wavy shaped paths, mimicking shapes in nature. I appreciate the way in which Vangelis encouraged me to enact a caring and thoughtful stance towards the trees, echoing Pepper's (1993) eco-socialist environmental benevolence and complying with ecofeminist ideals of refusing to background nature (Abatemarco, 2018).

What I find interesting about the following quote is that it demonstrates the application of a permaculture principle (with the mole hills), and it also shows us that the group are prepared to add features which are not typically part of a forest garden, as we see with the wildflower bed for bees:

"Today, I made a bee line to Seren, who had organised the day as part of the Friends of the Earth *Save the Bees* day. Seren had a bag of wildflower seeds from Friends of the Earth and together with a softly-spoken man, she was making a bed for the wildflowers. Flower beds are not strictly forest garden components, so it is interesting to see them cropping up here. Seren's bed is triangular, demarcated by planks of wood. First the soil had been prepared by digging and weeding, taking particular care to remove roots. This was arduous labour as the soil is pretty heavy and clay rich and it took longer than anticipated. When this was done, the seeds were scattered, with an impromptu blessing made for the bees and their flowers. It was a joyous occasion; I was delighted to be taking part. Next, more loamy soil was used to sprinkle by hand as a top layer. This soil was from the adjoining field and was wheel barrowed in as suggested by the owner of the field next-door, who had noticed that there were many mole hills in her field. Thus, despite queries as to whether the mole hill soil would be too nutrient rich for wildflowers, a permaculture principle was enacted, as the problem (mole hills) became the solution (great textured, really friable soil). Hand sprinkling the soil was satisfying."

(Extract from Forest Garden Field Diary, Stewart, 2015)

This extract illustrates the nature side of the reason/nature dualism, as our approach was ecofeminist and viewed the bees as Earth-others who would benefit from a blessing (Abatemarco, 2018). We used our hands to sprinkle the soil and a careful and delicate approach was employed. Gender has rarely featured in this thesis but this possibly is one instance where the 'underdog'

nature side of the reason/nature dualism is a group of volunteers who were expressing our 'feminine' nature.

When the bees and their flowers receive a blessing, we witness an instance when once again, the group are doing things their own way, adding their own beliefs to the proceedings, as I can't recall any permaculture book advising communication or faith in the unseen, the realm of spirit. Abatemarco (2018) discovered that her farmers enacted both sides of the reason/nature dualism. The below extract from the *Save The Bees Day* could be interpreted as highlighting the reason side of the dualism, as ecofeminist methods are eschewed in favour of 'non permaculture' black plastic, employed for pragmatic reasons, as opposed to a value based approach (Abatemarco, 2018):

> "Vangelis and another chap made a rectangular bee bed as well. This one was done differently, no weeding was done but a weed proof black liner was used as the base, with composted soil wheel barrowed on top. It was curious and fun to see two very different approaches to the wildflower bed for bees. There were discussions of the pros and cons of weeding versus using an artificial membrane. Different individuals favoured a different approach and didn't necessarily agree with what the other was doing. Consensus was reached none the less in the spirit of 'we all do our own thing here' (within reason). I found this very interesting. So, a degree of variation from the permaculture practices is occurring but not too much divergence. (I see no slug pellets, nor artificial fertilisers). It almost goes without saying that permaculture is an 'organic' agricultural system."
>
> (Extract from Forest Garden Field Diary, Stewart, 2015)

This serves to emphasise the experimental approach to the making of the second wildflower bed for bees, as even a weed proof black plastic liner was employed! And in Section 6.5, a keen reader might note an example of a discrepancy here between what people say they do and what

they actually do (Castree et al., 2013). This is only illuminated due to my immersion in the field, when we see values being cast aside in favour of pragmatism.

In the above quote, harmony remained, even though people were not necessarily in complete agreement over actual practices to use. It is an example of the direct democracy needed in post-capitalist transition fissures that Chatterton (2016) advocates. As I note in the last sentence, it appears as though the group are willing to depart from strict permaculture principles, but they seem reluctant to stray too far from the path, so there must be some sort of invisible boundary over which they will not tread. The following three quotes are in chronological order and from three separate visits and are intended to be read together. I appreciate the way they elucidate not only the tension we faced regarding the 'weed' problem and our reluctance to use yet more fossil fuels to mow the path, but the joy I beheld when in the end, Vangelis abandoned permaculture principles and instead, adopted a pragmatic approach:

> "Volunteers were using handheld tools such as loppers and scythes, to do battle with the vegetation. The grass was just so tough! I tried using loppers but found them unwieldy and resorted to tugging as grass clumps with my gloved hands from the base, easing the roots with a fork"
>
> "The day yielded dilemmas for me, here we are building a resilient system but unless we can borrow a grazing animal (which will only graze the paths), we are definitely going to have to use some machinery that runs on fossil fuels. How ironic! But we must be pragmatic as well as high minded. It will be interesting to see what happens, who decides what, and what the outcome is"
>
> "Vangelis had bought a petrol mover and had mown the paths. Oh, what a change! How fantastic to be able to walk around once more and how obvious it was that although it would be 'nice' to have done without a petrol-powered device, how very impractical this would have been in this particular set of circumstances! Would it be too excessive to say I was ecstatic about the intervention of the petrol mower? Maybe, maybe not."
>
> (Extract from Forest Garden Field Diary, Stewart, 2015)

The first thing that is evident above, is that we encountered some of Pepper's (1993) constraints as we practiced our 'benevolent' stewardship. We could not stay true to our values (which were to reduce fossil fuel reliance) and instead, we were forced to buy in to the neoliberal economic system. This was unlike Abatemarco's (2018) farmers, who enjoyed living integrated lives in alignment with their values, despite the financial cost. In this regard, we 'failed'. We bought in to the high carbon system and did not enact radical post-capitalist transitions (Chatterton, 2016). We sat on the 'reason' side of the reason/nature dualism (Abatemarco, 2018). Sandover (2015) tells us that as food growing practices are labour and time intensive, some of her participants had taken steps

to work together, or use machinery, to overcome constraints. Eventually this also happened in the Forest Garden, when Vangelis bought a petrol lawnmower.

Finally, I'd like to share a quote showing how the Forest Garden is not only a place for nature but a place for people too, and how for some, it is a place of deep conversation, about many topics:

> "Seren's *Wildflowers for Bees* garden was looking nice. Interestingly, the rectangular bed and the triangular bed were both covered in very different plants. I remember one moment of conversation with Seren when I remarked that I found there to be something fascinating about a Forest Garden, I likened it to an interface between nature and humans. I think Seren had been talking about the question of whether humans have the right to change nature, that we always adapt nature and make things more to our requirements and preferences, rather than to simply leave nature alone. Seren and I often share deep conversational topics whilst gardening. I don't really have the opportunity to record these conversations, which is a great shame and I doubt they would occur if I started recording, as I think the very nature of their spontaneous arrival would be impaired. Over the months, we have talked about:- Peak Oil (sic); herbal medicine and homemade tinctures; the right of humans to change nature; feminist issues; the way that some garden centres now sell flowers and plants for aesthetics only (as they are infertile); the loss of habitat for bees; the loveliness of having bees around; the self-containment of wasps on a ripe apple; drone strikes and the fact that the drone planes are being tested nearby, and whether, as local residents, it is our duty to protest in some way, if we are against the killing of humans far away. We have spoken about all these things and more. We have often questioned the way that humans view nature and their 'rights' over nature."
>
> (Extract from Forest Garden Field Diary, Stewart, 2015)

The rich conversation space afforded by gardening together relates to the aspects of commoning, whereby people gain emotional enrichment (Dawney, 2013), and also the enhanced quality of life described by Abatemarco's (2018) farmers, when they live in alignment with their values. The farmers might not make a great financial profit, yet they enjoy bonuses such as increased family time (Abatemarco, 2018).

6.4 The Aesthetics of Resilience Building in Everyday Life

I will introduce the Eco Shop with these following quotes from my Eco Shop Field Diary, to give a sense of place:

> "Outside the Eco Shop are three attractive and impressive handmade wooden benches, presumably connected to the shop. My first impression upon entering the Eco Shop was that it was akin to a beehive, albeit a somewhat chaotic and messy one. It struck me as both a hub of activity and a place of diversity, represented by the type of goods sold (both donated and *newly* made), the customer and volunteer base"

> "The shop sells a huge array of goods; ranging from second-hand books, bicycles, DVDs, electrical goods, household wares, clothing, bric-à-brac and furniture; to ecologically focused magazines, such as *Permaculture Magazine* and *Resurgence*; to newly hand made goods made by local crafts people, using ecologically sound or up cycled materials"

> The shop is homely, with a sideboard and magazines and even the till system is eccentric. The till is not a till in the slightest but is in actual fact a hinged wooden box which sits atop the counter. There are no internal compartments and so the various denominations of cash are stacked accordingly, subject to the box staying nice and still. Each item sold is jotted down in a big A4 book using a code of initials, denoting whether it belonged to the shop (sh) or an individual seller (their initials)"

(Extracts from Eco Shop Field Diary, Stewart, 2015).

Cresswell (2018) validates my instinct to attempt an inventory of the array of goods in the Eco Shop. Cresswell's (2018) vivid description of Maxwell Street market in Chicago, the lifeworld of which is noisy, overflowing and jumbled. The employment of lists to help describe place isn't new, but Cresswell (2018) is the first to bring them, and the use of parataxis, to my attention as a method to help connote a sense of place. Inspired, I made my own list, of which this is an extract:

> "Saws, spades, hoes, secateurs, loppers, bird boxes, herbs for the garden, leaflets, lawn mowers, bicycles, taps and shower heads. Old nappies- both shit stained and fresh, old nappy covers- brittle plastic or pliant and soft. Dusty or clean, you'll find them all here. Bras, panties, slips, pillowcases and duvet covers. Gentlemen's coats and smelly old trainers. Flip flops and wellies, high heels and clogs. Baby shoes and huge shoes. Old plugs, snaked electrical wires, incense and seeds, plants for the bees! Nest boxes and rotary washing lines, fire bowls from gas cylinders, a rocket stove too. Zimmer frames and walking aids, spades, gardening forks and trowels. Cameras, lenses, necklaces, flick knives, pocketknives, fishing tackle, moonstone rings, silver jewellery, plastic beads, teddy bears and half-done tapestries. Napkins, hankies, fire irons, violins, records, flutes, zoom lenses, box cameras and curios."

(Eco Shop list, Stewart, 2015)

As you can tell, the Eco Shop embraces a maximalist aesthetic, a busy-ness, an urgency, a sense of things jostling for position. Certainly, there is great fecundity and plurality, I describe the aesthetic

character as manifold. It is inviting, there is a domestic warmth, as Amanda declares, "Yeah, and it kind of looks a bit like a living room as well, with the sideboard there and it's homely!" (interview with Amanda, 2015). If you look at the plan I drew (see Appendix 3), you'll see the pathways through the shop possess a degree of curvature and non-linearity.

I once asked about the paths, thinking the design reminded me of a permaculture garden and I assumed it must have been purposeful, but it was simply the way things unfolded, largely directed by Amanda as she explains:

> "Yes, because permaculture stuff is based upon natural, organic-ness, so that's why they [Author- a permaculture garden and the lay out of the Eco Shop] both end up with the same thing. And the whole building's not square, either, which helps."
>
> (Interview with Amanda, 2015)

For the people who use and run the Eco Shop, a crucial aspect to 'actually' building resilience is, to an extent, embrace the messiness, the raggle-taggle nature, a certain wildness, a certain roughness; probably to a greater extent than Ruskin (1905) had in mind when he wrote *The Nature of Gothic*, in which he implores us to delight in the handcrafted, the not quite perfect. Chatterton (2016) implies that we have little option but to take from what surrounds us and to accept a little 'organic-ness' in what we create, as we make sites of post-capitalist transition, "What might come after capitalism can only be built from where we stand, using the multiple and messy resources and capacities that present themselves." (Chatterton, 2016, 405). The systems that follow capitalism have no precedent and it is essential that we are willing to try new things, to be "experimental" and to take risks and Chatterton describes these activities as, "contentious, messy and deliberate." (Chatterton, 2016, 405-406). Whether Chatterton (2016) uses the term 'messy' in a literal or figurative sense I'm not sure, but as 'homely', as 'organic' as the aesthetics of the Eco Shop are, to some, they are also messy in a material sense.

6.4a Balancing Perfection and Mess

It is clear from talking to volunteers that they have individual comfort levels as regards to mess. Some were content with the degree of the mess, chaos, and disorder in the shop, whereas others liked to create more order. This is probably down to personal preference. Amanda is keen to create a visually stimulating environment where people might come in and be inspired by what they see; books, magazines and information about gardening, herbal medicine, permaculture, spirituality for example, and by what they encounter; useful and unusual tools, a cosy, homely display and the

impression that there's another way to live. She often uses the words such as "uplifted' or "inspired', and it's clear that she is intentional in her desire to enable people to visualise a way of being in the world that is more harmonious with the natural environment:

> "I was hoping to give the impression of it being an all sorts of shop and somebody described it as, 'A Mishmash of Muddled Marvels' and I thought that this was perfect, so all the windows and things, I try to give the impression of having the information, the inspiration and just the idea of having things come round again. And it's quite important that the impression isn't too posh so people know that it's the sort of place where you can get a really good bargain, as well as everything else, because there's other shops that have made the mistake of making their window too beautiful, too upmarket, and it gave the wrong impression"
>
> (Interview with Amanda, 2015)

What makes things more interesting is that different volunteers seem to have their own tolerance level of the ratio between chaos and order. Helen wants the shop to be more ordered. She notes that sometimes you can't see what's there as it's buried:

> "I had come in as a customer but at the time, it was so chaotic that I couldn't cope with this and I wasn't even looking through things, I was looking at other stuff, but not that. So, that's what I'm seeking, is that balance between… and I'm thinking that it's starting to get really wonderful in here…"
>
> (Interview with Helen, 2015)

Helen talks about the need to have a balance between chaos and order. She wants customers to be able to find things! Here, Amanda comments on getting the balance right between the shop being a bit dishevelled, cluttered and casual, and it being messy to the extent that it doesn't function, as "And it's really difficult to stop the place looking too messy but then being messy is part of what we are about…" (Interview with Amanda, 2015).

It became quite clear that the messiness of the shop was something I find tricky but also, I wonder whether Olivia is correct that we'll have to get used to living with a lower standard once our society has suffered the omega phase that was frequently referred to by my participants Chapter 5:

> "It's not sustainable and already, in the fifties, when I was first becoming conscious of this, I thought, *we are going to have to take a knock, we're going to have to take a lower standard of living (in the conventional terminology), if the world is to survive*."
>
> (Interview with Olivia, 2015)

6.4b The Hidden Waste of Capitalism

The Eco Shop sold a wide range of second-hand cloth nappies and nappy paraphernalia. Women's environmental groups (some of whom, have been informed by ecofeminism) have influenced UK government policy via imaginative and committed campaigns which have foregrounded environmental issues that normatively are ignored in policy making (Buckingham, 2004). One such example was the UK Women's Environmental Network's Real Nappies campaign, which encouraged the use of cloth nappies over disposable nappies (Buckingham, 2004). One afternoon, I sorted through all the nappies, and through this entry, we notice that although the aim is to re-use resources, some cannot be re-used and end up in landfill.

> "I suppose it's building resilience, because it *is* feeding resources back into the community and whilst buying new cloth nappies is 'sustainable', this goes further. And, sometimes people will use second-hand cloth nappies, after all, I had been happy to put my son in nappies that both myself and my two sisters had worn! And when my sister used them for her daughter, they were still fine. Then again, my mother did have quite a good washing machine and a good system going, so maybe that accounted for their continued good condition? Some of the nappies at the Eco Shop are in good nick whilst others leave a lot to be desired (I ended up with one whole bag of reject nappies that I put into a 'rag bag'). Amanda says they'll make good cleaning cloths because they're so absorbent. There were some plastic pants which were so bad, though, that I just put them in the bin."
>
> (Extract from Eco Shop Field Diary, Stewart, 2015)

Chatterton's (2016) idea of taking stock of the capacities and resources we have, and using them to create new systems in the present, is realistic in the way that we need to quell our squeamishness, and see items such as old cloth nappies as useful materials. Through my embodied engagement with the old cloth nappies, I found that the situation is imperfect and wasteful, no matter how good our intentions are. This wastefulness disquieted William Morris, whose intention when setting up the Kelmscott Press in 1891, was to design with sustainability and longevity in mind (Miller, 2011). This principle was opposite to the capitalistic production system of the time, which encouraged (and sadly still continues to encourage) planned obsolescence (Miller, 2011). To Morris, the capitalistic mode of production was inherently wasteful of resources and labour, and Miller (2011) notes that he did not believe this had to be the case: "Morris's utopian novel *News from Nowhere* is his longest and most comprehensive account of the future socialist society that he believed was imminent, and the novel reminds us that waste can also have use" (17). The theme of being mindful of resource use is prevalent throughout this thesis. We see this from the way my participants think about waste in semi-structured interviews, to the encounters with waste in the Eco Shop and Forest Garden.

6.5 The Eco Shop is Unusual, Special, Treasured

In the sections below, I wish to exemplify just a few ways in which the shop is unconventional and unexpected and that its special character is noticed and cherished by many. Here is an entry from my Rags to Rugs Field Diary, not long before I left the field, on a day when I was filed with admiration for what had been achieved there:

> "The atmosphere in the shop was something else today, quite special and so I'll set the scene; it was a lovely, lovely day, I mean, that shop! Every time I go there, I get more enthusiastic and excited about it. It's now cleaner and tidier than I have ever seen it, which is quite something. It is still very dusty though but there's so much going on and I find it very hard to actually articulate just how rich and fascinating that shop is. There're now even cameras in there, old cameras (I don't know whether this is perhaps the work of another volunteer) but there is now a cine projector and some old lenses (a type I've never seen before- tiny, slim lenses). I noticed an old Brownie camera, an otoscope, more tools than ever, big digging hoes, a rocket stove (I should have taken a picture), and many plants. It was busy, many people came in- so much chat. The atmosphere was very relaxed, very mellow. Increasingly, I perceive the shop as an incredibly valuable resource for the community- in so many ways it ticks so many boxes. Wow, that shop!"
>
> (Extract from Eco Shop Field Diary, Stewart, 2015)

The Eco Shop is a post-capitalist transition fissure, an example of a creative response to the challenges levelled at us by neoliberalism. As Chatterton (2016) says, "The more intense the patterns of marginalisation from state restructuring under conditions of austerity or 'zombie' capitalism… the greater the need for post-capitalist socio-technical transition experiments." (406). I could tell the shop was a valuable asset and I wanted to know more. Suspecting it was founded on permaculture principles, especially the three tenets of Earth Care, Fair Share and People Care (Whitefield, 2004), I asked Vangelis, (who is a bone fide permaculture teacher) and he deftly explained,

> "Earth Care, People Care, Fair Share… Earth Care means including the Earth in any decisions that you make- to care, caring for the Earth… so whenever you are doing anything in life, how is it affecting the Earth…? You ask yourself that question and if it's not good, you should, you might want to ask yourself how you can do what you are doing in a good way, that doesn't affect the Earth negatively… so, essentially, that's permaculture… and it's the same with people, if we all thought about each other when we're doing things… it's the people… how is it affecting people? Is it a good thing or a bad thing? Then we might look towards doing things in a different way that is better, for one's self and for others, because one's self is a person also and people do things that affect yourself as well… at the end of the day, you are one of those people. That is essentially, at the end of the day, permaculture and so the shop is very much in tune with that..."
>
> (Interview with Vangelis, 2015)

The principle of Earth Care is an expression of ecofeminist ideals, and People Care answers some of the calls for a more integrated life, as the needs of people are foregrounded (Abatemarco, 2018). Vangelis goes on to explain Fair Share in more detail:

> "Fair Share is sharing things more so that hopefully everyone is getting what they need. So, if you have too much, look at what doesn't have enough, that's what Fair Shares is, really… OK, so, people coming in … local people donating their surplus clothes, bric-a-brac and so on… they are…That's it, yes. So, that's Fair Share in action? Yes, it is. And we sell them to other people who might need them at very, very cheap rates, really."
>
> (Interview with Vangelis, 2015)

Fair Share is a facet of socialism, redistributing resources to those in need, and also confronting capitalism. In this regard, the activities fulfil Chatterton's (2016) calls for more radical action, especially with regarding capitalism.

When Amanda and Helen talk about the shop, I am struck that possibly unknowingly so, their language conveys a sense of the shop being alive and living a life of its own. Images of a garden come to my mind, especially with Amanda's theory that buried older items could come to light, "I sort of had the theory that things that had been there a while could go under the shelf and that when things in front got sold, they would be seen." (Interview with Amanda, 2015).

This idea is reminiscent to resilience thinking, in that each part of an ecosystem plays a crucial role, although some might only come into play very rarely, such as after a forest fire (Walker and Salt, 2006). At these times, these seeming superfluous organisms reveal themselves to be key players for the overall health of the system (Folke, 2006). Amanda's process is organic, spontaneous and theoretical. Sometimes I had the sense that both Amanda and Vangelis are happy for things to almost happen on their own in the shop. Thus, the shop gains its own agency, it is non-static, moving, and active. This is exemplified by Amanda's description of the organic and spontaneous evolution of the shop and its displays:

> "Because in the beginning, it didn't seem right to spend money on displays because, we might have collapsed and the display would have ended up in a skip, so that felt like the wrong thing to do, it was very, very… old drawers balanced and things.. and as we've moved on, we've been able to uplift and make more beautiful signs … and everything's got tidier and better…"
>
> (Interview with Amanda, 2015)

I impressed at the innovation at work in the shop, as volunteers find unconventional ways of working and of solving problems creatively with what they have to hand. Again, this concurs with Chatterton's (2016) suggestion that post-capitalist transition is not a prescribed method, but a myriad of possibilities of what could come.

6.5a The Eco Shop has a Life of its Own

Vangelis was famed for saying the shop runs on chaos, and on occasion I've observed him seeming mildly amused by petty squabbles. In one instance, I complimented Vangelis after I witnessed him deftly deescalating a potential flashpoint, and I asked him about his philosophy, as it was a prominent example of the direct democracy Chatterton (2016) states is needed at post capitalist transition sites:

> "… in the shop, I have the authority to intervene in things that people do… but it's more done in the way of allowing people to do things differently, it's about not being obsessed… even if people might be doing something in a different way, it might be totally fine because that's how they do things"
>
> (Interview with Vangelis, 2015)

This idea that the shop runs on chaos intrigued me, so I asked fellow volunteer Thomas about it, and he recounts a time when both him and Vangelis were serving customers and he witnessed a very different type of exchange:

> "I remember him [Vangelis] saying to me one day, we were talking about money, well, somebody came in and mentioned money and offered some money or something and I think and we bartered the price down or something and that happens sometimes, when people come to the counter and you find that we're bartering them down, or something. And I find that very odd, that it's happened with so many people there, saying "Oh no no, that's worth about a quid", you know, that odd thing going on, but Vangelis saying it runs on chaos, yes chaos. He said, "This place doesn't rely on money" and I think it's true. Money is something that he said recently just gets in the way and it is true, it's just something that's there, that's an in the middle thing. What it really runs on is human nature, as he said, and he's absolutely right there. … That's what he said, 'The currency isn't money, it's human nature'"
>
> (Interview with Thomas, 2015)

We have a pleasing fusion of ideas, that the shop runs on chaos, and that the currency is human nature. This feeds into Brown's (2014) thoughts that post-capitalist transition sites are *alternatives* to normative modes of doing business. It also tallies with Gibson-Graham's (2006) alternative economics, which include barter, local currencies and cooperatives, which as systems, aim to be

less oppressive (Turker and Murphy, 2021). Commoning is an important part of these alternative economics (Turker and Murphy, 2021), which we have observed in the Eco Shop, from pooling cheap goods, to ideas, to companionship.

After a while, I became certain that the shop had a life of its own, although I didn't breathe a word of my outrageous fancy to anyone. I thought it one of my eccentric ideas. However, Rose (2013), says that not everyone sees the world through normative eyes, many believe it to be more alive, with non-human objects and beings having their own sentience. I was surprised though when others in the Eco Shop started talking about their perception of a similar phenomenon, unprompted by myself. Thomas was explicit and insistent that the shop had a life or mind of its own, and he says: "it's like Bagpuss's shop in that it really does have a life of its own, a mind of its own and a will of its own, I think as well." (Interview with Thomas, 2015). Amanda alludes to something similar, when she notes how it grows, changes and that magic happens:

> "When we first started and we had nothing, I had an old stool, so I thought, "Oh, we could hang clothes on it!', so I put the stool up and hung clothes on it. And there was one rail left in here from the people before and then we've had things donated ever since. We haven't bought any of the rails, they have all been donated by other shops, and the shelves, so it's still moving, all the time, still changing... It's a bit magic, innit?"
>
> (Interview with Amanda, 2015)

Meanwhile, Thomas tells me about the unique inter-volunteer message book, and talks more about the shop being alive:

> "As I was saying, we have this one message book which is the thing- the only formal way of passing things on, other than speaking to Vangelis or saying something, ""Could you mention that to so and so.."", other than that, it just seems to be Vangelis that holds things together and the shop itself, so yup, living breathing thing it really is. Oh, I'm certain its living and breathing (chuckles), there's no doubt about it, it really is a thing on its own. That's one of the first things I said when I was down there, I'd been there a couple of weeks, you know, it is, it's a living breathing entity, it's a whole thing- to a certain extent it seems to have a will of its own"
>
> (Interview with Thomas, 2015)

Amanda, Thomas and I are joined by Chatterton (2016), who describes the commons as an organism, a web of connection (2016) and that they are made real through commoning, they weave a tapestry. Is he therefore implying that they have a life of their own? Some volunteers would

prefer the shop to be tidier, and this is an ever-unfolding negotiation between the volunteers and the shop itself, if we are to believe that it has a life of its own. As enchanting as Bagpuss's sentient shop is, Vangelis has a prosaic explanation. He muses that actually, it is simply the volunteers who run the shop and he displays an optimistic opinion of human nature:

> "Well, what makes this shop work is the volunteers, so the question is, are there people like this in other towns? There probably is, so if they had the opportunity, they'd probably rise to the occasion…"
>
> (Interview with Vangelis, 2015)

These above sections illustrate wonderfully the ways in which resilience building in everyday life, commoning at sites of post-capitalist transitions, certainly in the Eco Shop, can be a messy, quirky and chaotic affair, which concurs with Chatterton's observations that each site will have its unique expression (2016). In part this is by purposeful design, in part, it's the character of the shop and how it has evolved.

6.5b Rhythm of the Afternoon

Here we find me putting my body to work (McMoeran, 2012), as an activist scholar (Sandover, 2020), a slow scholar (Carr and Gibson, 2017). Through visceral engagement with waste clothes, I experience the materiality (Sandover, 2015) of the steaming station and waste clothes. I saw the stains, I smelt the smells, I became dusty and I enjoyed the steam in the atmosphere. I confront capitalism (Chatterton, 2016) by redistributing resources and selling clothes at a cheap price. Like some of Franklin's (2011) participants in Stroud, I just got on with the task at hand, set my activities on repeat, immersing myself in the physical activity necessary to further sustainability.

So, how did we perform resilience building on an everyday basis? What sorts of activities were carried out and what were our roles? I'll start with my main role, that of chief steamer on the 'Textiles Team':

> "The day has a rhythm, there's a certain amount of ebb and flow. Quite often I get there at one pm, and it's quite upbeat and busy and I pretty much immediately get stuck into steaming, which I end up doing most of the afternoon. I'd say from about two until three, it's a peak time in the shop and it gets quite chatty, quite busy. Then from half three, four onwards, there's a definite wane, things are much quieter and the car park outside empties. Quite a few of the volunteers who got there early leave at that time, and maybe the pace of the steaming calms down, it's not quite so frenetic. That is a good time for me to put clothes out onto the rails. And then from half past four to five, it's quite quiet, which is nice. I really enjoy that time, because I have introverted tendencies and I like the respite, just turning the lights off and winding

things down. So, that's what I know about the afternoon's rhythms, I don't know about the morning rhythm."

(Extract from Eco Shop Field Diary, Stewart, 2015)

My task was to steam the donated clothes before pricing them up and putting the out onto the rails, and the afternoons had a distinct tempo, as we completed the many simple and common sense tasks:

"Once I had finished the steaming, Amanda took me through the pricing up process, which seemed based on common sense- most small T-shirts were £1.00, unless they were 'extra special', a jumper might be £2.00 and so a coat could be priced at around £4.00. A lot depended upon my own discretion and the condition of the garment. Occasionally, something really nice would need to be priced a fair bit higher. Once I had priced the garments, I arranged them on the rails and in the process of doing so, took it upon myself to re-arrange three rails, grouping like coloured garments together, and also, similar items side by side."

(Extract from Eco Shop Field Diary, Stewart, 2015)

I was left alone to decide how to price the garments and I appropriated the usual low pricing practices of the Eco Shop. In this way, I performed my own small activist scholarship (Sandover, 2020) role in challenging capitalism (Chatterton, 2016) and furthering sustainability.

6.6 The Eco Shop Serves Community

In the mid 1980s, the discipline of ecological economics was emerging, and scholars noticed that ecologists were prone ignoring the human component of problems while economists paid little heed to nature (Folke et al. 2016) (see section 2.3). Of course, we now know better, that ecology and economics are intrinsically linked, but it is a fallacy that either the domain of nature, or economics, can exist in a vacuum (Folke et al. 2016). The Eco Shop is a site of alternative economics (Gibson-Graham, 2006). It demonstrates a foregrounding of nature, commoning and a confrontation of capitalism, yet it still turns a profit. The shop provides social benefits to the community as well as environmental ones, as Thomas explains:

"How it delivers by who it accepts as volunteers as well, and the process by which they… seeing who can volunteers and who can't... they seem big on giving people chances. And I agree with that and the wider effect on the community, I think massive, it can't not be. Because so many people pass through the place that it has an effect and everyone that walks in walks out of there a little bit different, I think"

… "It really does bring an awful lot of people together and afford a little bit of a safety net to people, whether it intends to, or not. It's somewhere that they can pop into, you might have regular customers

> who only spend ten or twenty pence at a time, or maybe nothing but it's obviously a part of their life as well, you know, unofficially. It's obviously somewhere they enjoy popping in to, it's nice to see that" … "It's lovely, we've got so many regulars who are old citizens and it might take a little longer for the right money to be found but it doesn't matter because it's nice to talk to these people and give them time where otherwise, in other shops, they might not have that time"
>
> (Interview with Thomas, 2015)

These social benefits can be explained as the soft side of commoning, which can bestow a feeling of being held, perhaps like a safety net (Dawney, 2013). Thomas describes inclusivity and an ethics of care. People are valued. These aspects link to the nature side of the reason/nature dualism. These are part of an integrated life, which acknowledges, and foregrounds, those otherwise excluded, and also cherishes moments, such a quality time spent with others (Abatemarco, 2018). These are facets of ecofeminism (Abatemarco, 2018).

Vangelis tells me that he always intended the shop to provide knowledge about sustainability, but I wonder whether he anticipated just how much of a community hub it would become?

> "It was set up, really, to further sustainability… And the other thing was, having a place where people could just drop into and the shop is open six days a week and it is staffed by volunteers. Basically, people can drop in and they can get some advice about something related to sustainability… they might need something doing in their garden or want to make something from wood or… and really, it was to have a place where people could come into fairly often, really"
>
> (Interview with Vangelis, 2015)

The way people gain advice is another aspect of commoning in this post-capitalist fissure site. Here, knowledge is seen as a resource, which can be freely shared with one another (Twigger Holroyd, 2017).

Amanda also talks about the Eco Shop delivering social capital:

> "Yeah, definitely, there's conversations like someone had a wild food book the other day and I had some ground ivy in my rucksack, because my gums have been a bit sore, you know, so I sort of pulled it out and said, "Hey, have you met this one? Here, smell it, this will make … you'll recognize it by the smell…" and so, you know, then the conversation came from that. It's definitely a place where things can and um, 'cos customers donate things as well, so I mean, that completely changes it from a normal new shop, doesn't it?"
>
> (Interview with Amanda, 2015)

The above extract is another example of commoning, and sharing knowledge (Twigger Holroyd, 2017). This time, the knowledge is of herbs and their beneficial uses, as once again, nature is foregrounded (Abatemarco, 2018). This idea of social capital is mentioned in my field diary. The permaculture principle of People Care relates to commoning, as can be seen below:

> "I couldn't say how many customers came into the shop that afternoon, but it seemed pretty popular, although not many sales were made. I think it is fair to describe the whole atmosphere was being relaxed, non-judgmental, welcoming, friendly, unhurried, chatty and community based. A far cry from high street shops where sales assistants pounce on weary customers, demanding, "Are you OK?". (I always have the sardonic urge to answer them in the most literal way possible). If I were a customer, I would adore the non-intrusive atmosphere in the Eco Shop, with lively conversation and often titbits of food for thought. The shop ultimately serves the community on many levels: mental (knowledge, conversation), practical (cheap goods) and social (enough time for a chat with a friend or acquaintance)"
>
> "It is my failing that I didn't predict the Eco Shop would serve people and the community so well. I predicted that it would serve the environment. To really see 'People Care' actually happening in practice is quite beautiful and very inspiring- this is a good model for society. We could do well to look at the way these interactions are working, the way difficulties are negotiated, the way power is negotiated and see what ways of being could be taken forward to bring about a more inclusive and harmonious society"
>
> (Extract from Eco Shop Field Diary, Stewart, 2015)

The commoning observed in the above extract includes the sharing of resources, knowledge, time, and good feeling (Adey et al., 2019; Chatterton, 2016; Dawney, 2013; Twigger Holroyd, 2017), and is a view of post-capitalist transition sites that Chatterton (2016) calls for. For Chatterton (2016), it doesn't matter if a transtioner is working within an existing system, or if they have withdrawn from established systems, and are creating something new, both approaches are purposeful and create, "interstitial or prefigurative examples of the future in the present." (405), which is exactly what I recorded in my field diary. The inclusivity and harmoniousness seen above are ecofeminist ideals.

We also experienced commoning when we worked together in the Eco Shop. There were many examples of us pooling knowledge, resources (Chatterton, 2016) and also, coming to inhabit an emotional landscape which held us and cheered us up, as we experienced Dawney's (2013) feeling of being in common. As the physical commons of pre-enclosure Britain offered material succour and helped with a subsistence life of the rural poor (Huckle and Martin, 2001) and (Adey et al, 2019), so too did the volunteers and people local to Llareggub, benefit from the subsistence assistance the Eco Shop and (to an extent) the Forest Garden provided, as they could buy cheap goods, ranging from electrical, to tools, to clothes, to plants. The Eco Shop also provides the experience of being in common (Dawney, 2013) with others as for some, it's a place to 'hang out'

and chat, to share knowledge, laughter and even sadness. With the changes brought about by agrarian capitalism, landowners viewed the land as something from which they could profit, and no longer a resource to hold in trust (Huckle and Martin, 2001). As we push up against capitalism in the Eco Shop, by confronting it and selling things cheaply, we are viewing economics differently, building alternative economics (Chatterton, 2016; Gibson-Graham, 2006). To me, there is a link between sustainability (in the present), the ability to subsist (in both the Feudal period and the future), commoning, capitalism, and alternative economics.

6.7 The Eco Shop Confronts Capitalism

Connors and McDonald (2010) critique Transition, in the way that it can largely be populated by the middle classes and rarely challenges capitalism. The Eco Shop confounds this, as we see volunteers and customers from all walks of life, and a distinct challenge to capitalism (although, the shop still made a good annual profit). The Eco Shop fulfils some eco-socialist aims (Pepper, 1993), by the way in which it redistributes resources, either cheaply or, occasionally for free to its customers. Barter is sometimes part of the culture in the shop and reverse haggling has sometimes occurred, whereby customers were willing to pay a higher price than the price that staff wanted to charge for it. Although the Eco Shop confronts capitalism in part, the volunteers do not receive a wage from the shop, they are all supported by separate means. We cannot say that it is a pure alternative economy, only that in part it is non-normative. It offers a glimpse into how alternative economic systems might look and function, rather than a handbook. This was all evident to me as my time as a volunteer. The labour is in the Eco Shop is voluntary and happy (Gibson-Graham, 2006).

6.8 The Eco Shop is Inclusive

I remember seeing customers in the Eco Shop whom I didn't expect, as their external appearance did not match with the garb of alternative lifestyles. These were customers who dressed according to normative clothing styles. They came to the shop in search of low-cost goods and kinship. This demonstrates that the reach of the Eco Shop's activities were wide ranging. Perhaps some of these customers would fall under Edward's 'blue' and 'black' individuals, who have no interest in sustainability (Winter, 2018), yet they still shopped at a venue created to further sustainability.

Winter (2018) critiques the Copenhagen's top down and technocratic Green City project as too focused on normative, technological solutions, as the impetus came from the state, as opposed to the people. She observes class divisions between those with more and those with fewer resources as to their ability to lead (the desired) sustainable lifestyles (Winter, 2018). Poorer people were excluded. Winter's participant, Edward, works in the sustainability field and his organisation doesn't focus its efforts at 'blue and black' people because they have no desire to live more sustainably (Winter, 2018). Most volunteers in the Eco Shop fell into either Edward's 'light green' or the 'dark green' niches (Winter, 2018), as they had prior knowledge of and engagement with sustainability, to varying degrees. Not all the volunteers could be said to fit these niches and I worked alongside 'blue' or 'black' people, who came to the Eco Shop with no prior interest in sustainability, but who found that the activities made sense and so they gained in enthusiasm. My analysis is that the Eco Shop has succeeded where Copenhagen failed due to a difference in approach. The Eco Shop being grassroots, as opposed to the Copenhagen Green City, which was top-down in approach (Winter, 2018). The Eco Shop is more in touch with 'the people', as it was conceived and run by volunteers, as opposed to remote top-down elites. The Eco Shop is successful in engaging groups whom Edward's organisation finds impossible to work with. It is clear that people enjoy the commoning they encounter in the Eco Shop, which is demonstrated throughout this chapter.

When I was volunteering in the Eco Shop, I often thought of Mason and Whitehead's (2012) paper, *'Transition Urbanism and the Contested Politics of Ethical Place Making'*. Mason and Whitehead (2012) discuss hidden tensions within Transition Culture involving distant places and others, 'ethics of care at-a-distance' versus localisation. People can be inspired by local action and localisation can, according to Connors and McDonald, create such a pleasant experience at the local level, such a 'harbour' from oncoming 'storms', that people might not focus as much energy on global, at a distance problems (Connors and McDonald, 2010; Mason and Whitehead, 2012). The Eco Shop volunteers did have ethics at a distance projects going on at the same time, which counters what Connors and McDonald (2010) have observed. My results show that the Eco Shop provides a significant level of care for people locally but also, a degree of care for those further away. I have attempted to describe ways in which the Eco Shop builds resilience, serves the local community and also cares for those at a distance but Thomas (one of Edward's 'blue' or 'black' people (Winter, 2018)) is much more eloquent:

> "And so, knowing very little about conservation, permaculture, recycling or any of it really, I can see how many strands the shop had. At the time they were doing a thing for Syria, so I could see a strand going that

> way, I could see them helping the community directly, like with the fruit trees, I could see the Forest Garden and I met some of the different people that went to it (before I'd even been there) and then I went there and looked, that gave me an even better idea. It was what the whole place seemed to be about, but inside the shop as well, they seemed to have more time for customers, especially, if somebody walked in there in a little bit of a lost state, shall we say, I know that the staff had more time for those people, so there was another strand to it- that it was helping people in that way"
>
> (Interview with Thomas, 2015)

Thomas believes all the volunteers have been drawn together and he appreciates the sense of humour expressed by the volunteers and believes it serves as community glue, even though those are not his words:

> " but we're all people that have been through different highs and lows in life, some of them may be a little bit different to your average office worker, shall we say, which is why we've all been drawn together anyway, I think. And that support in there that there is for each person in there, that we all kind of give each other the best we all can is, when we're all having our highs and lows, is things that can make you laugh about these things while talking about other serious things. Does that make sense? I mean, it's the very fact that we are drawn together that probably enables a sense of humour and also helps us stay together, you know."
>
> (Interview with Thomas, 2015)

What Thomas describes is the emotional aspect of commoning (Dawney, 2013). He notes the shared sense of humour, and it was something that I relished about the place. People have more time for each other, the volunteers come from a variety of life experiences, and many have perhaps faced more challenges than usual. Thomas believes that the humour which is present means that distressing and divisive real-world problems are discussed in such a way that the element of the absurd appears and people laugh instead of arguing. Chatterton (2016) finds something similar, when he states that:

> "Many informal forms of social interaction, such as cleaning, cooking or gardening together, are central to building strong bonds of trust and solidarity, which allow the project to learn collectively and strong relations to flourish."
>
> (410)

This was certainly true of my time at both the Forest Garden, and Eco Shop, and I find it fascinating, particularly as our society is often perceived as being very reactive and fractured these days. Also, because people are actively engaged in doing something to address problems in the world, perhaps this means that they can laugh about it? Working together seems to make people happy! I think these extracts from my Eco Shop Field Diary sum this up really well:

> "I enjoyed a light-hearted volunteering session with lively banter and 'how many XXXs does it take to change a light bulb' jokes. Someone discovered a giant inflatable globe in the donations, and it was decided

to 'blow the world up'. Many 'ha-ha!, you're blowing the world up in the Eco Shop!' jokes followed until Henri was aghast to discover that Tibet was missing from the map! Despite the distressing political implications of this, the jokes continued, this time, with more subtlety, poignancy and wit, as humour was used to deal with unjust world events."

(Extract from Eco Shop Field Diary, Stewart, 2015)

"One of the most delightful things for me that I have noticed, is a thread that seems to run through every single one of my afternoon or mornings in the Eco Shop, and this thread is called humour, it's laughter. Laughing at little, small things, brightening somebody's day with a little joke about something. Making an ironic comment about something, even having a showdown between a couple of volunteers about carrier bags and recycling bags. Should we put them in the bin? Should we recycle them? Should we put them behind the counter? The bag issue was all getting a bit much, but the situation was resolved and now there's a new joke and the joke is, **"Don't talk to so and so about carrier bags",** and then everybody starts laughing and trying to wind each other up about carrier bags! I suppose there is a real warmth, a genuineness and a friendliness that is consistent throughout the social interactions in that shop and I think that is pretty priceless"

(Extract from Eco Shop Field Diary, Stewart, 2015)

6.9 Performance of Making Rag Rugs

As a maker geographer, I put my body to work (Carr and Gibson, 2017; McMorran, 2012) in this performance of slow scholarship, as I experienced the materiality of cutting the waste T-shirts into continuous yarn, winding this into balls, and using my hands to crochet this yarn. I encountered the sights, sounds and smells of others and the material culture of the Eco Shop, as well as the sense of frustration and satisfaction with my growing body of work, my rag rug (Carr and Gibson, 2016). This activity formed part of what Chatterton (2016) calls a post-capitalist transition, and what Gibson-Graham (2006) call a post-capitalist fissure, as we confronted capitalism, taking on this hidden wate, commoning together, and embracing alternative economics (Gibson-Graham, 2006). We didn't produce a product that had a high monetary value, yet we produced a product aligned with our values, thus in step with some of the ideals of an integrated life, which seeks to foreground nature and dissolve the reason/nature dualisms (Abatemarco, 2018). Pepper (1993) believes that by taking back the means of production, we reconnected to nature.

Slow scholarship as a maker geographer can be hard simply because making something is never as simple as it appears, as the maker has to re-do parts, unravel, refine, revisit or start again (Carr and Gibson, 2017). The maker geographer experiences research gains due to intimate proximity to material culture and the process of making. They can come to understandings that would never be possible from simply observing the making process (Carr and Gibson, 2016).

Here we will use the Rags to Rugs upcycling workshops to illustrate how the Eco Shop builds resilience, via the re-use of waste textiles through the process of commoning.

Helen became very aware of the problem of the 'Rag Bag' when she worked on the textile team and was confronted with the tangible evidence of a wasteful society as she sorted through the incoming textiles donations each week and realised that a vast amount was unsellable. Miller (2011) talks about the hidden waste of capitalism, but because of the position Helen occupied, this waste was exposed. In this field diary extract, I set down the process of Helen uncovering some hidden waste of capitalism and subsequently bringing it to my attention:

> "She also has a collection of T-shirt yarn and of course T-shirts which have been filtered off from the Eco Shop rag bag. I don't fully understand the situation, but approximately fifty per cent of the clothes donated to the Eco Shop are unsellable. This is because they are dirty, smelly or maybe there's a hole or missing button. I suppose some of these problems could easily be cured if someone could take them home and give them a wash, sew on a button but the setup of the shop this isn't so practical. Until fairly recently, the unsellable clothes or 'rags' used to go to the Rag Man, who would pay the Eco Shop a nominal fee and I think that they were re-processed somewhere in the UK. However, I think the payment from the Rag Man has gone decreased (I'm not quite sure) but Helen was saying that now the rags are taken to Germany, where they are burnt. I'm not entirely sure they are all burnt but a lot of the fabric is burnt and Helen is aware of a tremendous waste of resources. Because she is close to the coal face, because she is the person who unpacks the bags donated by the public, she is the one who puts her hands in there and asks, 'Can we sell this in the Eco Shop, yes or no?'. She knows that fifty per cent of the incoming material is unsellable. And this is unsellable in the Eco Shop, you know, it's not exactly the most pristine shop on the planet! What the wastage is from a more conventional second-hand or charity shop, I dread to think"
>
> (Extract from Rags to Rugs Field Diary, Stewart, 2015)

As this waste wasn't in alignment with our values of foregrounding nature and furthering sustainability (Abatemarco, 2018), Helen and I agreed to try to upcycle the waste into artefacts of higher value. Helen prepared the waste T-shirts by taking them home and washing them, whilst I created a series of posters, inviting the public to our free series of workshops. Helen also gathered equipment (such as rag rug making books, various knitting needles, crochet hooks and scissors) and I decided to research the best method of turning a single waste T-shirt into one continuous piece of yarn, using a particular method of cutting it up with scissors. I found the information on a YouTube video, which is part of the intellectual and creative commons (Gauntlett, 2011):

> "All this waste is not resilient, especially with the loose feedback loop. And so, Helen decided to do

something about it, and I was a willing accomplice, as we set up for the first Rags to Rugs workshop. Anyway, Helen's had a bee in her bonnet about this, so she's been talking these unsellable T-shirts home and washing them, getting them ready. We filled two wicker laundry baskets with washed, unsellable T-Shirts, which joined Helen's wool and T-shirt yarn. Helen also brought along some craft books and notably one of them was an old handmade rug book. Helen told us that most of the rugs included were the type of rugs that ladies would make, and that scant mention is made of rag rugs (towards the end of the book) because, *ladies don't really make rag rugs*! I thought that was quite interesting and I am guessing they were perceived as vernacular. There were also variously sized crochet hooks and knitting needles on the table whilst I bought my own giant hook along, a 15mm plastic affair which cost me around £1 and with which I can attempt giant crochet."

(Extract from Rags to Rugs Field Diary, Stewart, 2015)

During the workshops, we commoned together, in that we shared space, skills, resources, knowledge and most crucially, enjoyment (Adey et al., 2019; Dawney, 2013; Chatterton, 2016; Twigger Holroyd, 2017). The free workshops were a success and in terms of gender and age ranges, a diverse mix of people joined us. The only charge that was made was a very modest fee (which went to the Eco Shop), for the T-shirts.

Attendees took care to choose a pleasing colour combination of waste T-shirts. I demonstrated how to cut them into one continuous yarn, and Helen taught people how to crochet. I realised that I had no talent in teaching crochet, so I hung back, lest I confused people. We spontaneously arranged our chairs in a circular shape and spent a few hours chatting and making together. Many topics were discussed, and naturally, the subject of waste and upcycling arose:

"Helen was saying that she thinks we're are now Peak Stuff, we're not just peak oil anymore and she sees it going two ways: she said that maybe we're going to be forced into using the stuff, all of the throw away T-shirts but also that maybe we will become a bit more conscientious about our shopping habits and perhaps buy things made with a bit of longevity in mind. There was also mention of using bailer twine to make doormats, Helen mentioned it, she said that she'd seen it somewhere that she went to and then Zoe piped up and said that that's what they used to do when she was younger. She used to live on a farm when she was going, and she went to the Young Farmers Club and they used to make door mats out of bailer twine. I think this was a combination of knitted and plaited twine, I think starting with a knitted centre and then add plaits outwards, or vice versa. Anyway, it sounded as though that's just what you did, it was something to do; cheap, sensible, and that's what they did back then. I don't know when 'back then' was but it's not an entirely new concept"

(Extract from Rags to Rugs Field Diary, Stewart, 2015)

We reclaimed the means of production by taking some of the hidden waste of capitalism (waste T-shirts) (Miller, 2011) and crocheting them into rag rugs. Pepper (1993) states that by doing so, we reconnected to nature and thus, part of our selves. As we commoned together, we experienced

an agreeable feeling of being at one (Dawney, 2013). Through our practice of learning or furthering existing skills, we increased self -reliance through making, which can be used as a small-scale solution to environmental problems (Carr and Gibson, 2016). As the environmental crisis deepens, we're more likely to need skills such as the ability to repair and make things ourselves (Carr and Gibson, 2016), which chimes with what Zoe says in the above extract, when she tells us that farmers used to make doormats out of bailer twine.

My own rag rug took many more hours to complete and, due to the fact that production is by hand and time consuming, these rugs have a very low financial value. They can never compete with mass produced goods from the globalised neoliberal system. Likewise, the food produced by Abatemarco's (2018) farmers is high value, yet undervalued by society, and her farmers experience degrees of financial stress. Despite these struggles, the farmers recognise rewards gained in other ways, for example, family time, landownership, physical exercise and the satisfaction of living in accordance with their beliefs and ensuring "quality of life for the organisms living on the farm" (Abatemarco, 2018, 1608). In this regard, our rag rug production has similarities, in that we experienced the high value of commoning together, we enjoyed ourselves, and we aligned our activity to our values of trying to tackle some of the hidden waste of capitalism.

6.10 Transition Culture or transition culture?

I wish to make a distinction between Transition Culture (the official movement) and transition culture, whereby people perform action inspired by ideas of transition, resilience and sustainability, with no official affiliation. We observe an example of transition with a small "t" at the Eco Shop, as unlike critiques aimed at the Transition Movement by Connors and McDonald (2010), the Eco Shop doesn't subsume smaller groups. I witnessed the Eco Shop helping smaller groups to flourish, as was the case of the Rags to Rugs workshops. Also, some volunteers found the Transition Movement and permaculture too masculinist in approach, yet they were happy to spend their energy on furthering the aims of the Eco Shop. Thus, the Eco Shop comes under transition culture, which tallies well with Chatterton's (2016) post-capitalist transitions or urban commons. Connors and McDonald (2010) critique the Transition Movement for being too dry and too masculinist in nature. This sentiment is echoed by Helen, who finds permaculture a bit lacking in the emotional sense. Perhaps she didn't experience Dawney's (2013) good feeling of commoning?

Transition Culture isn't eco-socialism, yet transition culture, or post-capitalist transitions are, since they do confront capitalism. Hopkin's (2008) argues for the same type of upcycling that we performed with the waste T-shirts, one that builds resilience by dealing with the waste in situ, working together and increasing local skills. Hopkins (2008) wants to see the feedback loop of resources tighter and smaller, which we amply demonstrated in the Rags to Rugs workshops. I would not say there wasn't any masculinist culture present at the post-capitalist fissure sites at which I volunteered, but I heard less complaint from my participants about it than I did when some of them reflected that they had found permaculture 'too dry' (see Section 4.2d).

6.11 Experiential Learning

As planetary boundaries are approached due to globalization, some communities have responded to this vulnerability by starting on a journey to resilience, and to study this, a considerate methodology should be used (Wilson, 2012). My sensitive ethnographic work is what Wilson (2012) has asked for. Meanwhile, Carr and Gibson (2016) would like to read details from the work of maker geographers, such as myself.

I used visceral, sensorial and instinctive research methods in the Forest Garden and Eco Shop, whereby, "experiential learning takes place through adaption" (Sandover, 2015, 153). Sandover (2015) conducted auto ethnographical field work growing food and running workshops at allotments and she gained practical knowledge through these practices, as did I from my immersive gardening, clothes steaming and making practices. We both experienced visceral processes and what Sandover terms "pre-rational learning" (Sandover, 2015).

Through the allotment practices (Sandover, 2015) as a volunteer in the Forest Garden, a practice of benevolent environmental stewardship was performed, which fulfilled some aims of eco-socialism (Pepper, 1993). I experienced the materiality of the garden in the most literal manner, as thistles pricked and nettles stung at me (Sandover, 2015). As a slow scholar engaged in making culture, I used creative methods to record artistic responses to my sessions in the garden (Carr and Gibson, 2017). When it was time to harvest the apples, we approached the multitude of wasps from the perspective of foregrounding nature; we viewed them as integral Earth Others and we demonstrated curiosity and a benign attitude towards them (Abatemarco, 2018 Buckingham, 2004). We refused to see them as a threat, or pest. We did not hyperseparate them from ourselves as humans, instead, we attempted to erase part of the separation between humans and nature

(Abatemarco, 2018). Coincidentally, the behaviour of the wasps was unlike any I had previously experienced, as they carried on their business of eating fermented fruit, unconcerned by our presence. This new knowledge came to light as a direct result of my participatory methods (Sandover, 2015). We then furthered eco-socialist aims and challenged the capitalist mode by distributing a fecund apple harvest amongst all volunteers, with plenty to spare for friends and family, at no financial cost, since the proceeds from the Eco Shop support the work in the Forest Garden (Chatterton, 2016; Pepper, 1993). This action answers Connors and McDonald's (2010) call for the Transition Movement to confront capitalism and it relates to Sandover's (2015) work on allotment practices, when she learns that there has been a move to increase access to food growing land (and skill) in direct response to the elitism that is sometimes present in AFNs due to exclusive rights over land and higher produce costs.

We witnessed an alignment with values, thus expressing the nature side of the reason/nature dualism in the Forest Garden when, for example, we created a wildflower bed for bees and one volunteer gave them a blessing (Abatemarco, 2018). We also saw the reason side play out in the Forest Garden, when we discarded out values in favour of pragmatism. Instances of this occurred when Vangelis and others used a black plastic liner as weed suppressant in their wildflower bed for bees and when, after deliberation, it became clear that it was impossible for the volunteers to keep the paths clear by hand tools alone, and a petrol lawn mower was acquired. Sandover (2015) notes that constrains faced in allotment practices might mean that the gardeners use help from others or machinery.

We also saw that permaculture principles *were* enacted, as we turned two problem (no paths and waste materials) into a solution (pathways made from straw and bark chippings) (Whitefield, 2009). This was contrasted when the activity strayed from strict forest gardening, to the unorthodox introduction of flower beds. This attitude of trying to follow the general guidelines and principles whilst they are practical, but not being afraid to go off-piste when they become hard to implement concurs exactly with what Oliva, who is a dedicated permaculturalist, says in Chapter 4, when she reports having an 'instinctual' approach (see Section 4.2d).

The work is hard in the Forest Garden but through but my field diary, we gain a sense of satisfaction and this contentment relates to the emotional or 'heart' aspect of energy descent (Hopkins, no date). We also glimpse activities not usually associated with permaculture nor Transition Culture, that of the interplay between humans and spirit, as flora and fauna are blessed.

Other insights revealed through the Forest Garden Field Diary are physical attributes of the garden, such a description of the soil and flora. Furthermore, the Forest Garden is shown to be a place for humans, as well as nature, and a place where people are able to discuss profound aspects of life and to have debates over the best way of doing things, yet to reach consensus and for the overall harmony to remain intact. In this way, I witnessed direct democracy (Chatterton, 2016) and the value ethic of appreciation for quality of life, which reveals the nature side of the reason/nature dualism (Abatemarco, 2018).

This immersive ethnographic work answered a key research question: '*Does the Eco Shop build resilience*?', as promoted by Hopkins (2008). It became clear that it did, via a multitude of pathways. I found the answer to my question through observation, asking questions and analysis. With profits from the Eco Shop supporting both the Forest Garden and outreach fruit tree planting schemes in the community, it is building future food and ecological resources (Hopkins, 2008). By supporting local craftspeople and selling their green wares, it is creating modularity and tight feedback loops (Hopkins, 2008). By reusing waste materials and hosting rag rug making workshops, it is increasing skill and bonding community (Hopkins, 2008). Additionally, by functioning as an impromptu community centre, many emotional needs of people are being met, though the beneficial feeling generated by commoning (Dawney, 2013). I made an infographic relating to the answer of my research question, which can be found in Appendix 4.

My work showed that commoning is a vital part of resilience building. Chatterton (2016) proposes that we call the geography of post-capitalist transitions the urban commons. Dawney (2013) encourages us to gather together, to be soothed by the sense of feeling in common. Adey et al. (2019) view the commons as physical resource and an emotional factor. Twigger Holroyd (2017) uses commons as a metaphor for sharing space, knowledge and resources. Where the commons that I discovered urban commons? I believe the Rags to Rugs and Eco Shop activities were, as they occurred in an urban setting (albeit a small town in rural Wales). Pobl yr Afon Forest Garden is situated on the outskirts of a town however, in a liminal and marginal space, as it lies between a town and a village, along a rural road.

My work with volunteers at the Eco Shop demonstrates that it answers the critiques levelled at the Transition Movement by Connors and McDonald (2010); that there is a tendency to be too dry, too masculinist in nature. The Transition Movement can be largely populated by the Middle Class (thus exclusive), can also focus on localisation at the expense of global problems and it doesn't

confront capitalism (Connors and McDonald, 2010). The post-capitalist transitions as discussed by Chatterton (2016), and as seen in the Eco Shop, do satisfy Connors and McDonald (2010). We saw inclusivity, I spoke to volunteers who found it less masculinist and less dry that permaculture. Smaller groups were supported, rather than co-opted, and capitalism was in part, confronted. The Eco Shop was populated by a diverse group of people, from various backgrounds, with a variety of privileges and constraints, and it was inclusive, rather than exclusive. Social and environmental justice at a distance was furthered (Mason and Whitehead, 2012). Thus, my case study shows that when commoning activities and a horizontal or anarchic structure is activated, using direct democracy, we see transition culture (or post-capitalist transitions) at work, which aim for low carbon futures and satisfy Connors and McDonald (2010). Although some volunteers at the Eco Shop were involved in the Transition Movement at one stage, they never became an official initiative. Instead, they worked in the spirits of transition, in their own, autonomous way.

An outcome of my embodied research as a volunteer at the Forest Garden and in the Eco Shop, was that I witnessed people managing the backloop of the adaptive cycle (Quilley, 2011), via their post-capitalist transition intervention. Both sites can been seen as revolt actors (Quilley, 2011), where small and incremental change can threaten the larger scale and entrenched systems of globalization and neoliberalism. Localisation is viewed by Quilley (2011) as a revolt action and can cascade up, via nested adaptive cycles (Walker and Salt, 2006).

The post-capitalist fissure sites of the Eco Shop and Forest Garden embrace many facets of eco socialism (Pepper, 1993). In the Eco Shop we witness a redistribution of resources and with the Rags to Rugs project, we discover and then confronted the hidden waste of capitalism (Miler, 2011). We then reclaim the means of production (Pepper, 1993), through commoning (Chatterton, 2016) (Dawney, 2013), as we made colourful crochet rag rugs from waste T-shirts. Finally, my results show that due to the grassroots approach of the Eco Shop, some 'hard to reach' people become engaged in sustainability practices.

The permaculturalists I interview in Deheubarth tend to live in isolated rural plots and so I could only claim that part of the commons I encountered were urban, others were more rural and liminal, with people relying on travelling to each other's homes, or to a central site to common together. In the next chapter, I travel to a ceramists' studio to conduct a semi structured interview whilst making ceramic tiles with her. The work is reciprocal and through the practice of being a maker geographer, research tensions are resolved.

Chapter 7:

The Re-Enchantment of Everyday Life

7.1 Resolution of Methodology Through Making

Coming from a background of traditional science, physical geography, landscape management and environmental archaeological, to the field of human geography, I experimented until I found a methodology that satisfied me, a geography of making. Through creative collaborations and shared creative space, it appeared that my relationship with participants was as equitable as could be hoped and the process was agreeable for all. As we sat in a circle chatting and crocheting rag rugs from old T-shirt yarn, the relations tended towards horizontal rather than vertical, as we see favoured by anarchist geographers (Stringer et al., 2012). My early feminist readings cautioned against exploitative research and instilled in me a desire for my research to exert a transformative effect, but they gave me scant practical ideas of how to achieve this and it took quite some shaking until I had cast them aside. As is often the way with ethnographic work, as discussed in Chapter 3, the field exerted a transformative effect upon me, and a dichotomy arose. Through the immersive ethnographic practice, I embodied making as a key part of my situated knowledge. I gardened, I designed, I drew, and I did crochet, thus the field made me into a maker geographer.

As I explain in Chapter 3, I didn't set out to be an observant participant, I supposed I would conduct an ethnography of sorts, but I envisaged myself chatting to people and gaining interviews, so I would approximate as participant observation at best. I had no idea I would be 'putting my body to work' alongside fellow gardeners, volunteers, and makers. Likewise, I could never have imagined the emotional turmoil I was yet to experience, nor the insights I would be privy to. It truly has been an incredible 'journey' from start to finish. I don't think I exaggerate when I liken it to some epic hero's quest; when you factor in all the personal tribulations which have attempted to blow my path to smithereens. Yet, I have plodded on, my grubby cheeks streaked with tears, and can now reflect. As someone who describes herself as both a creative and an intuitive, employing a creative response to problems, is second nature to me, but deserving of reflection and

comment. There were many instances when creative research methods came into my own practice. In the earlier stages, they were employed both deliberately (via the creation of my 'artistic response' entries to my Forest Garden Field Diary) (see Appendix 1) and also, by default, as the very nature of becoming a volunteer in the garden was of course, a work of creativity. Additionally, one could say that the co-creation of the Forest Garden Plan, my Eco Shop flyer, Rags to Rugs posters, (see Appendices 2, 5, 6) and much of my volunteer work in the shop drew on my creativity, and of course, my collaboration in the Rags to Rugs workshops consciously employed creative research methods. When I compare my own progress against measured outcome, I am often anxious and disappointed, and am left wondering why I can't just churn this stuff out. Yet in my creative life, I learnt a long time ago that my progress is seldom straightforward and many years ago, Ruskin commanded me to accept and delight in the imperfection of my creations (2008 [1853]). Knitting and crochet frequently require me to undo the work, sometimes a few stitches, sometimes whole rows, a process known as 'frogging', because you "rip it, rip it". (It's a play on words, (Stoller, 2003). I take solace in the company of Carr and Gibson (2017), who insist that not all drafts are to turn into finished pieces.

If we establish the need, and indeed, the validity of embodied, close quartered research, which relies on experiencing the minutiae, the everyday, the essential experience of making, it brings to attention to the question of 'how'? (Carr and Gibson, 2017). And this is where an element of risk is involved. We might have to take a deep breath and be prepared to buck the trend in the accepted neoliberal hegemony (Carr and Gibson, 2017). McMorran (2012) critiques geographers for being reluctant, as he says: "Recently geographers have been avoiding work. At least as an explicit research topic, work has been largely absent from the geography agenda" (490). Even though my thesis isn't explicitly about work, my ethnography contributes to this fill gap in this knowledge. Carr and Gibson (2017) are optimistic that a change is afoot, as they inform us that some exciting work is occurring with geographers working alongside makers, especially in the realm of newly published PhD theses. Carr and Gibson (2017) recount three PhD projects covering yarn bombing, knitting and granite sculpting; all recent work which helps us to understand relations with place, activism, friendships, care, and economics. There is a recent body of work by various maker geographers and maker academics who utilised the PhD period as an opportunity for prolonged immersion with makers, and as: "The PhD presents one opportunity for embedding the researcher within an existing community of makers over a long period of time." (Carr and Gibson, 2017, 5), and this satisfies the temporal component of Moeran's (2017) requirement of participant observation fieldwork. Carr and Gibson (2017) are empathic in believing in both the

validity of such endeavours and the bringing of them into the academic milieu, not least because they are part of a healthy response to a more precarious world and environment in which we now find ourselves living. (Carr and Gibson, 2017). They go on to denounce any who would see making culture as a mere hobby or indulgence, but put it in its rightful place, as part answer to our current social-ecological problems:

> "Such devotions ought not to be denigrated as uncritically romanticised motivations or attachments to fetishized commodities, but in fact *celebrated*, for the romantic commitment to creating, fixing and restoring physical things, so commonly found within maker-cultures, is itself an important asset within the context of growing socio-ecological volatility."
>
> (Carr and Gibson, 2017, 7)

7.2 Grassroots transition culture

As we have already encountered, Hopkins and the Transition Network recommend that Transition Initiatives educate local people with the aim of engaging them to the cause of Transition, thereby fostering at atmosphere of enthusiasm towards resilience building and environmental stewardship (Hopkins, 2008a; Hopkins, no date). This is achieved through events such as film screenings, lectures and workshops and I see much value in this, but from the onset of this work, I wasn't convinced one needed to participate to engage in resilience building and this hunch was born out through my results. When I first heard Hopkins speak at the *Deheubarth without Oil* event, and when I subsequently read the resilience and re-skilling chapters in his *Transition Handbook*, (2008a) I was enthused excited and engaged with the process. When I met with the Transition Network people (as part of my role as Development Officer for Transition Llambed) and when I browsed official Transition Culture, Transition Network websites and blogs online, I was, and still am left disenchanted, disconnected and without any sense of enthusiasm, as I found it didn't support my ecofeminism. I find it lacking in enchantment. My supervisor mused that possibly the arid atmosphere of some of the Transition discourses is a legacy of the social-ecological resilience perspective lacking an everyday quality. I can see what he means but I'm wondering whether this masculinist outlook is more characteristic of the environmental movement per se, and that the exact same application of masculinist solutions to masculinist problems that Seager (1993) warned us about in Chapter 2, are at play?

What I gathered from my field work is that an official Transition Initiative might not be able to fully engage people in place like Deheubarth, perhaps because it will only ever function as a cultural import and not something from the ground up (Connors and McDonald, 2010) (see Section 2.2f).

Many of my participants are already fully committed to building resilience in their own ways, so they are not necessarily seeking external validation (see Chapters 4-5). Furthermore, many of them have a proactive personality and independence of spirit which may not respond so well to instruction, ratification nor command from the outside:

> "So we were talking about that dynamic, the dynamic of Vangelis's role as founder and the fact that the shop is run by volunteers. I think the conclusion was that you have to have boundaries and you have to have some rules, even though there are quite a few 'anarchic' types involved in the shop, who work there, so you can't be too rigid with them, otherwise they'll disappear."
>
> (Extract from Eco Shop field diary, Stewart, 2015)

My empirical research has clearly shown that despite other motivating factors, my participants often engage through the 'heart' (see Section 4.1c). It is as if an emotional factor has to flow through, in order to sustain what they do in practice- they have to enjoy it to be motivated and committed, and this is something that Franklin et al. (2011) also discovered in their study of sustainability projects in Stroud. In Chapter 4, I postulate that the key to localization and resilience building is the 'heart' or emotional aspect. The themes of satisfaction, happiness, fulfilment, were prevalent. The 'head' or theory aspect was optional, but the emotional factor was obligatory, it seemed. Chapter 4 shows us that people can come to build resilience via initial engagement with 'hands' and 'heart', and the 'head' can come later. This contradicts advice from Hopkins (2008a) who encourages a conceptual awareness at the onset. I have no intention to belittle the 'head' aspect, it is just that it's clear it doesn't *have* to come first, people can find their way into engagement, through other routes. Franklin et al.'s (2011) work demonstrates the way in which community volunteers can gain in confidence and knowledge via taking part in practical sustainability building projects. Also, once embodied work is embarked upon, it can change one's perception (Sandover, 2015). Sandover (2015) found that people gained knowledge through physical activity, and this concurs with what I was told by my Practice-led resilience builders, who gained environmental knowledge following physical action.

I had erroneously assumed that the majority of customers using the Eco Shop would be part of the 'alternative community' and through participant observation work as a volunteer, I found that this was absolutely not the case. I realise now that this assumption was based on something that Franklin et al. (2011) observe in their study of Stroud, in which it is said that the town is split, and: "On one side of the divide are said to be those who were described as '"greenies"', '"hippies"', and '"arty types"' (349). As Franklin et al. (2011) point out, these 'greenies', 'hippies' and 'arty types' are not typically indigenous to Stroud, but they are the ones who: "have been involved in

setting up and maintaining the local sustainable initiatives" (349). However, the Eco Shop's customer base is widespread, as it appeals to many people, for a variety of reasons, and the same is true of the volunteers. Winter (2018) found that Copenhagen's top-down sustainability Green City initiative was classist. We can contrast this with the grassroots initiative of the Eco Shop and the Forest Garden, which were more inclusive by nature. In Winter's (2018) work, Edward, works for an environmental NGO and he categorises Copenhagen's citizens' motivation towards sustainability goals as ranging from 'blue' and black' (disinterested), through to 'dark green' (highly committed). Edward's organisation doesn't focus its efforts on the 'blue and black' groups, as these people will never engage with sustainable lifestyles (Winter, 2018). Winter's (2018) findings contrast against my own, in which we witnessed individuals from the 'black' and 'blue' groups becoming enthusiastic about increasing sustainability via sovereign immersive engagement with the tangible work of building resilience. These individuals had no prior knowledge of sustainability, yet became interested once physical activities and ideas shared with them made good sense. I met these participants via my ethnographic involvement as a volunteer. I believe the reason that these 'unreachable' groups participated in the activities in Deheubarth, whereas they did not in Copenhagen is simple, the Copenhagen initiative is top down in approach whereas my study focussed purely on grassroot activities. Winter (2018) critiques sustainability projects drawn up by distant elites, with no consultation of grassroots members. My results show that grassroots groups can be successful in engaging groups who otherwise remain outside of sustainability efforts as this is important validation of the positive potential of grassroots sustainability projects.

Connors and McDonald (2010) are wary of the umbrella-like nature of the Transition Towns movement, which could collate and then accidentally dissipate the momentum of a plethora of smaller movements. They cite a participant from Transition Town Totnes who regretted aspects of the movement as, they saw it taking over and swallowing up already established groups (Connors and McDonald, 2010). Both Amanda and Vangelis told me that they were Transition with a small 't', as they and other were already engaged in resilience building, so didn't see the need to formalise their activities. One of the strongest messages to emerge from this thesis is not to discredit Transition Culture in any way (and what a hypocrite I would be, as I owe so much to Transition) but to recognise that many people are involved in transition culture, with a lowercase 't' and 'c', as they are not affiliated to an official organisation. Additionally, critiques of new environmentalism are that it is too middle class, does little to confront capitalism and can advocate localism at the expense of global environmental and societal problems (Connors and McDonald,

2010). My ethnographic work showed that grassroots projects can be inclusive and agitate around capitalism.

7.3 The Web of Life

Chapter 5 reveals that a healthy connection to nature, fellow beings and a rich culture fosters a satisfaction, which leave one less prone to the lure of rampant neophilia and capitalist consumption, so despised by Morris (Miller, 2011; Pepper, 1993). One notion which has meaningful implication is the recurrent utterance of "everything is connected", or variants thereof. I heard it so many times, you could be forgiven for thinking it was a mantra. A key aim of feminist research is to give voice to others, especially those less heard voices and this articulation forms a part. Participants spoke about the interconnectivity between humans, each other, nature, and spirit, which concurs with some literatures from the resilience perspective, stating that humans and nature are inextricably linked (Walker and Salt, 2006; Folke, 2006; Gunderson, 2009). The same notion appears in ecofeminist work (Adams, 1993; Orenstein, 1993; Ruether, 1993; Gadon, 1995). Many of my research participants acknowledge this human/ nature/ spirit interconnection (see Section 5.4).

7.4 An Instinctive Maker Culture

If we start to think about space and place, we could say that for me, the space I often occupied was 'back stage', as I was part of the garden, embodied as an active gardener, and later on, a 'steamer', and later still, one who crochets. In all these encounters, I used my geographer's body to work and to gain situated knowledge (Carr and Gibson, 2017). Although the garden claimed me immediately, I began by occupying the place of an outsider, and it was much longer before I became an emotional insider within the group. It was not until the Christmas dinner, a few years down the line, that I got the final recognition that I was a fully-fledged insider. So, as ever, the interface between myself and the garden (nature) was instantaneous, solid and tacit, but the interpersonal relations took more effort and time. This no doubt comes down to my personality, I am more at ease amongst animals and plants than I am with humans, unless there is an elusive mixture at play. Other researchers would no doubt be different, and so I agree with Moeran (2007) that in part, it does come down to the personality of the researcher. This dichotomy comes as little surprise as being someone used to a degree of unease in social situations, yet complete ease and peace in nature, it merely reflects how I generally find myself; 'in space, out of place'.

However, I found that making things together resolves various research tensions. Engaging in creative research methods can be used to reduce researcher privilege and provide a 'bridge' between researcher and participants, as discussed in Chapter 3. My results show in Chapter 4, that people find making things satisfying and we already know that it is an activity which can be used to build resilience, so it ticks all the right boxes. Twigger Holroyd (2017) uses the term "folk fashion" to describe the process and materiality of making and mending your own clothes at home. She employs: "folk fashion as a catch-all term: an umbrella concept that encompasses everyone involved in making their own clothes, and everything they make" (Twigger Holroyd, 2017, 1). She believes that folk fashion can be used to increase sustainability as; the social and environmental burden is reduced in comparison to mass produced globalized modes of production; less waste is produced when we mend our clothes; making is a timely process and therefore we come to invest in the garment emotionally, we start to treasure it and are less likely to abandon it- consumption is slowed down; the maker experiences enhanced well-ness, which feeds into sustainability and; self-reliance is increased and the maker becomes more resilient Twigger Holroyd (2017).

According to Gauntlett (2011), a "shared purpose is essential for human stability, otherwise we can find ourselves unexpectedly crushed by loneliness and stress" (223). Gauntlett (2011) also associates contentment to the bonds we have with each other. Thinking about our 'lone wolf' resilience builders (see Section 4.1b) who don't always enjoy community participation, and who are less likely to get involved with Transition groups, would they be more inclined to join a group of makers? Gauntlett (2011) has observed that, not only do inter-relations improve our well-being but that when we make and share things together, we become linked to them in: "unexpected, unplanned, and perhaps rather anarchic ways" (223). As a researcher, making served as a wonderful way to share a platform with others. Cresswell (2018) talks about parataxis, placing things side by side, avoiding a hierarchy, and the space in which making things with others occurs can be likewise. When we crocheted together in the Eco Shop, we sat round in vaguely circular formation. I believe this physical use of space can help further the aims of a feminist geography, as space is more likely to be 'shared', less likely to be 'held'. I found the process of researching and chatting while making to be very enjoyable. Craft, making, sharing of activities is pivotal but, as Morris recoiled at brutalist socialism (Morris, 2008 [1888]) which is nothing like his beautiful Arts and Crafts movement with its proven and enduring legacy, I too can only believe in a resilience building which is not only practical but is also nourishing to the soul, be that through companionship, aesthetic beauty or and enchantment.

My results in Chapter 4 demonstrate that for some, Transition Culture and permaculture were deemed dry and even masculinist (see Section 4.2d). Others found their knowledge interesting and informative, yet once they were engaged in the embodied performance of resilience building, they were happy to be instinctual and throw the plans away (see Section 4.2d). Another compelling theme to have emerged from Chapter 5, is the idea that fulfilled people with a rich cultural life and plentiful agreeable relations with self, other, nature and spirit, are less likely to be drawn towards excessive consumption (see Section 5.5). In tandem with this though is the idea that globalization attempts to erode culture and produce homogenisation (Abatemarco, 2018). Gantlet (2011) says that although making is joyful, the process can often be disheartening and demanding. However, it is inspiring that Gauntlett (2011) notes, that making things is a "challenge" to big government and big corporations because the maker is eschewing consumption at the industrial scale (224). When we embrace these trends, we can engage with the glorious idea that a re-engagement with the small pleasures of everyday life, the re-calibration of self to nature, spirit and others, might just weave healthy threads across the abyss of environmental destruction to which we collectively seem to be heading:

> "As I was leaving, Vangelis was talking to Jazmin about the relationship between oneself and the Earth and spirituality and if you want to be at peace with yourself, you maybe need to work out your relationship first, with the Earth, and go from there. I thought this was quite interesting."
>
> (Extract from Eco Shop Field Diary, Stewart, 2015)

Gauntlett and Twigger Holroyd (2014) both of whom are inspiring and accomplished maker academics, engaged with craft, sustainability and social change, do not dismiss the importance of both individual effort and small steps when it comes to engagement with the world and increasing sustainability, as these small steps add up to something greater at the collective level (Gauntlett and Twigger Holroyd, 2014). As Gauntlett says:

> "These 'micro steps, combined together at the macros level, become significant in contributing to social change. In particular, we explore the ways in which amateur making is important for sustainability- through offering an alternative to the mass consumption model and building a sense of engagement with the world."
>
> (Gauntlett and Twigger Holroyd, 2014, 1)

Thus, we see the connection between making and sustainability and importantly, the idea of interconnection, through the increased participation (therefore, connection with) the world. By reclaiming the means of production and making a great many small steps at the local level, we build participation and also challenge mass consumption (Gauntlett and Twigger Holroyd, 2014). I propose we call this the re-enchantment of everyday life and that we use making as our prime vehicle through which we create things, memories, and spaces to re-member how to live sustainably. Ruskin (2008, [1853]) argues for the roughness of gothic architecture and the imperfection of the handmade and transition culture can possess a certain roughness, a lack of polish, as we see in Chapter 6; it is homemade, but it is authentic, and it might just be enduring.

As a result of my immersive ethnography, when Linda told me about the 'Rag Bag', the 'Rag Man' and the waste clothes which were incinerated in Germany, sites of the hidden waste of capitalism were revealed (Miller, 2011). Linda and I took responsibility for this waste (Dawney, 2013) and tried to satisfy some of Pepper's (1993) eco-socialist aims by hosting the Rags to Rugs workshops with the public. In the guise of slow scholarship (Carr and Gibson, 2017), I put my body to work (McMorran, 2012) as maker geographer (Carr and Gibson, 2017), or activist scholar (Chatterton, 2016); Sandover, 2020). This activist scholarship also echoes Sandover's (2015) immersive ethnographic work when she ran healthy eating workshops with the public. As we reclaimed the means of production and 'upcycled' these T-shirts into continuous yarn and then rugs, Pepper (1993) believes we started to reconnect to nature and thus part of ourselves and our innate spiritual and innocent human nature, less corrupted by capitalism. Chatterton (2016) wishes to see people confronting capitalism via commoning, and as we experienced the beneficial emotional aspects of commoning (Dawney, 2013).

7.5 Commons

The need to reconnect with nature and thus, part of yourself (Pepper, 1993) through commoning holds a potent grip on our psyche. Prior to agrarian capitalism, the land was held in trust, and it was not viewed as a resource from which to profit until after the Enclosure Acts (Huckle and Martin, 2001). The metaphor of the commons can be used for commons of the mind (Twigger Holroyd, 2017), a feeling of being in common, through commoning activities whereby people enact sharing of resource, activity, and space (Adey et al. 2019), evoking a caring ethic (Dawney, 2013). The link is deeper when we consider that prior to agrarian capitalism, resource use in Britain was renewable and low carbon (wood, wind, draught animals), yet we turned to non-renewables

and high carbon resource use (coal and metals) after the Enclosure of common land (Huckle and Martin, 2001). There is an implicit connection between the once material common land, capitalism, and commoning as a post-capitalist transition. As we now seek to enter lifestyles which are lower carbon, more sustainable and renewable, at the same time as engaging in commoning, we come full circle, reclaiming the physical commons through material practices such as community gardening and running shops together, to affective nature of shared experience (Dawney, 2013).

Chatterton (2016) uses the idea of the 'urban commons' to give direction to the geographies of "post-capitalist transitions" (403). Twigger Holroyd (2017) uses "fashion commons" as a metaphor to describe every single garment of clothes that there is (58). She uses commons as a metaphor because:

> "While the concept of commons is traditionally linked to the land, the principle is frequently extended to other physical resources … and intangible cultural resources – sometimes called the commons of the mind – such as open-source software."
>
> (Twigger Holroyd, 2017, 58-59)

Twigger Holroyd (2017) sees commons as a diverse place, where we can partake, move around, and like its namesake, the natural ecosystem, some areas will be more frequently tramped or grazed than others, depending on need and season. The way we moved round the Eco Shop and Forest Garden was similar. There were 'high traffic' areas, quieter places, zones of frequent exchange and interaction, resources to be shared, gathered, sorted, planted, tended. We gave to the commons of the Eco Shop and Forest Garden and in turn, they gave back to us with sustenance, be it in the form of tangible, physical resources, or fruit from the "commons of the mind", in terms of knowledge or ideas. For Chatterton (2016): "the commons is a widely understood spatial motif, evoking bounded entities that exist to nurture and sustain particular groups" (407). I find it fascinating that, as Chatterton (2016) points out:

> "In this simple historical form, the common (the fields, the village greens and the forests) are geographical entities governed by those who depend on them- the commoners. However, it refers to much more than physical attributes of air, water, soil and plants, as well as socially reproduced goods such as knowledge, languages, codes and information."
>
> (407)

This is very similar to the way in which the volunteers shared and managed the Forest Garden and the Eco Shop. It is pertinent to note here that in Abatemarco's (2018) feminist work on women

organic farmers, she observes that due to the fact that the women are aware of their dependency upon nature, they do not background it, they are not 'more than', not 'higher than' nature (they resist the dualism) (Rose 2013), they have a more holistic attitude and it shows in their attitude towards the land: "These farmers have an intimate relationship with the natural environment such that they derive their livelihood from the land, but also see it as something valuable in its own right." (Abatemarco 2018, 1615). This is as if they have turned the clock back to pre-capitalist times. When the eighteenth-century Enclosure Acts were passed, not only was environmental degradation accelerated, as wetlands were drained, woods felled (Huckle and Martin 2001) and habitat lost, but also, the people lost part of their connection to nature, their means of production, and part of themselves. It is of little wonder that the commoning practices spoken of by the likes of Chatterton (2016) and Twigger Holroyd (2017) hold such an evocative and potent grip over our psyches, as we seek to re-connect to nature, become more self-sufficient and un-do environmental damage, as we seek to release ourselves and nature from the enclosure of capitalism and globalization.

This thesis amply demonstrates that my participants in Deheubarth are building resilience through Hopkin's (no date) concept of the 'head, heart and hands of energy descent'. Analysis of the data showed three clear motivations held by people who were engaged in resilience building. We saw the intentional, Theory-led Resilience Builders, who demonstrated the 'head' aspect, as their engagement stemmed initially from education, understanding and knowledge, in other words, the intellect. In particular, Myfanwy, Vangelis and Olivia exemplified this approach and to a lesser extent, Helen, Amanda and Ffraid followed this too. The 'heart' aspect relates to the Satisfied Resilience Builders and *all* of my participants experienced positive emotions, such as joy, satisfaction and happiness as a result of their activities. They reported enjoyment of making, creating, and also, the joy of commoning together (Gauntlett, 2011; Chatterton, 2016). Finally, we saw the 'hands' expressed through the People-led Pragmatists. These participants came to build resilience for pragmatic reasons; perhaps it made sense not to waste resources, maybe they simply enjoyed making things, or perhaps they copied others who inspired them, be they family members or fellow volunteers at the Eco Shop or Forest Garden. To these participants, it was a bonus that their activity increased resilience and enhanced sustainability, but that wasn't the motivational factor, as they would have done it regardless. In particular, Broceliande, Thomas, Whiskey Sanchez and Gin Jones embodied this approach, which concurs with Hopkin's (2013) more recent conclusions that we need to just start 'doing' things. It is notable that in this group, most of my participants reported that through partaking in resilience building activities, they started to think

more about resources, connections and often they chatted to others at the same time and found themselves to be discussing sustainability. Thus, to an extent, the act of doing led to the act of intellectual engagement. Although Hopkins (2008a) advocated education first in order to motivate people to undertake resilience building, my research has found that this approach works for some, but not all of my participants. The fact that my participants were happy engaging in the act of commoning and that some started out simply engaging materially, with no prior assumption of increasing sustainability, shows that there is need for this to be addressed. Dawney (2013) describes the emotional factor of commoning, the good feeling people experience when working and sharing resources and space together. Happiness was a strong theme emerging from the commoning activities in my fieldwork, especially the Eco Shop, as people expressed a light-hearted (see Section 6.9) approach to even serious global problems. Policy makers wish to know how and by whom the work of building lower carbon, more sustainable systems will be carried out (Franklin et al., 2011). My field work feeds into Franklin et al.'s (2011) work. It concurs with Dawney's (2013) observations, and I believe we can add the joyous attributes of fun and humour to the emotional satisfaction of commoning in post capitalist transitions.

Despite the fact that the Eco Shop was set up explicitly to enhance sustainability (Interview with Vangelis, 2015), this thesis demonstrates that through the act of commoning (for example, sorting clothes together, running the shop together, serving customers together) and thoughtfully engagement with the materiality of the shop (for example, re-using resources), through volunteers donating their time and energy to the shop and each other, the shop gives back to not only the volunteers, but to the wider community, via a series of social benefits. These include customers being able to find very low priced goods, the shop serving in part as an informal community centre, the shop providing voluntary roles to those who otherwise might not have been so relaxed in normative employment, due to personal factors. It provided a hub where customers could chat with each other and volunteers, exchanging ideas, jokes, knowledge and information. Thus, it provided vital social benefits to the local community, like commoning (Chatterton, 2016; Twigger Holroyd, 2017) it nurtures people. I wholeheartedly agree with the use of the term 'commoning' as a fitting metaphor to describe a reclaiming of our communality. When the people of Britain lost their once extensive rights to common land, which provided physical sustenance, means if production (the poor managed to be mainly self-sufficient with the help of the common rights (Huckle and Martin, 2001) and perhaps emotionally as well, as they lost their connection to nature (Pepper, 1993). In ecological terms, this went hand in hand with environmental degradation and loss of biodiverse habitats. In essence, capitalism severed people's connection to the land, part of

their selves, their ability to be self-sufficient and also their role as caretakers of the land (Pepper, 1993; Huckle and Martin, 2001). As we seek to reverse this trend and re-connect with nature, ourselves, each other through resilience building activities which involve commoning, such as gardening together, it is evident that not only is sustainability furthered, but that emotional contentment is increased also. I am thus convinced that the process of commoning plays a crucial role in building more resilience and sustainable futures.

7.6 Commoning is the Glue

It is too simplistic to announce that Transition Culture is not eco-socialist (as it doesn't sufficiently confront capitalism), yet likewise the transition culture (or post-capitalist transitions) that I was part of are not *fully* eco-socialist. They *do* confront capitalism, but only to an, *as yet* limited extent, as I identified via my ethnographic work. As a volunteer sometimes going backstage (Goffman, 1959; Dell, 2016), I learnt that the volunteer labour (Gibson-Graham, 2006) was generally subsidised through a system completely separate from the Eco Shop. My own labour for example, was only available due to the privilege of myself being a researcher at the time. Thus, the Eco Shop confronts capitalism, yet is simultaneously reliant upon less obvious support from external neo-liberal systems. Meanwhile, although Transition Culture can be critiqued for not directly confronting capitalism (as Transition Towns encourage vibrant local business), it confronts it *obliquely*, aiming to transform capitalism (Turker and Murphy, 2021), re-routing it to the local, making it smaller scale and more ethical. Therefore, we can say that Transition Culture has a subversive attitude towards capitalism, globalization and neoliberalism.

J.K Gibson-Graham (2006) have helped geographers to understand DE/CE (diverse and community economics), but we need to delve deeper into the materialisation of post-capitalist and alternative economics (Turker and Murphy, 2021). We need to know whether these templates could flourish as they spatially expand, and what makes them robust and persistent (Turker and Murphy, 2021). This thesis doesn't answer the former question, but we gain a sense of the glue behind the alternative economics of Rugs to Rags, when a financial profit is not made by the production of these goods, yet the emotional wealth is potent, as we shared a productive space together through the good feeling created by commoning (Dawney, 2013). Therefore, we can assert that post capitalist transitions can possess valuable emotional currency!

As has been shown, post-capitalist transitions (Chatterton, 2016) are, from a resilience thinking perspective, backloop interventions of the adaptive cycle (Quilley, 2011), where people seek to acknowledge the late K stage that society is in (mounting environmental and societal problems concurrent with perpetual normative 'business as usual' ways of operating) (Folke, 2006; Walker and Salt, 2006) and to forge alternative ways of being and connections, so as to mitigate the threats. In other words, to make deliberate benign societal transformations to try to avoid destructive unavoidable environmental changes (Brown, 2014). We have also seen participants articulate (particularly Amanda) a time to come when a relatively small catalyst or trigger may shift us into a new regime entirely, which follows the adaptive cycle theory (Walker and Salt, 2006; Brown, 2016). Brown (2017) notes that geographers have produced work on the Anthropocene but more attention is needed on planetary boundaries (nine ecological tipping points) and temporal stress, (a sense that time is running out). My work in Chapter 5, where my participants discuss the coming crisis, should help address this lack.

Wilson (2012) would like to see more research done on who builds community resilience and how do they do this? Chatterton (2016) encourages us as radical and critical geographers to elucidate sites of post-capitalist transitions, which show us how we can live "beyond the capitalist present" (Chatterton, 2016,404) and the gardening, commoning and making illustrated in this thesis fulfils these requests. This work has featured post-capitalist sites of rupture or fissure (Chatterton, 2016; Gibson-Graham, 2006) where people undertake localisation activities, acting as revolt actors, confronting capitalism and globalization by re-working and re-networking the system of resource, labour (Gibson-Graham, 2006), means of production (Pepper, 1993), confronting the hidden waste of capitalism (Miller, 2011) and reconnecting with nature and each other through experiencing a feeling of being in common (Adey et al., 2019; Dawney, 2013). By providing goods and services cheaply or for free and by upcycling waste textiles and selling second hand goods, we demonstrate sites of alternative economics (Gibson-Graham, 2006) as my participants undermined the neo-liberal hegemony.

Academic research and government policy on sustainability is lacking on exploration of the practical skills needed for growing food (Sandover, 2015). This thesis helps in part to plug this gap. As a maker geographer engaged in embodied slow scholarship, my field work in the Eco Shop and Forest Garden furthers this body of work but my engagement with the Rags to Rugs projects especially illuminates this scholarship (Carr and Gibson, 2017). We redistributed resources (Pepper, 1993) in the Eco Shop, with cheap goods, we took back the means of production in the

Rags to Rugs workshops (Pepper, 1993) and we practiced benevolent environmental stewardship (Pepper, 1993) in the Forest Garden.

7.7 From Resilience Building to the Re-Enchantment of Everyday Life

Over the course of my research, I have discovered that Transition Culture in Deheubarth is thriving, whether people are affiliated to an official Transition Initiative, or not. I have also found that people do undertake resilience building, even though they have no prior theoretical knowledge - they just see an activity occurring which makes sense, and they join in (see Section 4.1b). We also hear how some long-term environmentalists respect permaculture but find it a bit 'dry' and lacking in emotional engagement (see Sections 4.2c and 4.2d). I was also surprised to discover that my participants have an intuitive understanding of the adaptive cycle, as they express concern that our social-ecological system is showing signs of the 'stutter' of a late K phase, and they articulate the oncoming omega phase (see Section 5.2). Some are building permaculture 'lifeboats' in anticipation, setting land aside for food, and are worried about omega phase robber bands, while others are making plans to put any would-be thieves who arrive to work on the land (see Section 5.2b). But a common theme expressed by participants is that by using 'community glue', we might find a way through (see Sections 5.3 and 6.6).

During interviews and in the Forest Garden, empirics demonstrate that people use permaculture principles and design as long as it is working well, but they are not afraid to enact an instinctual response when performing embodied work. In essence, they appear to be balancing inspiration from permaculture with instinct and common sense (see Section 4.2d). We remember how enchanted I am by the fecundity of the Eco Shop, how myself and others failed to predict the extent to which it would not only serve the environment but also the community. We are touched when we realise how the Shop is beneficial to the well-being of humans and the environment. We also marvel at the notion that possibly The Eco Shop has a life of its own (see Section 6.5a). We note that resilience building activities might be messy or have a quality of imperfection or 'roughness' and we link this acceptance of the unpolished to handmade material culture (Ruskin, 2008 [1853]). We remember our astonishment with the notion that my participants all spoke at length about and are firmly in agreement with ecologists (Walker and Salt 2006; Folke, 2006) and ecofeminists (Adams, 1993; Orenstein, 1993; Ruether, 1993; Gadon, 1995) that we are all interconnected, humans, nature and even spirit (see section 5.4). We are solemn when we hear the words from my participants that an impoverished culture leaves people more vulnerable to the

menacing grasp of neophilia, yet we are inspired when Myfanwy suggests that a rich culture helps protect against this (see Section 5.5). We start to think about activities which will serve to enrich our culture and coming together and making are two things we know we can do. We also remember how people report so much satisfaction from partaking in making and how this could fulfil an ancient impulse, harking back to a time when our ancestors *had* to make - in order to survive (see Section 4.1c).

It is striking that when we remember what Oliva told us in Chapter 4, that she's an informed permaculturalist but when it comes down to the actual performance, she is prone to adopting an instinctive approach and even disregarding the 'rules' or perceived wisdom, once she is in her own garden. Via my participant observation work, we discover this exact same approach being adopted in the Forest Garden. The understanding I now have is that people are happy enough to adopt permaculture practice or principles if they are working well, but when they become cumbersome, or even, when a more delightful idea appeals to them, they might turn rogue and just do what they feel is best. There does seem to be a limit to this behaviour though, as while the Forest Gardeners eventually accepted the assistance of a petrol mower, they did not resort to slug pellets, artificial fertiliser nor pesticides. I do not know what forces bound these invisible limits, as further study would be needed. In essence, I found that it was as if people took the principles of permaculture and applied them to everyday life, whilst simultaneously administering a healthy dose of common sense.

Readers who are excited about the resilience perspective could be forgive for wondering how they might implement these insights into their everyday life, and I believe my thesis has illuminated this, firstly by showing that as complicated as social-ecological resilience theory is in paper, my participants demonstrated an intuitive understanding of the key concepts. Secondly, I believe my participants offered pragmatic examples of activities which can be enacted. As an example, one could gather a raggle-taggle crew who could begin making or gardening together. Perhaps you could make something beautiful from recycled or natural materials and others might be inspired to try something similar and in turn, their connection to the natural world is strengthened, through this shared activity, culture is enriched, and they experience decreased desire for destructive external stimulation, such as consumerism. Ultimately, this thesis has demonstrated how not only is transition culture in existence in Deheubarth, but that engagement must occur through a direct connection. Where it is a connection to nature, the joy of making, people or even spirit, you'll find people engaged in resilience building activities, but when there is an impoverished culture, then

globalization and consumption might lead the way.

Figure 4, Handcrafted wreath, made by Author from plants growing in her garden

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Appendix 1

Coloured Drawings of Forest Garden

Holla for ya Challah! Challah! Challah! Challah!!

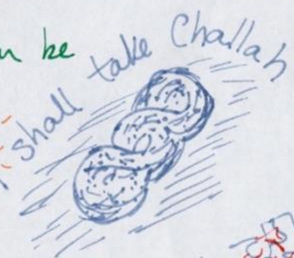
A waking dream

tentative white flowers

Researcher as Agent of Change

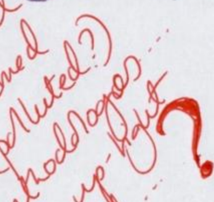
- Is this change welcome?
- There is POWER in this. I can be careful of how I yield this.

Shall take Challah



It is a cold day, I shall wrap up warm.

Following on from my first foray into the garden, where all was well whilst I was mulching yet seemed transgressed and changed (polluted?) once I started explaining methodologies... I wonder whether a less up-tight approach might work well...?



The research process is artistic reflexive and creative therefore scrawls, dreams and scribbles are all Good...

Huge potential for researcher to be a Potent Force For Good? Depends upon the essence of the researcher, no doubt. I generally make an impact, whether I wish to or not. Burden some at times. So, what then if I go and share Challah?

The Garden is claiming ME .... I, ME, mine ... A good feminist research will exert a transformative effect upon the lives of the participants: this research is exerting a transformative effect upon ME already. What does that make it? Researcher as Participant? As Subject? As broken down?

Visit No: 2

old planks and tyres as benches

The old wheelbarrow became my trusty friend

Instead: I spoke less, I listened more. I broke the challah, around the fire. I believe I relinquished some of my researcher priviledge. I became more permeable. I became more vulnerable. I occupied a liminal place between researcher and local community member.

- I placed straw mulch round young trees
- I removed grass
- I tidied up sticks
- I embedded with the garden

Straw mulch

I didn't mention MY RESEARCH

- it didn't "seem" right
- at tea time round the fire, one of the gardeners mentioned a visitor they once had, who only spoke about themselves. Then the gardener looked me straight in the eye and offered me a cup of tea.

In my blundering first attempt at "entering the field", in my haste to explain my intentions and desires, I had inadvertently hijacked the thread of their afternoon's gardening with discussions of my own agenda and research

Liminality

Visit No: 3

I am now a Forest Gardener too – I am now part of this group and this garden. Negotiated participatory research, creative, reflexive research. Much privilege has been spent... the organism which is the group and the garden is to lead and inform my research

Stand here and take it all in

The apple trees are in BLOSSOM

Crab Apple

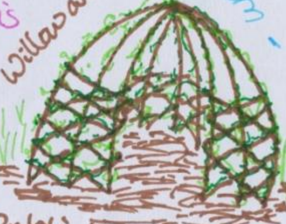
Wood mulch pile

So happy

The day is warm and hazy, it seems as if the whole garden is full of blossom

Springtime in the Garden! So many blossoms! Fresh leaves, balmy sunshine and bees, bees, bees....

Willow arbour is looking amazing!



the 'Jump' – un standard

I may well help with Publicity....

Request to film interviews = strong possibility

Organic nature

The crab apple tree has masses of blossom – even more than the apple trees. It is a fantastic pollinator and can pollinate many apple trees.

Triangular bed for bees. Sprinkled with wild flower seed

This is creative research Bridge – melting pot

Loamy soil from mole hills in adjacent field used as top soil in Bee Flower bed.

Photography Yes!

Multiple basins of attraction....

Permaculture Principle: The Problem becomes the Solution

4 years of gardening here

Non Linear

Landscape gardeners have trouble disposing of bark mulch. Forest garden use it up.

No real hierarchy – no fixed plans

Un-predictable – surprises....

I weeded thistles, grass and dandelions from the bark mulch path. Bark mulch is from local landscape gardeners.

CO2
PEAK OIL
OIL

Beautiful and balmy sunny day
Visit No 4
lots of people in the garden
Loppers
Need more people power.
Or maybe a grazing animal
Sythe
Petrol Strimmer? Petrol Mower? Fossil fuels?
"The garden is apt to grow somewhat torpid at this time of year"
The "WEED" plant.
Strong
Vigorous
Tenacious
Spikey ......
How can we do this with only sythes and hand tools?
I don't think we really want to admit this but.... there is almost a sense of over whelment with the "weeds"......
We favour some plants over others in the forest garden - we "like" the ones we can eat
Those paths we mulched and weeded just a few months ago?
Overgrown!!
Everything has grown so fast!!
Wetches
Thistles
Docks
Grass
......
"Weeds" .... we've forest gardeners. everything has a place in nature but really, the "weeds" are rapacious! So hard to pull out of the ground right now. They are tenacious!!

APPLE MINT JELLY

BIG QUESTIONS:

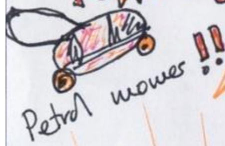
- If we're not happy about drones and killing people remotely, we can get involved locally at Aberporth
- If we're not happy with a world so dependent on Cheap Oil that it endorses FRACKING, then we have to build a world not so dependent on cheap oil.
- What will I do with all my APPLES?

Visit No: 5

September 2013

Early autumn

WOW POWER!!



Petrol mowers!!

The season of Mellow Fruitfulness

Tasks:
- Weeding around trees
- Harvesting fruit

gooseberry bush

Beautiful plums

Luminous plums!

Wildly disappointing flavour but Oh so pretty!

Wildflowers for bees
Bee World

Paths mown through the garden in readiness for a school visit.....

So many apples! Happy wasps...

Baskets full of apples
Bags full of apples
Trees full of apples

Apples Apples Apples

Visit N.6

Chatting about making homemade herbal tinctures

Weeding

The almost skeletal "weeds" yield easily now. They give themselves up.

bark mulch around the trees

Just a few old apples still clinging on

....Birds and bird song.....

I shall try to make a map of the garden for the group

A day for clearing and making pathways

Remulched pathways

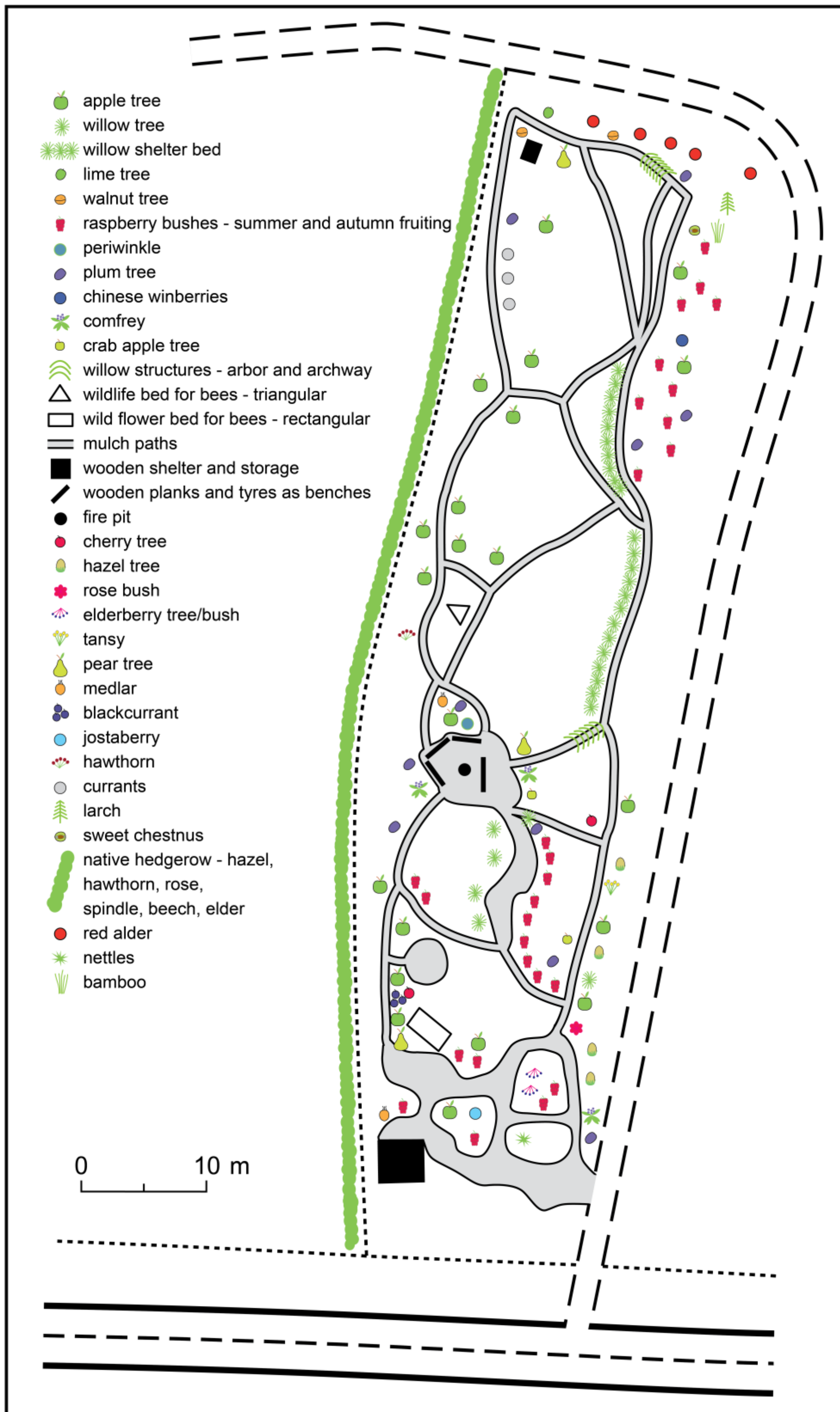
The petrol mower is helping still. The ground is low, the plants are dying back, the earth is being revealed and still the petrol mower is making headway. We do need it.

Quiet and the air is so Fresh

The garden is clearer, fresher and quieter. Preparing to rest. Ahhh!

Appendix 2

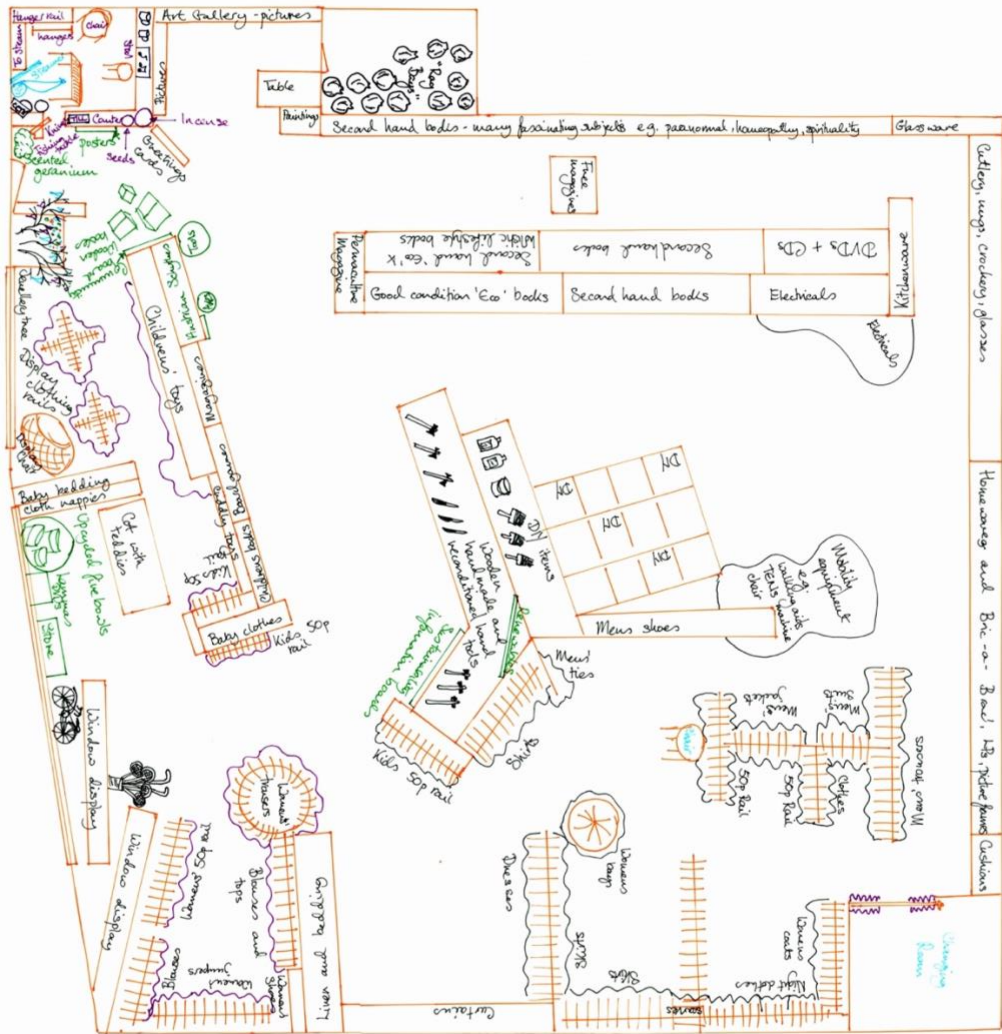
Forest Garden Plan



Forest Garden Plan designed by Antony Smith, former cartographer, DGES, Aberystwyth University, after sketch by Author

Appendix 3

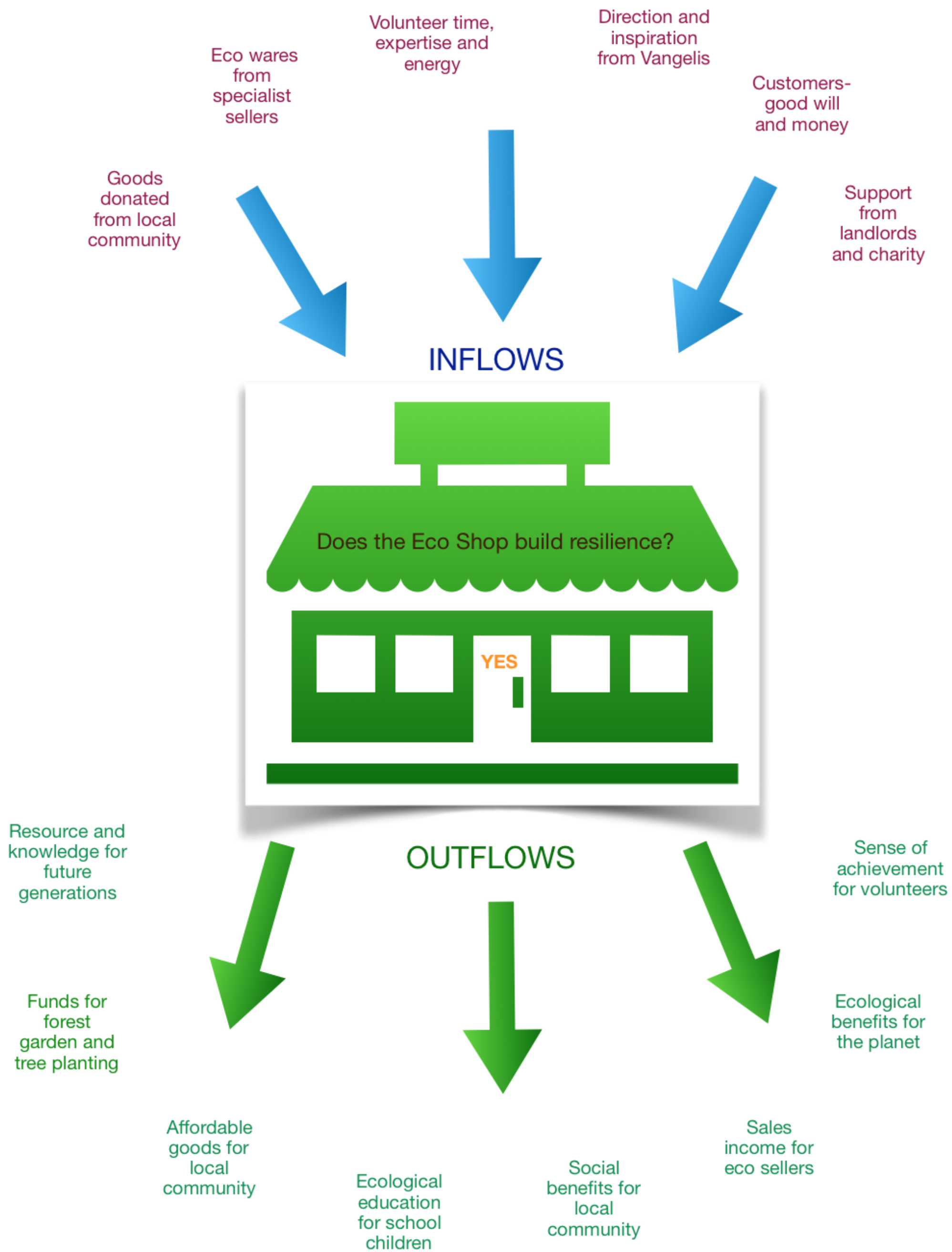
Eco Shop Plan



Eco Shop Plan, after Author

Appendix 4

Eco Shop Infographic



Eco Shop Infographic, after Author

Appendix 5

Eco Shop Leaflet

The idea behind a forest garden is to mimic a natural forest ecosystem in order to produce valuable crops, using as little effort as possible. The planting is done in layers, from the ground cover, the shrub layer, to the canopy. The big difference between a forest garden and a natural forest is that nearly every plant in the forest garden has been carefully chosen as a useful herb, fruit, nut or wood tree for human use. There are also some special pollinator plants, to really encourage wildlife. At Maes y Coed Forest Garden, you will find raspberry bushes, apple trees, cherry trees, nut tress, comfrey plants and willow trees, all interlinked through a series of winding paths. Not only that, there are some special social spaces too, such as the willow arbour, fire pit and a beautiful wooden shed. It is somewhere where you can chat about important issues, get busy, or simply listen to the birds.

Wise Owl Permaculture

Wise Owl Permaculture was launched in 1990 by Vangelis, who now lives in Dehaubarth, where he founded Pool yr Afon Forest Garden and the Eco Shop. Profit from the shop supports not only the forest garden, but also fruit tree planting schemes run by Wise Owl Permaculture at local primary schools in Deheubarth.

www.wiseowl.org.uk

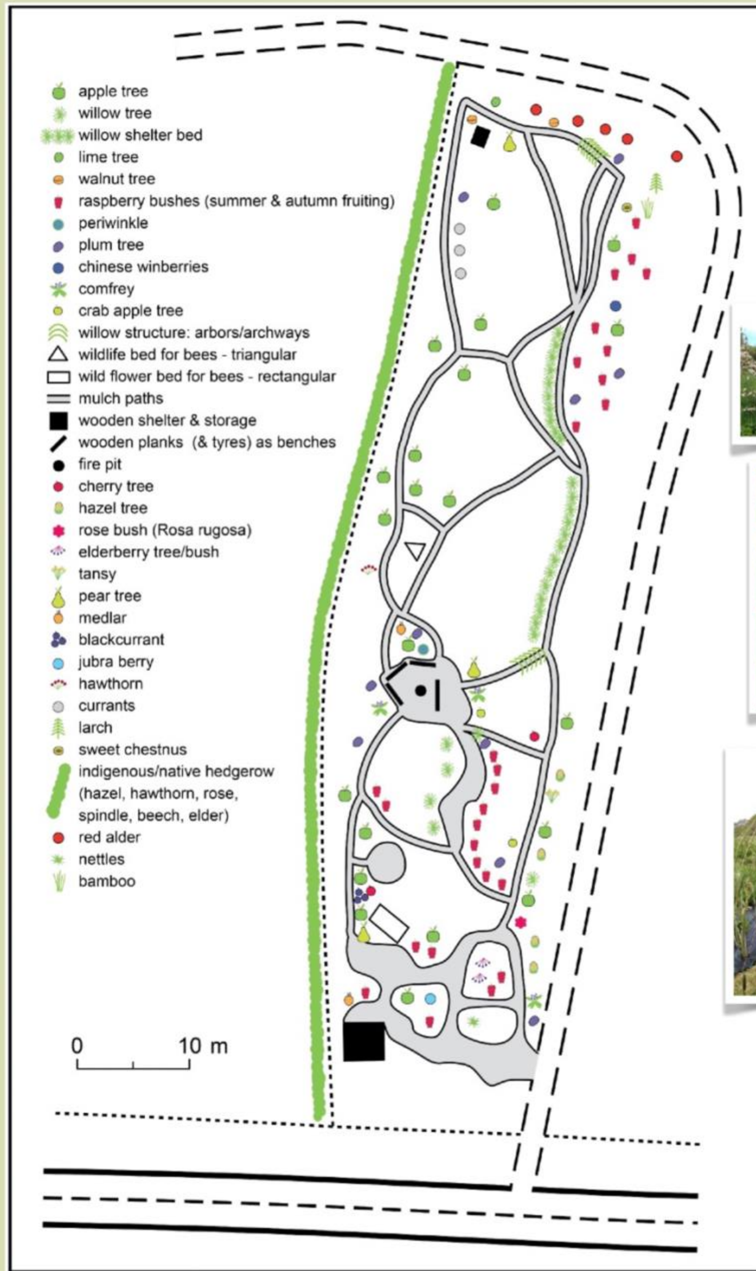
LLAREGGUB ECO SHOP

Come over to our wonderful eco curiosity shop. You will find woodworking tools, handmade crafts, green living books, gardening tools, clothes, toys, magazines, household goods and so much more.

We also have useful community and environmental notice boards.

Mon-Sat
10am-5pm
Llareggub
www.siopeco.org.uk

POBL YR AFON FOREST GARDEN



Volunteer days are the last Sunday of the month, 1-4pm. Everyone is welcome.

Maes y Coed, Near Llareggub

Come along and be part of something amazing!

Email: info@wiseowl.org.uk

Appendix 6

Rags to Rugs Posters

Up-cycling workshop

KEEP CALM

AND

UP-CYCLE!

CHEAP MATERIALS
EVERYONE WELCOME
• • • • •
ADMISSION FREE

WHAT TO BRING:
Giant crochet hooks, knitting needles, fabric scissors

The Eco Shop

8th October
1.30-4.30pm

LEARN HOW TO MAKE:
T-shirt rag rugs
Scrap yarn blankets
Hooked rag rugs
Patchwork quilts

For more information, call Helen on 01392 552667

Up-cycling workshop

KEEP CALM

AND

CROCHET!

The Eco Shop

26th Nov
1.30-4.30pm

Appendix 7

Letter of Support

Dear Whomever it may concern,

It has been my great pleasure and privilege to have worked with members of Cardigan Eco Shop and Teifi Community Forest Garden over the past three years and I should like to offer my support for their continued efforts.

I am a final year PhD student with the Department of Geography and Earth Sciences, Aberystwyth University. My research has focused on socio-ecological resilience and activities which confer or erode resilience; in short, what we can do in order to safeguard a healthy and balanced ecosystem and environment for the future.

Over the years, as part of my ongoing immersive ethnographic fieldwork, I have served as a volunteer at both the Eco Shop and Forest Garden, two ventures implemented by Naturewise, a community environmental organisation, founded in 1990. I have been supremely impressed by the way the group functions, how they self-organise, what benefits they have delivered to the environment and furthermore, to the local community.

The Forest Garden is an incredibly rich resource for the community, now and into the future. The garden has increased the biodiversity of the area, improved the soil health, provides food for the community, and of course plays its part in the reduction of atmospheric carbon dioxide. Not only that though, there are many social benefits to the garden and it is a place where volunteers pop in and out to work and laugh together, learning new skills and immersing themselves in the therapeutic power of nature.

Ever since the creation of the garden, local school children have visited, in order to learn about ecology, help with planting, explore the winding paths and play in the willow arbour. In 2016, forest schooling has been developed in association with Coppice College, so that youngsters can learn bushcraft in the garden. These experiences help foster values of environmental guardianship.

The Eco Shop is the linchpin of the whole venture if you like, where donated clothes and goods, as well as a plethora of fascinating green woodworking tools, green books and the like are sold at very reasonable prices to the local community. Proceeds from the Eco Shop go on to support the Forest Garden, and more recently, fruit tree planting at all four local primary schools, as well as help for the nearby allotment society, in the form of donated sheds.

What has perhaps come most to my attention whilst working with the group is *whom* is served by the Eco Shop and Forest Garden. My presumption was that it would have only really reached the 'alternative community' but I was proved so very wrong as I realised that perhaps fifty percent of the customers in the shop are from what could be termed the wider community. I remember serving an elderly gentleman who was shaking in pain, yet he was just so happy that his two pounds bought him something to make his life a little more comfortable. This experience left a lasting impression on me as I realised that the group serves many vulnerable members of the community, possibly people whom otherwise are not so visible. The same can be said for the Forest Garden, with the continued work with local primary schools and inclusive and friendly atmosphere.

I should like to express my gratitude to all members of the group who have accepted me, a stranger from Aberystwyth University, to come and 'study' their activities and teach me so much. I wish them every success for the future.

Yours sincerely,

Katherine Stewart MA

DRAFT COPY

Appendix 8

Interview Transcript

Olivia

Code:
Plum= Olivia
Midnight= Me

Baking bread, knitting sewing, growing vegetables, permaculture…. It's perhaps a dangerous thing but from the age of about twenty, I never threw away anything, I never bought new if I could use something that was previously used. For want of another reason, it seemed to be natural for me to want to reuse everything, including bent nails, I straighten them. I have about twenty kilos of recycled nails. Every time I pick up wood from the tip, I'd get the nails out and store them, instead of putting them into the fire, which we otherwise do, it destroys the tempering and they just become, well, they are recyclable as scrap but recyclable as nails if you get them out before. They are slightly damaged but I scarcely ever use them new. I built a wood shed quite a number of decades later and the woodshed was almost entirely built of recycled pieces, which is not unusual. And what was the reason that you started? I'm going into philosophy before anything else- as a young teenager, about eleven or twelve, I'd already decided that our culture was complete scrap, it was nonsense, it was going in the wrong direction and it therefore is quite important to work out for yourself what you're going to do because if you don't agree with the majority decision, you have to work out a way of abstaining, which is why I retired at fifty. I'd worked within the system as cleanly as I could in order to be able to retire as early as I could and live completely outside the system. Wow, long-term strategy! Well, it started with planning my retirement when I was eighteen and I was spared, I mean, a lot of people who do that kind of thing are complete nerds (?) who die at fifty because they are unlucky, I was lucky. I lived to see the fruit and all that planning. But of course I am fully aware that ultimately, the money that I stashed away in order to build a retirement was being recycled within the system which I so deplored but now I've got it out. For instance, any cash I have got goes straight into Triodos Bank because they use that money for environmental and sustainable purposes, sustainable is the key word for Triodos. But I am afraid I wasn't always as clean as that, I just went for profit. There's a very interesting book whose name I have forgotten by John Steinbeck, the corruption of a person who suddenly decides they want to make as money as possible. And they do all the most immoral things and they end up destroying themselves. I think I walked that line, I gambled on the Stock Exchange and I didn't care what I was investing in, anything, if I thought it was going to go up. Well, that's no good. But it was with this long-term strategy? But it was selfish. But, did you keep referring back to your eleven twelve-year-old self? Of course! I just recognised that I was being hypocritical and I accepted that, I just thought, *Well, I'm hypocritical*. There's no pint in grieving about it, you can't un-hypocrise… but nowadays, so many people that I didn't know about at the time, I'm afraid, I probably …., I'm afraid. Now, I've seen so many people who are actually *living* the truth, I feel very much inferior to them, very inferior. Although, yes, I am living my truth now, at the time when I was trying to accumulate enough to retire on, I was working *inside* the system. To start with I was a teacher and then I ran my own business and I maximised profit. The actual business itself, I ran it responsibly, the way I, the workers all had the opportunity, if they wanted to, to become shareholders but they didn't want to, they just didn't want the risk because of course, there's downs as well as ups. With our customers, I was extremely insistent that we put them first, we out them first, it sounds a really stupid thing to say, I mean, just some businesses put profit before customers, which is no good for a business in the long run, grind the business into the dirt if you do that. So, even in the big recessions and Margaret Thatcher, we carried on having customers, they didn't go away. It was not the same when it came to my personal life, I invested what I made in the Stick Exchange and any thing I thought would make money, I didn't question it with morals or scruples. I've gone in at the deep end. Do you want me to go on about what I do? You can if you want to, I mean, you've gone so deep already that I'm stumbling here now! Am I messing up your order? No, no, no. no! It's making it better! Because I never wanted these to be asking… the questions are just the prompts, really. I'll go freestyle. The freedom that I then had when I retired, It was implicit in my own mind, what I wanted to do was to get out of the system, to be unconnected. To be unconnected, as far as it was legally possible to be with the system, which of course involves being as self sufficient as you can manage and again, there's a slight hypocrisy, well, quite a big hypocrisy in that it also involves having enough land to live on and there's not enough land in the whole country for everyone to have enough land to live on unless they work in groups and I am not a groupy person, I wanted to do it on my own. The first idea was to, actually go to the most severe environment that I could go and try and make it work there, so I looked at the Outer Hebrides and I was fascinated by other people who had tried the same thing. I found one or two examples of people who had done exactly what I would have done if I'd been there. They had planted trees which changed the microclimate, changed the soil by carting hundreds and thousands of tonnes of stuff from one place to another, mixing the sands and seaweed and peat. The only really successful site I could find was Inverewe Garden, which you may have heard of? Osgood Makenzie In the early Nineteenth Century, inherited a barren island in the middle of Loch Ewe, which he turned into a tropical garden. It's famous because it's the same latitude as Moscow and you've got palm trees growing there My Mum might have… is I near Loch Marie? North of that, yeah. I might have heard my Mum rave about it. See, he was a wealthy man and he could pay a lot of people to cart lots of material and he built huge walls to the vegetable garden and bought in and made a soil and then proceeded in a similar sort of fashion around the island, well it's a promontory, putting defensive planting, especially tough rhododendrons and other shrubs at ground level and tough trees around the outside and gradually as you get to the centre, it is windproof and the most amazing thing is palm trees and semi tropical plants, some of them have to be protected in the winter but not many because of the Gulf Stream. But it was an inspiration to me and that's why I went and looked on the Outer Hebrides, I thought, I want to find this and I did look at one piece of land on Loch Lyn, an island on Loch Lyn, which would have taken me until about one hundred and forty to get to the stage I wanted and I suddenly realised, *Hey, I'm too old to be doing this, in this place!* Because people that I met in the Hebrides had been at it for twenty

years and the trees were still only fifteen feet high. They were making an impact but it was several generations, whereas here (this was the next port of call), this area, it has a lot of the same environmental problems but it has more daylight in the winter, it has a higher average temperature over the year on the whole, although, admittedly, we have had some frosts probably worse than they do in Scotland, and we get so much rain. I wanted a flood of trees, this was an absolute obvious thing to start with. It had to be land that was cheapo and land that got a lot of natural water. So, having tried and not really seen anything that I thought was practical in Scotland, we decided we'd come to Wales and we had a look to see what was available and at one point, there was a period of about five years when property prices around here were just ridiculously low and without having to sell my property in Eastern England, I bought a small holding here. And, if you've got that, you've got no debt, you've got so much security and I feel so sorry for so many people, especially younger people, who … we got in, I am seventy and we got in when in on the property ladder when it was only a couple of thousand quid and the last house which I bought for fifty seven thousand, eleven years later sold for one hundred and twenty something thousand, now it's worth quarter of a million. It's ridiculous but a lot of people experienced it in those days, they came west and they had surplus money or enough to live on. And this blank piece of land, well, it had nothing in it, except a few beech trees, mostly just flat, overgrazed land, bare. So I just drew a plan in my mind, a belt of trees all the way around it and increasingly productive land nearer to the house. And twenty odd years later, that's what's there, in fact, it's getting too productive! I've got too much stuff going on. I thought, *What's the most difficult thing I can grow that's even possible?* And people could say, "You'll never grow strawberries there". Rubbish, I can grow strawberries easy! I thought, *What is really difficult? What do I like that I would have to import?* Answer, oranges. Well, how do you grow oranges then? I looked around a while and found no real solution then, you could say it was a bit of luck, a bit of inspiration, I saw a glass dome so in the end, with the last of the money that I had invested, it went on the glass dome, a geodesic dome. And they had never known anybody plant up one of their domes, people took orange trees in and out, in the Home Counties (use it as an orangery) but I had to keep my stuff in there all year round. It's very windy on the marsh and all the earth inside it, once it had been built, had to be removed because it was glacial clay, most of it, with peat on top and so I was into the business of creating soil. Just like the Eden Project, you may have seen what they do? (I haven't been there but... they have a project for making hundreds of tonnes of soil a year out of a mixture and I was doing the same and it's about four and a half feet thick now. And this year I have got two mandarins, a satsuma, a navel orange and a lemon, nectarine and apricot and basically, they are just growing like mad Wow!! And I made a mistake in the second and third year of letting things like butternut squash have their bed. ? It's obviously a bit freaky to grow oranges in mid-Wales but I have several hundred a year. They are not as good as bought ones but there are no air miles in them and in terms of cost, these oranges, if you factor in the cost of building the thing in the first place, each orange is worth several hundred quid! Well, it was a first, the cost is going down year by year. But of course, I also save on holidays because I don't need to go to the Mediterranean, I can just walk down the garden and go in the dome. And I have a hammock in there and a wood burner and you're surrounded by the smell of orange trees so why would you want to go away? Holidays are just a thing of the past. A strange thing, my next door neighbour who have just come, with some similarities of background, more money (they are still in work) but they've fallen exactly the same way as me, they don't want to go on holiday ever again, that's home now. That's home and beauty and holiday and everything. It's not something I actually planned, it's something that I took for granted- you're only happy, you're only safe and you're only whole when you are integrated with nature. Our civilisation is an alienating one and it functions on making people need things and if people actually are satisfied with what they have got, our economic system crashes because there's nobody buying anything! But of course, then people wouldn't need to do so much work because they don't need to earn any money because they are getting the stuff by doing it themselves. It's a slightly idealistic way of looking at it because a city is a very complicated thing to unscramble. How on earth can you keep a tower block running on the basis of what I am thinking of? You know, people doing stuff for themselves. How do you keep the warm? How do you keep people in food? There are some blocks in London growing food on the roof but they can't grow enough for the entire population but, I thought, *Well, in my own small way, I'll do what comes naturally*. And then I didn't have any kind of plan, it was all automatic it was just an instinct all the time and then I got contacted by who I now know is Myfanwy, just Dr Goldberg at the time (because I'm a member of the Machynlleth Centre for Alternative Technology), she'd got my name off their list (which strikes me now, as I think about it as a breach of regulations- laughs). But anyway, I never thought about that- laughs. So, I joined one of her permaculture design courses, to cut a long story short, and, you probably know the rest, because we liked each other. It was a fabulous course, we liked each other enormously and we stuck together and made ourselves into the Llareggub Permaculture Group, that's how it started, in the year 2000. And so, as a founder member thereof, I felt incredibly privileged because I'd suddenly found a group of people who felt the same way as I do! It was obvious, it was taken for granted. And I felt a certain degree of annoyance sometimes at permaculture as a system, in that it's so much, well it can be, so much theory. I'm interested to see that Bill Mollinson has recently been accused of denigrating theory by saying, 'You've got to do it by the seat of your pants, you've got to do it by instinct' because I always was, I'm not interested in guilds of plants, I'm not interested in doing things by a book, I just look at a site and think, *What will fit in there?* I do it backwards, I sometimes get it right, sometimes I don't. I've noticed a few permaculturalists do it backwards, as well, which is interesting because permaculture seems like this great big theory but when I've seen people do it on the ground, they're just being quite instinctual. It is, it's an instinct. And, of course, for the people that are doing it, it's so obvious that you wonder why everybody isn't doing it and you can't imagine why people do anything different. But of course, when you try and look at the world through other people's eyes and look at what you're doing, you realise that you are more than a little odd. I mean, I have a lower ambient temperature in my house in the winter than a lot of people because I… what's the point of heating it to seventy degrees or sixty-five or whatever people do? I don't need it that hot, I just need a bit of extra clothing, a water bottle on my feet if I'm sitting still and I can have it down to fifty, no discomfort at all. And visitors who are more used to higher

temperatures say. 'How can you live like this?!' and the answer is, *No problem, it's not a problem at all!* Sue was exactly the same, she never used the heating at all! I think her monthly electricity and gas bill combined was ten quid . And mine's nought because I've still been able to access capital, I've put in photo voltaic electricity generation and I've now got a storage station, so I'm off grid but I'm still connected to the grid, to feed in. So I actually feed in electricity and I make a vast profit on the electricity. Again, it's not morally right, because people who are badly off and living in a bed sit are paying for electricity through a meter, are helping to subsidise my feed in tariff. But I'm not going to start destroying that system. I get round that, I salve my conscience by giving money to useful things. The money I make from the electricity, I give it away. I am actually generating something like twenty times as much electricity as I use and that's only on PV panels, anyone could do that! (If they were careful). The person who came to install the storage system wanted to see my electricity bills and they said, "I don't believe these, I have never seen figures as low as these on an electricity bill." I have, I've seen Jane's! You look at the way people live and you think, that's just impossible, you cannot sustain it. So, going back to the origin of the while thing in my own life, there is a problem in maintaining our standard of living. It's not sustainable and already, in the fifties, when I was first becoming conscious of this, I thought, *We are going to have to take a knock, we're going to have to take a lower standard of living (in the conventional terminology), if the world is to survive.* I knew that then! But it's taken forty/ fifty years for people to begin to generally think of it. I mean, those who are already thinking like that, for them it is obvious but for other people, it's such a problem. It's because they are fed all this stuff from the media and from politicians. The most ghastly election slogan I ever heard was in the fifties, Harold MacMillan, "You never had it so good". It was prosperity, he was trying to sell his party on prosperity, ugh. That's not the point of a politician, they should be gearing us towards a better future, especially for the next generations and educating the people to restrain our greed. But of course, we had the extreme opposite with Maggie Thatcher. Anyway, I'm sorry, I'm straying. I'm going to hand it to you to think about some questions now. I've probably put you in a mess. No, no, no, it's great, I can tick off all of this! Alright, are you concerned about issues such as peak oil and climate change? Well, yes, except the concept of peak oil, although phrased like that is comparatively recent, the idea that the world was going to come to a sticky end was pretty obvious to me from teenage years- just look at the amount we are consuming. I wasn't thinking specifically about oil, to be honest, I was thinking about everything that we consume has a finite supply and yet we appear to think it has an infinite supply. Those two concepts are going to run into each other, sooner or later and it looks as though it's sooner than I expected. The oil question, I think we've passed peak oil already. And as for climate change, well, I knew that the global climate was warming but so did anybody who read about it but it's a very, very slow rate. The rate that we were told when I was young was about a degree every three thousand years, that was an inevitable by-product of the sun's development so, to see the acceleration in the last decade has been heart-breaking because you realise that what's happening now is our intervention, our interference, though not deliberate, has actually put the environment under a strain which is it not going to be able to adapt fast enough to and cope with. And sooner or later, things are going to start going severely wrong. The amount of extinction that's going on through climate change is already one instance, the spread of deserts, the increase of climate violence, the enormous storms, the things which are going wrong in Africa in the climate, nothings predictable anymore. But if you look historically, I mean prehistorically, of course, it wasn't predictable over those periods either. We've been living in a comparatively cocooned period of a thousand years or several thousand years in which the climate varied but not that much. We're now coming up against the end of the inhabitable period of the Earth, unless we do something really serious about what we are doing, the way we live. We're in the Anthropocene now, aren't we? We are indeed. Alright, I'd like to ask you about skills and techniques that you use for these activities. How do you learn them? And, say you're… you've spoken about your gardening and your permaculture and that's instinctual, do you use self help books, attend classes, watch You Tube videos, go to a club…? Probably yes to most of those things, not necessarily at such as intensity as some people, some members of the permaculture group who are complete junkies on training. I am sometimes in considerable awe of the skills they've picked up, they are much more scientifically and experientially based in what they do. A lot of mine is trial and error, suck it and see but one thing which I have, immodest I suppose, to say it like this but it makes sense, it is true, is that I have more skill than the average in the use woodworking tools at the macro level. Not building things, cabinet making, I have no skill there, but I mean use of chain saw and that sort of thing, simply because the business I ran was a tree surgery. I went into partnership with a skilled tree surgeon, I was not a skilled person at all in that respect, but I learned- fourteen years hard labour. And for me, to fell a tree in a particular direction is a... I don't have to think about it, I can tell by looking at the tree if it will work, or not. That's not an issue but I realise when people say, 'Did you do that on your own?' and I say, *Yes, why not?* And I realise that I've actually got a degree of independence from the system which is perhaps more difficult to achieve unless you've found another way of training yourself because, to use a chain saw (I know, that's using petrol) is actually sometimes the only way that a person on their own could cope with the amount of work with wood that one has if you're heating your house with wood, cooking on wood, heating the water with wood- everything is wood, there's no other heating system in the house. So, the wood's got to be there and I built the woodshed out of the wood that I've grown I had to fell the tress and then I had to cart them, cut them to shape, put the joints in, all with a chain saw and you know, it's not difficult, it's just that you have to know how to do it. I've only recently, the last fifteen years, become aware that it's actually quite a privilege to have that skill, which I learnt in business. But other skills, the gardening bit, was largely other people teaching me, asking questions, looking things up when I needed to. I'm not scientifically minded, I don't really care much checking for a variety that does better than another one, if something works Ok, I'll stick with it. So, I've been using the same variety of potato for twenty years and people say, "Why don't you try another variety?". Well, can't be bothered, what I've got works, so why change it? Of course, I might not be optimising the opportunities. I'm wondering if I can agitate a bit around the idea of community and also, you being independent. How does that all tie in for you with what you do in your life, to do with permaculture and maybe Llareggub Permaculture Group and maybe the bigger picture of this very precarious position we're

in globally? The global position is so bad that I'm afraid that apart from signing petitions and being a fully paid up member of the Green Party and that kind of thing and voting sacrificially for the Green Party on all occasions, and always taking the extreme point of view on climate issues because, as far as I'm concerned, it's not an extreme view, it's the truth, but people are trying not to face it. Apart from that, I don't do anything to change the way the world is going, I think the world will force people into behaving properly in the end but it may be too late when that happens but I can't see any other agency causing that improvement. But in terms of what you originally asked about, community and so on, it was an enormous advantage to have been able to join up with other like-minded people in the permaculture group. I acquired a sense of community that I'd never had in my life, never, I'd always been a loner and I'm still a loner. But I'm not alone in being a loner and all the people who do the same thing, we understand each other so well, it's like being in a community. But it's not the community people can automatically point at and say that's in a specific place, it's a community of minds and a community of intention. And, of course, the Transition Town movement is very similar, it is more localised but you're very lucky if you've got all the people in the area to believe in it- quite the opposite normally, it's a minority sport, difficult work. But I'm prepared to do what I can in the locality to further that kind of development, for instance the film series that we're running in Lampeter, I do the obtaining the films, I do the projection Is this for Transition? Well, it's Transition and LPG, we have a quarterly film it's worked out at. When we had Permaculture Gathering at Lampeter… I was going to say that the fact that I was brought up in The Church has a real relevance to me because the important part of the Christian message was entirely the issue of responsibility and love and if you look at the world with that eye, even if you later on don't carry on with the ritual aspects of the religion, the way you are calibrated as a child, is good. In my opinion, of course, it's good, some people say it's a slave mentality- that you look at the world not in terms of what you can get out of it but of what you can put into it. Especially if you love what you see, it gives you a huge sense of obligation. There are Christians, I am glad to say, there's a green Christian group working in Britain, who encourage a sense of stewardship for the environment but there are plenty who still think that God, in their benighted ignorance, they think hat God created the world for our benefit, which gives you the automatic right to take what you want out of it and hasten its end. And that's the downside of any religion, especially Christianity and the Judaic based ones have this idea of creation being for our benefit. It's so anthropocentric, we are not the end goal of evolution, or the development of the universe, we are a part of this development. It would do us a lot of good to keep us remembering that. And of course, that means that when it comes to politics and economics, the responsible attitude is one of humility. When you are actually in politics, humility is a disadvantage, as poor old Corbyn has discovered. People think you're a loser when in fact, if you really are honest, humility is the only course you could take. Pretending that you know the answers to everything is a recipe for absolute disaster. I'm conscious that we're running out of time and I'm wondering if we can extract any more thoughts. You've been very… complete in your, in what you've been talking about. Maybe, I think I can add… I'm aware of the fact that life is quite possibly going to get more difficult for our society as the different constraints close in on our economic system and you have to have a sense of what is important and what is not and of course the most important thing, apart from being kind to each other, is getting enough food, that's the number one thing, shelter is the number two thing but shelter's not as difficult. Food is the really important one. I think a lot of permaculture people regard themselves as a kind of life boat, I know I do. But I've actually, within a seven acre plot, I suppose it's not that big amount but I've put three acres down to food. Of course I don't need that much, I just let the birds have a lot of it but it's there and if there is a need, I mean for instance, I can put a fence or a net over it and I can take an enormous amount of surplus off the land, which won't do the land any harm but it will feed extra people. And I've got extra growing space for people, for people who want to come in, if they ever do. My horror is that what will actually happen is that when and if society disintegrates, the people who are creating these sorts of environments are actually just going to get expropriated by robber bands who will not know how to keep it going. They will just take the produce and destroy the source of the produce. That is a possibility but you'd just never do anything if you thought that all the time. That's quite deep. It's hard for me to ask you questions because these questions seem so superficial compared to what we are talking about…. Alright, you've spoken about Christianity, I'm just wondering if I can ask you a bit more informing philosophy or spirituality or a set of beliefs that inform what you do why you do. Or whether it's instinct? I mean, you're clearly a deep thinker, and you're saying you're instinctual, you work alone and with a group… One thing, how much of permaculture theory informs what you do? I'm talking about reading Bill Mollinson's books and all the rest of it. Patrick Whitefield… In a sense it's like organised common sense as far as I'm concerned, individual intuitions and individual insights strike me and I take them in, on board. One simple example is that since I got into permaculture, I started realising what good sense it made, I've never had a bonfire, I've burn the occasional bit of noxious stuff but normally, nothing and I was in the normal habit of having a bonfire in my garden, it's what gardeners normally do. I've found that so far, laying up your woody waste in habitat piles and letting it rot down works OK and you get, you're impinging less on the environment, you're actually slowing down the rate of carbon release and you're providing habitat at the same time and enriching the soil. That's one example, there are lots of little insights. Permaculture people say, 'I do it this way' and you think, *That's a good idea*, so it's a bit magpie-like. The system as a whole, I find almost impossible to cope with. (What system?). A permaculture system. But any kind of design system, it leaves me completely bewildered. I look at it and think, *Why? I don't know where to start with this*. But then I analyse what I have done and see, well, that makes perfect sense, that fits into the system but I haven't set out with the system first. You set out with instinct? I set out with a moral position, to be honest. It starts as moral. (And what informed that?) It's the Christian upbringing, I suppose but it's the sensitivity too. If you love something as I love the Earth and if you feel totally at one when you are in a non-human environment, when you are alone, or with company, it works specifically when you are alone because that's when the chips are down. If you are alone in a woodland, on a desert, on a mountain, on a field, anywhere, if you feel uncomfortable in your own company, it's because you are not aware of the agencies that are there with you. I'm not talking about Findhorn type deities, which may or may not be true, I have no direct experience of that, what I do have direct

experience of is being in company, even in an empty desert you are not alone, as long as you recognise that you are part of it. I don't think I ever set out with a desire to create that kind of philosophy, it just seemed obvious and it's experience, of course. When I'm around trees (especially trees because human beings have a deep seated and absolute need to relate to trees, it's part of our evolutionary path), near trees, I almost feel as if I've got my friend there. And I know perfectly well that they're not conscious How do you know that?! They are not conscious in the way that we are conscious, not in words, but they may well be aware, that's different. I mean, I've actually communicated with the energy system of a tree with a thin bark but it's… you can analyse it down to voltages in the bark, it's a 0.003 Volts, or something ridiculously small. I don't know what the figure is, very low currents passing through the cambium of the tree, there is an electrical potential in a tree and if you're sensitive, you can put hand there and you can, I was going to say 'listen' but if you wait, you can actually sometimes sense it and then you *know* you're with a living being. I went to America because I wanted to see the biggest living beings on Earth. I walked with the redwoods and it's a lovely phrase that the Americans coined, 'To walk with the redwoods'. It sounds a bit odd at first, *Oooh, they're not walking,* but you are with them and to walk in a woodland where the redwoods are part of the scenery, not all of it, is absolutely awe inspiring because you're just going through woodland and then you say, 'Ah, hi! There you are!'. They peek out at you from through the other trees and then you think, *Wow! You're a biggun!* And I personally have apologised to the biggest living creature on Earth, I went to Gerald Sherman as they call it and said, 'I'm so sorry, maybe your name is really Alice. (both laugh) But, I mean, it's silly, that's a joke, but it started me off crying because that tree answered. Now what am I talking about? People will say I'm off my trolley. But I didn't feel that I was off my trolley, I consistently feel that there is a kind of awareness, it's not, as I say, what I call consciousness, in the sense of being able to put into words who or what you are but an awareness that lifts something from the environment and processes it. So, if you're living in that kind of world, if that's the way you're seeing the world, of course, the way you behave in the world is affected. And the idea of doing what they are doing in Alberta and ripping up the land to get at the shale underneath (the tar shale), to create this moonscape, this devastated landscape, it's no surprise to me that so many people who work there go away almost shattered, never to come back because their souls are to be ripped out as they are doing what is evil! (Phew, yeah.) Carol apologises. No, you're not, not to me you're not. I'd just like to finish, if I could get you to talk a little bit about Gaia? If that's OK? Uhuh, yeah. IT was a lovely idea when it came out. I thought, That is a very good metaphor, that is a good way of looking at the way it all works. I don't for one mounted ascribe self-consciousness to Gaia, as a lot of people do, they talk about Gaia as though Gaia was a sentient entity. I have the same problem with people who talk about God as a person, God as a person with wishes and dislikes and so on. 'God doesn't want you to do that', to me that's almost a blasphemous thing to say, how can we with our tiny little minds, even come close to the first idea of what the energy of the universe is and isn't capable of? When I'm perfectly sure, from what I've experienced, that there is a kind of consciousness in the universe but we are *part* of it and that we can access the universe's consciousness if we just listen, which is what people are doing when they pray properly. Asking the universe for things is just incredibly childish, we are part of the whole system, we have to work in the system and listen to it and do what it needs, what we can provide, if we can, and hopefully get something back. You were talking about Gaia. Gaia is a non-religious based equivalent. It appeals to a lot of people as a religious idea, I think. For me, it appeals as a very fine metaphor, very fine metaphor, because it allows you to personalise the conception that if we damage the environment, it will damage us. You get what you put in, you get charged for your actions and if you are destroying the biosphere, it will chew you up and spit you out. So Gaia is, in a sense, rejecting you and I like that as a concept, it makes good emotional sense. I think it's not what Lovelock intended it to be, I think he wanted it to be just as a metaphor, just as a way of explaining the interaction of all they systems and they are a totality. He was actually trying to discover a way of finding out whether there's life on another planet and he said, 'What are the tell-tale signs? What's the overall system which produces certain effects which wouldn't be there if it weren't for life?'. And he came up with, amongst other things, free oxygen and it's life that produces free oxygen and all his descriptions of the natural systems and natural circulations of different chemicals and different energies, they are all so perceptive but people have made the mistake of thinking them as a sort of Christ figure. He's a scientist, a bit of a maverick scientist, never the less, a scientist and he will go where the evidence takes him. Thank you.

Appendix 9

Interview Crib Sheet

Research Participants Semi Structured Interview Schedule

Katherine Stewart- kms1@aber.ac.uk

Hello: I'm a PhD student from the Department of Geography and Earth Sciences, Aberystwyth University and I'm conducting research into activities such as gardening, crafting, provisioning, re-purposing and up-cycling.

I might use a fully anonymised quote from you as part of a research seminar presentation or academic paper. I will also be using this research in a less personal way, I will be writing about themes emerging from these interviews.

So, I want to know about activities such as: baking bread, knitting, sewing, growing your own veg, retro fitting your home to be energy efficient, inventing things, fixing tools and equipment and so on. If you're happy to talk about your interest, passion or hobby, I'll get stuck in…

- Do you partake in any of the above activities, or similar?
- If so, what do you do?
- If not… do you have any interest in trying them out in the future?
- Has anything held you back in trying your activity out? For example, funds, time, uncertainty and so on?
- Why do you do these activities and what first sparked an interest?
- Could you describe your experience whilst you are making or creating?
- This may seem off topic but I'm digging a little deeper here: Are you concerned about issues such as peak oil and climate change?
- Do you perceive any links between your activities and a greener lifestyle?
- Do you think your activity is environmentally damaging?
- I want to talk about activities associated with a greener lifestyle, such as composting, growing your own veg, upcycling things. Would you do these because the government or organisations suggested you should or would you do them anyway, no matter what?

- Were you taught these skills as a child? Do you pass these skills and knowledge onto children or youngsters?

- Are you still learning new skills and techniques? If so, how do you learn- for example, do you self- teach, read a book, attend classes, watch You Tube videos, or go to a specialist club?

- Are you part of a community group involved in environmental concerns such as a Transition Town, permaculture group or conservation group?

- Are you fluent with terms and ideas such as: up-cycling, make do and mend, re-purposing, Transitioning, re-localisation, resilience building, re-skilling and skilling up for powerdown? If so, which ones and can you remember where you first heard of these terms?

- If you grow vegetables, do you have a polytunnel or green house and how does the climate affect what you grow?

- Does spirituality or philosophy inform any of what you do as regards gardening, making, crafting etc.? Are you happy to talk about this a little?

- Do you have anything you wish to add?

Questions for Eco Shop Volunteers

- Can you talk a little bit about the Eco Shop- how it works, what it does?

- How did you first become involved in the Eco Shop?

- Is the Eco Shop (or indeed, the Forest Garden) part of Transition Culture or the Transition Towns movement in any way?

- Are you familiar with the term resilience building as a key concept of Transition Culture? Obviously, the shop promotes sustainability and Earth Care. Does it also build resilience?

- In what ways is the shop like a charity shop and also, how does it differ?

- How do you think the Eco Shop serves the local community?
- Is the shop founded on permaculture principles in any way?
- I have been struck by the lay out of the shop- it reminds me of the forest garden. It is non-linear and has pathways flowing through it. If the shop is busy, I simply chose another route and don't get 'blocked'. Was this purposeful?
- Could you describe the atmosphere in the shop?
- Is there anything else you would like to talk about?

Thank you so much for your time.

Appendix 10

Participant Information

Resilience building through forest gardening, provisioning, making and crafting

About me

Hello, I am a part-time PhD student at the Department of Geography and Earth Sciences (DGES), Aberystwyth University, in my second year of study. I am also a mother, crafter and gardener.

I have a research blog here:
www.katyafallingstar.blogspot.co.uk

And a craft blog here:
www.papillonnoirjewellery.blogspot.co.uk

My facebook craft page is:
Papillon Noir's Crafty Snacks

My university research profile is:
www.aber.ac.uk/en/iges/staff/phd/kms1/

About my research

My research interest stemmed from my involvement with the Transition Towns movement- I was Development Officer for Transition Llambed (west Wales) for their first 18 months. Resilience building is one of the key concepts behind Transition Culture and of course it grabbed my attention with the focus upon activities such as gardening, knitting, baking, sewing, mending and micro energy generation. I think that raising the profile of crafting, provisioning, gardening and the like in the academic and wider world is important. I view this as vital work, which is sometimes somewhat sidelined and neglected, in favour of scientific or economic activities.

Research Aims and Ethics

I am engaged with a deep academic study of resilience in terms of what makes a resilient socio-ecological system, but what I want to do 'in the field', is to meet with and talk to gardeners, crafters, provisioners and to find out what motivates them, where their challenges lie, and whether they are part of a relocalisation movement such as Transition Culture, or not? I wish to ask: is there an innate connection between crafting (and making) and 'being green'?

As part of my research ethics, I am encouraged to be reflexive, which means maintaining a flexible and reflective attitude towards my research. It means that I will let my research lead me, so to speak. What this also means is that I wish my research to be fun, ethical and reciprocal. Therefore, I am wanting to give back to my

participants in someway. For some, I am sure the very act of being interviewed for academic research will be exciting enough (!) but I am very willing to give of my time and skills where appropriate. For instance, part of my research focuses on a community forest garden which means that I am occasionally found on my hands and knees weeding and mulching. Of course, asking questions and mulling over big ideas whilst gardening can be far more engaging and inspiring than sitting in a clinical environment!

Research methods

There are several methodologies I am likely to employ throughout my research. I will use the most appropriate one for the situation, for example:

- Participant observation: being fully part of a group or project yet simultaneously observing and making 'field notes' which later become a field diary.
- Conducting semi structured interviews, which will take between 30-60 minutes each. I will have several prepared questions but the session is designed to allow a flow of conversation, thoughts and ideas. I want to hear what you have to say about a given subject.
- A couple of my research participants have requested that I make a video with them. I hope that they will lead this 'interview' session, showing me what is really important to them, and why.
- I am also planning a future creative research workshop session but this won't be until mid next year (2014).

If you are interested

Please do not hesitate to get in touch with me if you have questions or ideas.

Katherine Mary Stewart

My email: kms1@aber.ac.uk

My university landline: +44 (0) 1970 622610

Above all, thank you for your interest, it is most appreciated!

Appendix 11

Explanatory Statement

Researcher Contact Details
Katherine Mary Stewart
DGES
Aberystwyth University
G1 Office
Llandinam Building
Penglais Campus
Aberystwyth
SY23 3DB
+44 (0) 1970 622606
kms1@aber.ac.uk

Date

Explanatory Statement

Dear Research Participant,

I would very much like to thank you for showing interest to participate in this research project. There are three documents which are important to read (and in one case sign), before I can actually start the fieldwork research in earnest. These are:-

- This letter, which is called the *Explanatory Statement* ('Explanatory Statement.docx')
- The document entitled *Resilience Building through gardening, provisioning, making and crafting: About Me* ('PhD Participant Information.doc'), where I attempt to more fully explain my research project and how I intend to conduct my field work
- The *Informed Consent Form* ('Informed Consent Form.doc'), **which is for you to tick and sign, should you be in agreement**.

What will happen if you agree to take part in this research?

There are three main research methods that I am employing; semi-structured interviews, participant observation and at a future date, a creative research methods workshop.
If you have agreed to an interview, I will meet you at a location of your choosing and conduct a semi-structured interview about your forest gardening/ provisioning/ making or crafting activities. The interview will last approximately an hour but if you wish you talk for longer, we can make provision for this. As the interview is semi-structured, I will ask some outlined questions but there will hopefully be flexibility for you to enjoy the process, relax and chat informally. As my participants are generally enthusiastic and passionate about their activities, there is a good chance that I will want to know a little more following the interview and in this instance, I would follow up with an email or phone call.

If you have requested a video interview, it will be either semi structured or directed by you, if you wish to explain your work more fully.

Participant observation is ethnographic field work whereby the researcher observes what is known as 'the field', yet also becomes part of the research themselves as they partake in the activities. The researcher makes field notes which later become a field work diary.
If you wish to attend the creative research methods workshop, we shall collectively explore creative research methods, allowing spontaneous chat, creativity and silence to emerge (or exist) as and when. We shall focus on a research topic but the very nature of creative research methods generally involves some degree of spontaneity, fun and relaxation, so be prepared.

What are the possible disadvantages and risks of taking part?

There are generally few risks and disadvantages associated with taking part but on occasion, participants may talk about something which triggers a difficult memory. This is rare and if it does occur, we will take time out, stop and only continue if the participant is happy doing so. My research focuses on activities people are often passionate about but I shall *not* be discussing private nor personal matters and unless otherwise requested by the participant, anonymity is always respected. Participants are able to specify any particular safeguards they wish to impose in addition to the University Codes of good practice, as explained below:

All personal information relating to you (e.g. name) will be kept confidential unless otherwise requested and will be stored in a password protected file on my personal computer. When you are quoted in my research you will be given a pseudonym unless requested otherwise. Furthermore issues of location or anything that may give away identity will not be mentioned unless otherwise requested. Business and project names will not be mentioned unless requested otherwise also. As highlighted earlier, you are free to request your own safeguards.

Are there any possible advantages in taking part?

Yes! Many people enjoy the interview session as it can be a good opportunity to chat about something they are enthusiastic about.

Some participants may specifically request that they do not remain anonymous, or rather that their project or business is mentioned by name in say, seminar presentations. If they request this, the effect would be for their project to gain publicity which could further enhance their reputation. This is 100% optional and must be requested by the participant.

With the video interviews, anonymity is much harder to achieve, of course, so disclosure will be discussed. I know that some participants may wish to be videoed working and their project. If requested and if compliant with Aberystwyth University regulations, the video will be uploaded to You Tube to help the group further their publicity and public dissemination.

In my own experience, attending a creative research methods workshop is a thoroughly enjoyable day, where one has some time outside the ‘daily grind’ with which to chat, create or contemplate amongst fellow human beings. Many have noted with focus group sessions that a synergistic effect occurs and participants often enjoy their time.

Additionally I believe in reciprocity and wherever possible, I am keen to ‘return a favour’. If you can think of a favour or request you wish to make of me, do not hesitate in doing so!

If you have any questions whatsoever, please do not hesitate to get in touch with me. Thank you for taking the time to read this!
Kindest regards,

Katherine Mary Stewart MA

More information

Interviews

A transcript will be made available to the participant in order to give the interviewee opportunity to raise concerns. Only the approved version will be used by the researcher.
Participation in the research is completely voluntary and an interviewee can withdraw from the research at any time.
Interviewees are under no obligation to answer questions they feel are in any way too personal, intrusive or inappropriate. Such a refusal will in no way inform future treatment.
The interview will not enjoy legal privilege.

Collection

The interview will be held at a location chosen by the interview.
It will be recorded (sound only) onto my iPhone for transcription at a later date.
The interviews will vary in length.

Storage

The soundfile will be stored on my iPhone, which is password protected. The transcription will be held on a secure, password protected, external hard drive as back up. The soundfile will then be deleted on the iPhone.

Other material

Consent will be sought on the use of email correspondence and other things such as personal jottings.

Use of data

As well as being used in the thesis, the interviews are intended to form the basis of scholarly journal articles.
They may be used in presentations at scholarly conferences, events and workshops. A copy of the completed thesis can be provided if requested upon completion- expected September 2017.

Complaints

You can complain about the study if you don’t like something about it. Please write to:
The Secretary of the Aberystwyth University Ethics Committee for Research Procedures
Dean’s Office
Cledwyn Building
Aberystwyth University
SY23 3DD

Appendix 12

Informed Consent Form

Informed Consent Form

Please read each statement below carefully and tick the box to show that you understand and agree to what is being said. Please then sign the bottom of the contact form to verify this.

Thank you.

Statement	Tick
• I agree to take part in the above Aberystwyth University research project	
• I have had the project explained to me, and I have read and understood the Explanatory Statement, which I may keep for my records	
• I understand that my participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project, without being penalised or disadvantaged in any way	
• I agree to the use of anonymised quotes from the interview/ questionnaire being used by the researcher for the uses outlined in the Explanatory Statement. Conversely, if I wish to be non-anonymous, I must specify this choice	
• I agree to storage of my contact details by the researcher	
• (Interviews only) I understand that I will be given a transcript of the data concerning me for my approval before it is included in the research	
• I understand that the completed thesis will be available in both hard and electronic format- in university libraries and online.	
• I agree to the appropriate storage of the fully anonymised interview/ questionnaire data after the above named research project has finished for use in future research	

Name	**Signature**	**Date**