The space-times of post-capitalist transformation: More-than-human affects in French and Catalan eco-communities

Elisa Schramm

Hertford College

University of Oxford

A thesis submitted for the degree of

Doctor of Philosophy

Michaelmas 2021

Table of Contents

ACKNOWLEDGEMENTS 6

ABSTRACT 8

1. INTRODUCTION 9

1.1 Understanding post-capitalist living 10
1.2 Why post-capitalism? 12
1.3 towards an understanding of post-capitalism 17
1.4 Eco-communities as sites of post-capitalist transformation 20
1.5 Work on eco-communities thus far 28
1.6 Filling the gaps 30
1.7 Research Questions 36
1.8 Field sites and methods 38
1.9 Layout of the thesis 39

2. LITERATURE REVIEW 44

2.1 Motivation, affect and ethics 45
2.1.1 Brief overview 45
2.2.2 Towards an affective understanding of motivation 47
2.2.3 Motivation as co-constitution of affect and ethics 50
2.2 Composing practices 54
2.2.1 Practices in eco-communities 54
2.2.2 Practice as more-than-human composing 56
2.2.3 Commoning as a form of more-than-human composing 59
2.3 (Wider economic) transformation 63
2.3.1 General overview 63
2.3.2 What kind of transformation? What kind of impact? 66
2.3.3 The how of transformation 1: Economic practices 68
2.3.4 The how of transformation 2: Attracting wider publics 70
2.4 Endurance 74
2.4.1 Type 1: endurance over time 74
2.4.2 Type 2: enduring discomforts 77
2.4.3 Bodies as sites of endurance over time 79
2.4.4 Conceptualising endurance 81
2.5 Conclusion 83

3. METHOD AND METHODOLOGY 86

3.1 Methodology 86
3.2. Fieldwork Design 89
3.2.1 Can Decreix 93

3.2.2 Can Masdeu 94
3.2.3 Calafou 98
3.3 GATHERING MATERIALS 103
3.3.1 Participant observation 103
3.3.2 Interviews 105
3.4 ATTACHMENTS IN THE FIELD 112
3.4.1 Positionality, homophilia and friendship in the field 113
3.4.2 Attachments in a multilingual context 115
3.4.3 Attachment through embodied labour 118
3.5 FROM TRANSCRIPTIONS TO FINAL WRITE-UP 119
3.5.1 Issue-centred analysis 119
3.5.2 Narrative analysis 121
3.5.3 Translation 123
3.6 ETHICS 124

4. MOTIVATION IN CONTEXT: NARRATING JOURNEYS TOWARDS POST-CAPITALIST LIVING 128

4.1 INTRODUCTION 128
4.2 VOLUNTEERS IN CAN DECREIX 129
4.2.1 Origins 130
4.2.2 Build-up 134
4.2.3 Can Decreix: a motivational experience? 139
4.2.4 Summary so far 144
4.3 LONG-TERM INHABITANTS 145
4.3.1 Background 146
4.3.2 Moving to the eco-community: The quest for a good life 150
4.4 CONCLUSION 159

5. COMPOSING POST-CAPITALIST WORLDS: REPAIRING PRECARIOUS INFRASTRUCTURES AS MORE-THAN-HUMAN COMMONING 163

5.1 INTRODUCTION 163
5.2 MAKING DO (1): BUILDING COMMONS IN RUINS 165
5.3 MAKING DO (2): WITH SURROUNDINGS 170
5.4 MAKING DO WITH SKILLSETS (3): AS APPRENTICESHIP 175
5.5 A WIDER SPECTRUM OF MODES OF COMPOSING BEYOND COMMONING 180
5.5.1 Interhuman power-dynamics 181
5.5.2 Towards increased stabilization of relations 184
5.5.3 Towards (resigned) acceptance of unstable infrastructural relations 188
5.6 MAKING DO (4): COMMONING THAT BENEFITS NON-HUMAN ‘INTRUDERS’ ON SITE? 191
5.7 CONCLUSION 195

6. TRANSFORMATION IN AND BEYOND ECO-COMMUNITIES: ATTACHING WIDER PUBLICS TO DIVERSE ECONOMIC PRACTICES 198

6.1 INTRODUCTION 198
6.2 BEER-BREWING IN CALAFOU AND CAN MASDEU 200
6.2.1 Attachment strategies 202
6.2.2 Implications for more-than-human collaborations 206
6.2.3 What kind of transformative strategy? 213
6.3 GROWING ORGANIC PRODUCE IN CAN MASDEU: REDISTRIBUTING RESPONSIBILITY TO WIDER PUBLICS 214
6.3.1 Reconfiguring responsibilities 1: Harvesting consumers 216
6.3.2 Playful relations at the margins 219
6.3.3 Redistributing responsibility 2: Harmonising human and vegetal rhythms 221
6.3.4 Redistributing responsibility 3: extending responsibility in the community gardens 223
6.4 CULTIVATING WILD PLANTS IN CAN DECREIX: POTENTIAL TRANSFORMATION THROUGH DISRUPTION(?) 227
6.4.1 What to 'grow' and how? 228
6.4.2 Attachment issues 232
6.5 CONCLUSION 237

7. THE ENDURANCE OF PRACTICES: DISCOMFORTS AND INCONVENIENCES IN ECO-COMMUNITIES 241

7.1 INTRODUCTION 241
7.2 FIRST IMPRESSIONS: EMBRACING DISCOMFORT UPON ARRIVAL 243
7.3 OFF-THE-GRID HEATING AND THERMAL DISCOMFORT: ETHICS, BODIES, AND MATERIALS 249
7.3.1 Heating with wood 250
7.3.2 Insulation 253
7.3.3 Embracing anti-capitalist discomfort? 256
7.4 MATERIAL COMFORT OVER TIME: SLOW CREEP TRANSFORMATIONS 258
7.4.1 Can Masdeu 259
7.4.2 Calafou 264
7.5 MANAGING IN-GROUP DISCOMFORT AND DISPERSING ATTACHMENTS 267
7.5.1 Proliferating attachments 268
7.5.2 Flexibilising working hours 271
7.5.3 Common visioning? 273
7.6 CONCLUSION 275

8. CONCLUSION 278

8.1 INTRODUCTION 278
8.2 KEY FINDINGS 279
8.2.1 RQ1: How does the motivation to visit or join an eco-community emerge in the life courses of individuals? 279

8.2.2 RQ2: How are more-than-human practices composed in post-capitalist sites? In which ways can they be understood as commoning practices? 281
8.2.3 RQ3: How are economic practices made attractive to wider publics and disseminated beyond the sites themselves? 284
8.2.4 RQ4: How do post-capitalist practices, especially those that are perceived as uncomfortable, endure over time? 286
8.3 CONTRIBUTION TO THE LITERATURE 288
8.3.1 5 gaps in the eco-community literature 289
8.3.2 More-than-human and non-representational geographies 293
8.4 METHODOLOGICAL INSIGHTS 297
8.5 LIMITATIONS AND FUTURE RESEARCH 302
8.6 WIDER SIGNIFICANCE 304
9. BIBLIOGRAPHY 308

ACKNOWLEDGEMENTS

This thesis would not have been written without the support, assistance, enthusiasm, and patience from a great number of people. First and foremost, I am grateful to my supervisors, Professor Tim Schwanen and Dr Beth Greenhough. I feel incredibly lucky to have been guided by you through this journey, patiently, diligently, and expertly, during my ups and downs, and especially the challenging days of the pandemic. Your experience, flexibility, and constructive feedback has really helped me feel secure and sane during the past four years. You have made me feel supported and encouraged in ways that I progressively understood to be totally out of the ordinary. I am also thankful for the generous financial support from the Studienstiftung des Deutschen Volkes and Hertford College, Oxford.

I would like to thank with all my heart all residents and guests of the three eco-communities I visited, Can Decreix, Can Masdeu and Calafou, for opening your home up to me, and sharing so much of your life, your stories, and your time with me. I firmly believe that so much can be learnt from you and I hope I have been able to capture some of this here. On a personal level, living with you has been incredibly inspiring and formative, and I have felt nourished and stimulated for many years now thanks to the impulses I have gained. You have given me a sense of possibility and hope and empowerment that I simply did not have before. I am especially grateful to all those who have taken the time to chat, work and do interviews with me. Special thanks go to François Schneider for your candour and letting me explore and research Can Decreix despite your reservations, and Amanda and Made for your friendship on site and beyond. Made, I am so grateful for the exploring together we could do in Barcelona that autumn; hanging out with you was a breath of fresh air that I desperately needed. In Can Masdeu, I am so very grateful to Martin and Claire for your kindness, frankness, and good discussions. In Calafou, I am deeply indebted to Beka and Robert for making so much time and hosting me and looking out for me and being all-round wonderful 'godparents' to me. Xavi and Fionella, I am so happy to have befriended you on this journey and to have had the privilege of learning about eco-communities with you and from you. Thanks also to Elena, Nico, and Jose Luis in Oxford for helping me with some of the trickier parts of translating from Spanish to English.

To my wonderful friends: Tilly, I have no idea how I would have managed without you by my side on this DPhil journey. Thank you for your patience, your hospitality (!), your candour, our

laughter despite everything (Frank Basching deserves a mention). Your companionship means everything. Thomas, thank you for making me feel so accepted and loved without question and thank you for your unflappability, your wisdom, and your sharp insights. Pete, I have never met anyone so giving and so energetic and energising – pandemic life would have been utterly impossible without you. Enrike, even if you're further away now, I am so grateful for your brilliance, critical spirit, and radiating warmth – you have quite literally made me a better person and a better scholar. Thanks to Shona, for your extraordinary brain and great discussions, to Hannah for getting me out on so many walks, letting me vent as needed and keeping me sane. To Ella for all the lunches we shared and your wonderful dependability. To Shiren for listening and encouraging me to 'keep pushing'. And to Saba for the quiet sense of trust in my abilities that comes out of a decade of friendship (and finding me a job!). Finally, thank you to my parents for your unwavering support, financially and emotionally, on this DPhil journey and many, many years before that. Without you, I would not be where I am now.

ABSTRACT

This thesis aims to understand how post-capitalist life is made possible in eco-communities and how it might travel beyond them. I do so with a view of uncovering attempts at thinking and doing differently in ways that may guide us in the Anthropocene (Clark, 2011: 162, see Gibson-Graham and Roelvink, 2009; Haraway, 2008; Povinelli, 2011; Tsing, 2015), whilst simultaneously responding to calls to study such sites in further depth as potential 'niches' with lessons to help address the excesses of capitalism and the associated climate crises (Litfin, 2014; Pickerill, 2017). I have conducted an ethnographic study of three eco-communities in Southwestern France and Catalonia in a broadly comparative vein and have drawn on the disparate body of literature around post-capitalist transformations and eco-communities on one hand, and more-than-human and non-representational geographies on the other. I have worked to address five gaps in the literature on eco-communities, namely, a lack of attention to embodiment and affect and to everyday material practices, their more-than-human constitution, their contribution to economic transformations, and finally, their endurance over time. I argue that repetitive, more-than-human affective relations along with moral-political convictions are crucial to understanding *how* post-capitalist transformations come about, especially when examining how affective relations and moral-political convictions emerge as motivations, how they are cultivated and passed onto to others, and how difficulties in doing so might arise over time. I have laid out this central argument in four space-times of transformation, that is, the variegated space-times of motivational experiences to move to an eco-community, the building of post-capitalist commons on site, the transformative potential of economic practices in and beyond the sites and finally, the endurance of post-capitalist practices over prolonged periods of time.

Key words: eco-communities, post-capitalist transformation, more-than-human, affect, diverse economies.

1. Introduction

It is a warm, if a little windy summer evening in July 2018, and around twenty participants of the Degrowth Summer School are sitting barefoot on the wooden floor of the patio of Can Decreix. Can Decreix is a degrowth house situated in Cerbère, which stares down onto the gigantic train station and the mountain that marks the Franco-Spanish border. The main inhabitant, Luc, is extolling the virtues of chabrot, a technique of licking plates after filling them with some red wine to clean out all the leftovers on the table, based on an ancient Occitan custom. Half-jokingly, with exaggerated movements he explains that this avoids all left-overs, especially oil, so we are saving resources. In turn, this also aids the cleaning up process, which is done without any chemicals causing long-lasting environmental damage. 'When we finish the plate', he adds, 'we put a bit of wine on it and we lick it and taste the wine even better, mixed with the olive oil'. He demonstrates the practice, which attracts laughter and maybe a bit of ridicule. The summer school participants, some of them reluctantly, start to imitate him. For my part, I add too much wine to my plate, which spills over as I try to move my tongue with sufficient force over this strange mixture of oil and wine. Over the next few days, chabrot keeps coming up as a topic of conversation. People laugh as they watch each other 'do a chabrot', occasionally spilling wine on the ground, encouraging each other, and humorously chiding those who are reluctant to do it. Yet one evening when I ask Desiree, one of the participants who has become a friend, whether she will continue this practice at home, she spontaneously declines, without giving much of an explanation. As I interviewed other summer school participants and volunteers, almost all of them seem hesitant to do chabrot.

The practice of chabrot and how it was received encapsulates rather poignantly some of the dynamics that I am concerned with in this thesis. What does it mean to put post-capitalism (or here: degrowth) into practice in everyday-life decisions? How does something so abstract 'acquire purchase in the practices of everyday living' (Hulme, 2010: 560), including, for example, simple practices such as how to best clean a plate? Many summer school participants rejected

this practice outright, considering it too myopic and actively refused to engage in such 'material politics' (Marres, 2012) that deliberately invests oily plates with political and moral capacities, and imposes particular obligations onto us. Some thought chabrot was ridiculous. Others, like Nerea, shared with me their struggles of getting the movement right with their tongues, alerting me to the difficulties of acquiring the embodied skillsets that are necessary for this kind of post-capitalist life. How then can we learn and relearn the skillsets for post-capitalist living? How can we learn to overcome potential visceral '*aversions*' to which Natasha, another summer school participant, confessed? How do we approach the discomforts and inconveniences that seem to pop up whenever sustainable living is practiced? And from Luc's perspective, how does one go about convincing others to take up post-capitalist practices even if they might appear difficult, disgusting, or irrelevant at first sight? More broadly speaking, how is a commitment to this kind of lifestyle motivated and how does this attention to the everyday relate to wider, enduring transformational processes towards post-capitalism?

1.1 UNDERSTANDING POST-CAPITALIST LIVING

This thesis is concerned with understanding how post-capitalist life is made possible in eco-communities and how it travels beyond these sites. I examine these spaces with a view towards uncovering ways of doing, living, and thinking differently, in ways that may guide us to live responsibly in the Anthropocene (see Clark, 2011: 162; Haraway, 2008; Graham and Roelvink, 2009; Povinelli, 2011; Tsing, 2015; Yusoff, 2015). More specifically, I take three eco-communities as cases of post-capitalist transformation, adopting a broadly comparative perspective, to examine the potentialities, issues, and challenges involved in realising deep changes in consumption, production, communal life, and social organisation. These three sites are Can Decreix, in Cerbère, France, already introduced above, Can Masdeu, a 'rurban' anarchist squat on the outskirts of Barcelona and finally Calafou, a self-proclaimed post-capitalist eco-

industrial colony some 60km west of Barcelona. In so doing, I also respond to calls for more attention to be paid to eco-communities as potential 'niches' with many lessons, especially for those in the Global North (Litfin, 2014; Chatterton, 2016a; Pickerill, 2017).

To examine eco-communities as sites of post-capitalist transformation and in line with what I have hinted at in the vignette above, I will outline four space-times that are examined in four empirical chapters in a broadly chronological order: First, I will examine the variegated space-times of motivational experiences that lead individuals to live their lives in eco-communities. Second, I will examine how individuals, once arrived engage in commoning processes on site, a key strategy for post-capitalist transformation that involved significant changes to everyday practices compared to everyday living such as organic gardening, bioconstruction, and the use of compost instead of flush toilets. I will also consider the ways in which residents have attempted to contribute to wider economic transformations in and beyond the site. I will focus particularly on the techniques that have been deployed to 'attach' consumers and visitors to particular post-capitalist products or ways of producing and how these relate to particular imaginaries of post-capitalist transformation. Finally, I will consider how practices performed on site endure over time, paying particular attention to bodily discomforts and inconveniences that I argue play a substantial role in shaping practices over many years.

To explain these dynamics, I have drawn extensively from and contribute to more-than-human geographies and non-representational theories. As hinted at in the vignette of chabrot above, the particularities of specific more-than-human configuration (wine, oil, human tongue, plate) and its specific affective charges (disgust or delight) are highly pertinent in understanding how post-capitalist life is made possible in practice. They point to an understanding of more-than-human relations as lively, locally contingent, and imminently political. In the context of the climate and ecological crisis - arguably brought about by problematic relations with a plethora

of non-humans in Western modernity with fossil-fuelled capitalism as a key feature (Head and Gibson, 2012: 699) – a consideration of these practices as reconfigurations of more-than-human relations is critical.

The remainder of this introduction will outline the objectives and goals of the thesis and explain how I have endeavoured to achieve them. I will do so by fleshing out why a transformation towards post-capitalism is necessary as well as desirable (1.2), before making a case for eco-communities as promising cases of how post-capitalist transformations can be achieved in practice (1.3). I will then describe how eco-communities have been studied so far (1.4). In so doing, I identify gaps that arise from this, which will allow me to sketch out the guiding theoretical concepts of this thesis (1.5). I will conclude by briefly presenting the field sites and methodologies used (1.6) as well as a layout for how my research has been composed together into this thesis (1.7).

1.2 WHY POST-CAPITALISM?

As has been argued abundantly, it may be difficult or even impossible to solve the climate and ecological crisis whilst retaining a capitalist mode of living, particularly when considering capitalism's reliance on endless economic growth and high levels of material throughput. It appears even less likely that this may be achieved in an equitable and fair way that assures a good life for all on earth (see Meadows, 1972; Schumacher, 1973; Jackson, 2009; Kallis, Kerschner and Martinez-Alier, 2012; Feola, 2019; Schmid, 2019a).

Furthermore, capitalist solutions to climate change and ecological crises, as apparent in 'eco-modernist' and 'green-growth' narratives and practices, can be considered insufficient to achieve the radical changes that are necessary to assure a dignified existence for humans and non-

humans alike on the planet. This is mainly because such approaches are based primarily on increasingly efficient (and depoliticised) technological 'fixes' and so-called environmental-economic 'win-win scenarios' (see Blühdorn, 2017: 43), that risk being counter-acted and offset by continued economic growth, demanding ever greater resources and energy.

Head and Gibson (2012: 699) argue that 'climate change is a quintessentially modern problem', with industrial capitalism as its main issue, whereby both scientific diagnoses of climate change and possible solutions remain firmly embedded within a 'modernist project of separating nature and society' (ibid.: 700) as well as within human exceptionalism (ibid.: 702). This is the case despite evidence in natural and social sciences that concepts of 'multiple and relational agencies' appear more appropriate than strictly binary frameworks (ibid.). But in so doing, many putative solutions arguably miss out on how 'we are surrounded by many world-making projects, human and non-human' (Tsing 2015: 21) along with opportunities for 'collaborative survival', as non-humans are relegated to the status of 'resource'. Thus, by attempting to 'fix' climate change whilst disregarding many other world-making projects that do not readily fit within green-growth or eco-modernist solutions reliant on 'progress' and endless capital accumulation and economic growth, most climate change mitigation measures have thus far been unsuccessful at keeping us within liveable planetary boundaries (Raworth, 2017).

Indeed, despite decades of technological innovation and related increases in energy efficiency, human carbon and environmental footprints have simply not reduced substantially, even within the Global North (Alexander, 2020: 16). Carbon emissions have risen by 60% since 1990, and have been characterised by a stop-and-go pattern in recent years: Between 2014 and 2016 total emissions seemed briefly stable, but rose again by 1.6% in 2017 and 2.7% in 2018 (Jackson and Victor, 2019:95), before flattening to 'only' 0.6% growth in 2019 (Friedlingstein *et al.*, 2019). After a significant and unprecedented decline of 6.4% year-on-year due to the COVID-19

pandemic in 2020 (Tollefson, 2021), the latest IEA's Global Energy Review (2021) estimates that global carbon emissions will increase by nearly 5% in 2021.

These increases have occurred despite 'relative decoupling', that is, a decrease in carbon emission intensity per unit of economic output. Jackson and Victor (2019: 950) for instance highlight that the carbon dioxide intensity of the global economy decreased from around 760g CO_2/US$ in 1965 to 500g CO_2/US$ today, a decline of 35% in half a century. By contrast, absolute decoupling, when the 'economy is growing while the amount of resource use and/or environmental impact is decreasing' (Vadén *et al.*, 2020: 238), has not been achieved. In this context, Haberl *et al.* (2020: 1) have synthesised evidence from 835 peer-reviewed articles published between 1972 and 2019 to find that 'examples of absolute long-term decoupling are rare', concluding that 'large rapid absolute reductions of resource use and GHG emissions cannot be achieved through observed decoupling rates.'

This is a rather sobering outlook on past and likely future emissions, which underlines the failure of past political and economic leaders to suitably address climate change and related ecological crises within a capitalist economic system. While politicians and indeed many scientists still hold on to green growth 'capitalist' solutions of 'increasing energy efficiency, promoting renewable energy and introducing technological solutions and market-based mechanisms' to enable decoupling (Haberl *et al.*, 2020: 30), Parrique *et al.* (2019) have suggested seven reasons to remain sceptical about the possibility to do so. Next to emission outsourcing (from richer to poorer countries), they emphasise continued rising energy expenditures (to extract remaining pockets of fossil fuels), rebound effects, problem shifting (new technological solutions causing different kinds of resource scarcities and emissions), an underestimation of the emissions related to services, the limited potential of recycling (recycling rates are low and are energy and resource intensive) and insufficient technological progress.

Here, even the scenarios of ambitious nations fall short of what is needed to fulfil the Paris Agreement, with Sweden and the UK's goals for instance falling short by a factor of 2, according to Anderson, Broderick, and Stoddard (2020). It is worth keeping in mind that their comparatively ambitious goals rely on 5% annual mitigation rates (ibid.: 1301), when the highest rate of relative decoupling thus far observed has been 3%, in the immediate aftermath of the 1970s oil crises (Jackson, 2019). Sweden and the UK's scenarios, like many others, are also increasingly based on negative emission technologies (NETs), whose (timely) success is highly uncertain and their inclusion in such models premature (Anderson, Broderick and Stoddard, 2020: 1291). As such, instead of solving the challenges of the climate and environmental crises, these efforts can be read as a commitment to artificially extend the life expectancy of current economic systems (Blühdorn, 2017: 45).

Nonetheless, even within international organisations, there have been voices suggesting different economic modes of organising, calling for 'sufficiency' based solutions (Haberl *et al.,* 2020). For instance, the IPCC has included a 'Low Energy Model' scenario for future emissions in 2018, which includes a significant decline in global material production and consumption, to be achieved partly through a shift away 'from private ownerships of key commodities (like cars) towards sharing based models' (Hickel and Kallis, 2020: 12), thereby questioning practices central to capitalism. Similarly, Stoddard *et al.* (2020: 27) argue that the bottom-up questioning of capitalism's adequacy to solve the climate and ecological crises as apparent in the 'many and varied social movements' increasingly comes together with 'critically minded expertise' of governments and international organisations and may therefore reform the 'core tenets of modern, industrialised society' (ibid.: 25).

These ecological critiques only add to and coalesce around 'older' critiques of capitalism. The latter have frequently highlighted capitalism's exploitative and unjust features as well as the

unhappy or alienated life that capitalism brings about (Jaeggi, 2016: 47). As such, despite significant levels of economic growth and capital accumulation, global populations have benefited very unequally, with the global 1% having captured twice as much growth as the bottom 50% between 1980 and 2016, leading to increasing levels of global inequality (Alvaredo *et al.*, 2018). This appears particularly unjust given that many people around the people do not have the resources to satisfy basic necessities, with the World Bank (2020) calculating that 689 million lived in extreme poverty in 2017, surviving on less than 1.90$/a day.[1] At the same time, these tendencies are exacerbated by climate change and environmental degradation, with another 68 to 132 million estimated to be driven into poverty by 2030 (World Bank, 2021). This is specifically the result of the actions of the wealthiest, with the wealthiest 10% having been responsible for as much as half of the cumulative emissions since 1990, and richest 1% for more than twice the emissions of the poorest 50% (Stoddard *et al.*, 2021: 4).

Furthermore, there is evidence to suggest that capital accumulation does not increase human wellbeing after a certain threshold, which is known as the Easterlin Paradox (Easterlin, 2003), with non-monetary domains such as health, social capital, relationships, and temperament usually contributing more to happiness than pecuniary ones (Sekulova, 2015: 113). Capitalist modes of production are also said to lead to a sense of 'lack of voice, person-job fit and meaningfulness' (Shantz, Alfes, and Truss, 2014), which contributes to lower levels of well-being and emotional exhaustion (see also Burkitt, 2019; Matthews, 2019), with income inequality itself leading to declines in subjective well-being, including from status competition and anxiety, mistrust and the corrosion of social ties, and fears about the future (Buttrick, Heintzelman and Oishi, 2017).

[1] While this constitutes, according to the World Bank, a significant reduction of people living in absolute poverty compared to 1.9 billion in 1990, these numbers are contested (see e.g. Dotter, 2017).

1.3 TOWARDS AN UNDERSTANDING OF POST-CAPITALISM

Given these significant inadequacies of contemporary capitalism, this thesis takes as its starting point that moving beyond capitalism is both indispensable and desirable and joins those that call for and seek to enact 'post-capitalism' (Chatterton and Pusey, 2020; Alexander, 2020). While generally perceived to come after or replace capitalism as a dominant economic system (Cameron, 2021), I view post-capitalist approaches as those that seek a 'recalibration of economic, political and social institutions to support a temporally and spatially equitable, sustainable and dignified survival of the human and of non-human species' (Schmid, 2019a: 1). I draw on three main impulses that inform my understanding of post-capitalism.

First, my analysis for the necessity for post-capitalism has primarily been informed by degrowth scholars (Jackson, 2009; Kallis, Kerschner and Martinez-Alier, 2012; Demaria *et al.*, 2013; Demaria, Kallis and Bakker, 2019). The above analysis of the ecological limits of capitalism hints at the need for degrowth, understood here as an 'equitable downscaling of production and consumption that increases human well-being and enhances ecological conditions at the local and global level' (Schneider, Kallis and Martinez-Alier, 2010: 511), which sheds doubt not only on the feasibility of unlimited economic growth, but also on its very necessity and desirability (Xue, Arler and Næss, 2012: 87). While some degrowth scholars argue that the association between degrowth and post-capitalism should be avoided (Andreucci and McDonough, 2015), I concur with others that degrowth can be viewed as a form of post-capitalism, given first and foremost that degrowth casts significant doubt on (unlimited) capital accumulation as a central capitalist mechanism (Schmid 2019a: 5, Vandeventer, Cattaneo and Zografos, 2019).

Second, I draw on existing scholarship within geography on post-capitalism (Chatterton and Pickerill, 2010; Chatterton, 2016a; Smith, 2018; Chatterton and Pusey, 2020; Schmid and Smith,

2020). While this body of work has not engaged much with degrowth explicitly, it arguably shares similar critiques of capitalism. In particular, I rely on Chatterton and Pusey's (2020: 27) 'three terrains of transformation between capitalism and post-capitalism', that is moving from capitalist enclosure to post-capitalist commons, from commodification to socially useful production and from alienated work to joyful and self-directed doing. The three terrains build on Marxist critiques of capitalism as well as its terminology (see more in 2.3.2).[2] These terrains and what they criticise may not be as sharply focused on the ecological critique that degrowth most poignantly provides, but they do offer useful analytical ground to work on, identifying more specific problems with capitalism and setting out post-capitalist alternatives.

Third, I draw on Gibson-Graham's diverse economy approach (2006; 2008) as a starting point to uncover the multitude of practices that can be understood as non- or post-capitalist that are already being performed currently, in many places. This serves as a corrective to overly structuralist accounts of capitalism, that often besets e.g. degrowth scholarship which ends up articulating rather 'bleak' (Buch-Hansen, 2018: 162) outlooks on the capacity of various diverse bottom-up economic initiatives to impact market and state institutions (ibid.). The diverse economy approach also provides a distinctive spatiotemporal understanding of the transformation towards post-capitalism, by arguing that firstly 'post-capitalism is already there' (Cameron, 2021: 1) in the diversity of economic activities that humans perform in the everyday and secondly, that capitalism is not an all-encompassing system that will be replaced by another, but rather a set of practices that can be performed differently. Here, two key means to contribute to transformations have been highlighted, that is, 'identifying existing economic diversity', and thereby attempting to 'strengthen these economies' (ibid.).

[2] Commodification has also been criticised within degrowth traditions (see Conde and Walter, 2015; Gómez-Baggethun, 2015), which has also championed the commons as a counterpoint to enclosure (see Helfrich and Bollier, 2015). Instead of alienation, 'conviviality' (Deriu, 2015) after Illich (1973) is often brought up to ensure autonomous and self-directed doing, as well as a broader emphasis on happiness and the good life (Sekulova, Kallis and Schneider, 2017).

Finally, my understanding of capitalism, while acknowledging the impact that all these configurations have on 'work' (see Chatterton and Pusey's second and third terrain), is less concerned with the post-work approaches that are currently popular (Mason, 2015; Srnicek and Williams, 2016; Pitts and Dinerstein, 2017; Bastani, 2019). This perspective foregrounds how automation may allow for the abolition for work to be replaced with measures such as the universal basic income. Here, broadly speaking, 'technological progress' is viewed as 'a way out of capitalism' (Schmid, 2019a: 5) that some argue should even be accelerated to enhance capitalism's 'uprooting, alienating, decoding, abstractive tendencies' (Mackay and Avanessian, 2014: 4). This view is at odds especially with degrowth approaches and their emphasis on downscaling and deceleration (Akbulut, 2021) and seems to imply a significant increase in resource use and emissions, at least in the short term.

There are arguably some tensions between this more performative account of the economy and the first two more substantive takes on capitalism/post-capitalism. Nonetheless, next to a frequent emphasis on 'oppositional activism' (Demaria *et al.*, 2013), 'non-reformist reforms' on a policy-level (see Gorz, 1967 in Bond, 2008: 9, see also Wright (2013)), and a more culturally oriented 'decolonising of the imaginary' (Latouche, 2009), all three are interested in 'community-led and grassroot organising' and 'experimentation of alternative organisations' that cover a wide diversity of economic activities (Schmid, 2019a: 6) as possible means to achieve broader transformations towards post-capitalism. While the diverse economy approach speaks of performatively bringing new other practices into being, its protagonists often rely on examples that are rather well-known as alternatives to capitalist economic practices. These have included consumer, producer, housing, energy and worker cooperatives, community gardens and local currencies. These examples also resonate with 'autonomous' perspectives, which have emerged as important to the sites I visited, and which emphasise self-organisation and self-legislation

along with activism (see Springer *et al.,* 2012), and are closely associated with 'micro-scale commons' (Chatterton and Pusey, 2020: 37).

1.4 Eco-communities as sites of post-capitalist transformation

Given this backdrop of diverse economic activities and bottom-up strategies towards post-capitalism, eco-communities, low carbon developments, eco-housing or similar 'place-based niches' (Chatterton, 2016a; 2016b; Pickerill, 2016b, 2017; Lockyer, 2017; Monticelli, 2018; Demaria, Kallis and Bakker, 2019) have been championed in various disciplines and contexts as part of strategies towards post-capitalism. As an 'interstitial' strategy' (Wright, 2013: 34), the goal of such spaces is to 'build new forms of social empowerment in the niches and margins of capitalist society where this is possible'. As such, they serve 'a critical ideological function of showing that alternative ways of working and living are possible' (ibid.), in a 'prefigurative' vein (Maeckelbergh, 2011; Yates, 2015).

While intentionally formed communities have been around for thousands of years (Metcalf, 2004), there has been an efflorescence of eco-communities since the 1990s (Lockyer, 2017), with for instance increasing numbers registering at the Global Ecovillage Network (GEN) (Sherry, 2019: 10). Such intentionally formed communities have been extremely heterogeneous, stemming from 'diverse origins including ideals of self-sufficiency and spiritual inquiry of monasteries, Buddhist movements, ecologist, pacificist feminist and alternative education movements, the back-to-the-land and cohousing movements in Global North and participatory development and technological appropriation movement in the Global South' (see Dawson, 2015 in Renau, 2018: 4). Past examples have drawn on Romantics such as Thoreau, political movements such as the utopias of Fourier, Owen, and Saint-Simon and more recently on the

hippies and related movements of the 1960s and 1970s. Terms such as 'urban group households, housing cooperatives, rural back-to-the-land homesteads, spiritual or Christian communities and income-sharing communes' (Christian, 2003: xix) are also in circulation, each with different nuances, but 'ecovillages' or 'eco-communities' has been perhaps most frequently used in academic research of the last 20 years. The term ecovillage has been popularised by Robert and Diane Gilman (1991) who defined them as 'human-scale full-featured settlement in which human activities are harmlessly integrated into the natural world in a way that is supportive of healthy human development and can be successfully continued into the indefinite future' (Gilman and Gilman, 1991: 10).

While this definition broadly describes key features of the sites that are under examination in this thesis, I prefer the term 'eco-communities', firstly because my field sites did not claim the term 'ecovillage' for themselves, and indeed were all (conspicuously?) absent from the website of the Global Network of Ecovillages (GEN). Secondly, my sense is that eco-'village' carries with it an expectation of size and location that none of my sites could fulfil – Kasper (2008: 13) for instance notes they usually have between 50 and 500 residents. By contrast, Cattaneo (2015: 195), who uses the term eco-communities, argues that the latter can 'also be established in isolated buildings or within cities.' Furthermore, I use the term eco-community to draw attention to two key elements, that is, very simply, as firstly, 'places of collaborative, collective and communal [...] living' that, secondly, have a 'particular focus on minimising environmental impact' (Bhakta and Pickerill, 2016: 407).

Eco-communities are similarly increasingly widespread (Sullivan, 2016), though it is rather difficult to find reliable numbers. Sullivan (2016), relying on 2015 numbers of the Fellowship of Intentional Communities, has argued that there has been an eightfold increase from 304 in 1987 to 2456 communities in 2014. Spain and to a lesser extent France are fecund countries to launch investigations of eco-communities. Renau (2018) argues that with 120 projects, Spain is

the second most frequently listed country in terms of number of ecovillages with the GEN, only surpassed by the US. This number is almost certainly an underestimate, with Escribano, Lubbers and Molina (2017) doing a non-comprehensive study of 27 eco-communities in Catalonia alone. Meanwhile, the number of eco-communities in France was estimated to be at least 500 in 2018 (Eco-villages.eu, 2018) – Renau (2018) puts this number for 2016 at a mere 20, which gives a sense of the wide range of estimates. Despite these significant uncertainties around the actual number of sites and of their residents, eco-communities seem to become increasingly numerous, though by no means ubiquitous.

In which ways can such spaces be understood to be relevant for an examination of transformations towards post-capitalist forms of living? First, proponents and residents of eco-communities have argued that they achieve a reduced environmental impact through the sharing of common infrastructures, equipment, skills, and various tasks, including care work, which increases resource and energy efficiency. Furthermore, increased social interactions between residents have been considered as socially rewarding and conducive to strong relationships of care and mutual support (Pickerill, 2016a).

It is their all-encompassing character that distinguishes eco-communities from a plethora of organisations and practices that have been deemed to be prefigurative or 'nowtopian', including consumer, producer, housing, energy, or worker cooperatives, local or social currencies, community gardens, bike kitchens, hacker collectives (see Carlsson, 2015), fab labs (Smith, 2018) and repair cafés (Schmid, 2019b). Eco-communities therefore arguably seek to enact an entire, post-capitalist mode of living rather than transform one sector or practice. In this sense, eco-communities function as particularly promising 'projects of the otherwise' (Povinelli, 2011), that can provide much needed inspiration as well as perhaps more crucially lessons for the adoption of such lifestyles more broadly (Litfin, 2014).

Several quantitative studies have largely confirmed such self-assessments, demonstrating a significant reduction in carbon emissions and other environmental impacts of eco-communities: Dawson (2004; 2006) has calculated that the German and US American eco-communities in his study only emitted around 20% of the respective national averages. Daly (2017) has similarly found in his literature review of 16 studies conducted between 2000 and 2015 that most eco-communities emit 25-70% of (subnational) comparative averages.[3] Considering a wider range of environmental impacts, Lockyer (2017) has shown in his case study of ecovillage Dancing Rabbit in the US that municipal solid waste and recycling to be 1/4th, the number of vehicles 1/8th, gas consumption ca. 1/17th, electricity consumption 1/5th and water use 2/9th of the national average. Conducting life cycle assessments of 3 eco-communities in the USA, Sherry (2019) has estimated that eutrophication rates were also 65% and ecotoxicity 77% lower than the US average, reflecting low-impact food and waste practices, respectively.

Meanwhile, others have emphasised that such sharp reductions in environmental impact are not detrimental to wellbeing and happiness, with eco-community residents consistently reporting levels of wellbeing on par 'with the highest scores previously obtained in multi-national comparisons' (Grinde *et al.*, 2018: 634), with meaning in life and social support the most important contributors to this envious position in the ranking. In Grinde *et al.*'s (2018) study, the wellbeing of 913 members of US and Canadian intentional communities were measured, with scales of 5.27/7 and 5.47/7 for men and women respectively, which, according to the authors, is 'equivalent to the highest score obtained in a multinational comparison' (ibid.: 634, see Pavot and Diener, 2008). Lockyer (2017: 535-6) has similarly relied on a survey of 200 intentional communities around the world and found that on scale from 0 to 30, both men and women living in intentional communities had high meaning of life with a score of ca. 27/30.

[3] The exception to this are several Finnish eco-communities who have a higher carbon footprint than the surrounding area, which in turn seems exceptionally low at just 3.6t/per person/per year. The Finnish average for 2017 is 8.11 tons (Ritchie and Roser, 2020).

Comparing this data with other segments of society,[4] he argues that they are in fact recording the highest meaning in life, slightly ahead of US adults aged 65 and over. As such, eco-communities have even been suggested as an 'evidence base for national wellbeing strategies' (Hall, 2015).

Beyond these statistics showing that a low-impact yet still satisfying life is possible, eco-communities can give global Northerners – who have the largest environmental impact – insight as to *how* post-capitalist transformations can be achieved. It must be noted here that not all eco-communities are necessarily trying to enact post-capitalism, with some showing more interest in a secluded lifestyle and/or rely on more 'capitalist' business models with revenue e.g., generated from visitor or educational centres (see Rubin, 2021; Forster and Metcalf, 2000).[5] However, as explained in Chapter 3, I have ascertained to focus only on case-study eco-communities that explicitly view themselves as moving beyond capitalism in some way.

These kinds of eco-communities can be said to have worked on the three terrains of post-capitalist transformation as outlined by Chatterton and Pusey (2020) in 'experimental, messy and contingent' practices of the everyday (Chatterton and Pickerill, 2010: 475). Specifically, eco-communities can be seen to put the commons into practice, that is, following principles of 'co-ownership, co-production and co-management of social goods and spaces' (Chatterton and Pusey, 2020: 3), through practices of self-reliance, mutual care, and collectivism (Bhakta and Pickerill, 2016: 407). In this sense, they share and collectively organise resources and spaces, rather than enclosing them, which in turn also reduces environmental impacts (the first terrain of transformation). Most eco-communities, including the sites under examination in this thesis,

[4] The data was provided via personal communication with Ragnhild Bang Nes in 2015.
[5] Here the boundaries are arguably somewhat fluid between allowing visitors to pay their share and making a business model out of visitors coming to see the project, for instance.

are also committed to self-governing and self-organised with participatory democratic decision-making processes (Christian, 2003: 3; Pickerill, 2016a).

They can also be said to engage in socially useful production, another offshoot of self-reliance, that sees many of them avoiding dependence on governments and corporations for basic necessities (Dawson, 2006) by producing their own food, making and repairing goods, building their own infrastructures infrastructures, including for energy and water,[6] avoiding commodification and significantly reducing the carbon and environmental footprint of such practices. Often this has been associated with innovations and experimentations that involve production from 'scrap using locally available, low-cost materials and basic skills' (Bobulescu and Fritscheova, 2021: 2) for instance, bioconstruction with mud, pedalling washing machines or solar ovens. This works as a significant counterpoint to high-tech techno-fixes within capitalism, and hints at qualitatively different ways of using technologies. Relatedly, many eco-communities are embedded within wider networks of alternative economic practices (Dawson, 2013; Sekulova *et al.,* 2017) that further suggest the potential for wider transformation beyond the communities. Furthermore, by removing themselves to a significant (though varying) extent from conventional employment structures, they arguably also have more opportunity for self-directed and playful doing as opposed to the alienation often associated with capitalist modes of working (the third terrain of post-capitalist transformation).

Overall, eco-communities can be understood as presenting one way to achieve 'diverse and autonomous forms of life and ways of living together' (Collard, Dempsey and Sundberg, 2015: 323), that acknowledge that humans are not alone on this planet but share it with a plethora of earthly others, that co-shape geological, biological, cultural, social and political life. As Timothy Morton (2012: 164) puts it so evocatively, eco-communities signal a mode of living that

[6] Transport appears to be a more mixed case: While there is a strong emphasis on bicycles and walking, and on avoiding cars as much as possible, my personal experience was that public transport was readily embraced.

embodies an understanding that 'humans are not running the show'. Similarly, instead of staking much hope on technological fixes, eco-communities often use 'frugal' technologies on site, or use more widespread technologies (e.g., solar panels) differently, in ways that are arguably more cognizant of the web of interconnections, human and non-human, collaborative and exploitative, on the planet. It is this interest in diverse modes of living, which makes eco-communities interesting field sites not only for the study of post-capitalist living experiments, but also for more-than-human geographers (more below), who share an interest in novel entanglements and alternative world-building.

Nonetheless, eco-communities have also come under criticism. Scholars have highlighted that they tend to reproduce exclusions based on class and race, and to some extent, gender (Chitewere, 2010; Chitewere and Taylor, 2010), therefore not considering equity and justice questions sufficiently, and potentially contributing to a 'greener version of sprawl' in the American context (Chitewere, 2010: 315). Furthermore, and relatedly, eco-communities have come under some fire for being insufficiently anti-systemic with Fotopoulos (2006: 2) in particular arguing that ecovillages are a-political and cannot be considered 'an integral part of an anti-systemic movement'. Here, with regards to my chosen cases, this charge is patently inaccurate (see more in Chapter 3; see also Cattaneo, 2015: 167). From a degrowth perspective, there has also been criticism that eco-communities simply 'live off the surplus – and the products and infrastructures – provided by the rest of the industrial economy' (Kallis, Kerschner and Martinez-Alier, 2012: 174) and therefore cannot provide a model for societal transformation. Furthermore, Kallis, Kerschner and Martinez-Alier (ibid.) argue that eco-communities are politically naïve and could imply much hardship, a choice many in society would not endorse.

While these criticisms may be valid within certain contexts, I argue that they need to be explored empirically rather than assumed a priori or based off theoretical concepts. Here in particular,

Gibson-Graham's work on the performative aspects of economic doing is useful. Relatedly, there are different assumptions about the scale of transformation at work. Following Chatterton and Pusey's (2020) 'terrains', I examine the ways in which post-capitalist life is made possible in practice, a process which I consider to be *transformational*. Here, lessons that can be learnt include how residents have become amenable to post-capitalist living, despite potential hardship or difficulties in adapting everyday life to a different political and economic system rather than assuming that this is impossible, hard to achieve or undesirable. These criticisms seem to associate transformation with significantly larger territorial units and social collectives, and find eco-communities therefore lacking as 'models' for 'scaling up' to 'the societal level' (Kallis, Kerschner and Martinez-Alier, 2012). I do not share assumptions about the possibility to simply 'scale up' eco-communities and rather explore the ways that they do have a wider impact in empirical detail. Relatedly, I do not consider that eco-communities *should* be a model for wider transformation, but rather that they offer insights, which may resonate further.

Finally, there are many 'all-encompassing' modes of living from the Global South and Indigenous communities that can be said to be non-capitalist or post-capitalist and thus give insight as to how humans might do, think, and live differently. These have included various post-development discourses and practices (Escobar, 1992), such as Sumak Kawsay or Buen Vivir in Ecuador and Bolivia (Acosta, 2013), Ubuntu in South Africa (Ramose, 2015), Eco-swaraj or radical ecological democracy in India (Kothari, Sangam and Radical Ecological Democracy, 2018), but also Indigenous thought (in the Global North) such as that of Haudenosaunee and Anishinaabe scholar Vanessa Watts' (2013) 'Indigenous Place Thought' or Papaschase Cree scholar Dwayne Donald's (2009, 2012) 'ethical relationality' and 'Indigenous Métissage', which envisage humans as 'rooted in reciprocal, ongoing and dynamic relationships that are informed by Indigenous legal orders' (Todd, 2015: 250-1). However, given the Global North's enormous and singular contribution to the 'disasters driving human-environmental

crises' and its complicity – past and ongoing – in exploitative colonial and neo-colonial economic practices, particularly in the Global South (Todd, 2015: 244), it is arguably those in the Global North for whom transformation is most urgent.

But rather than explaining which kinds of ethics and practices are necessary (which could also be gleaned from a plethora of non-Western non-capitalist modes of living), I consider it most relevant to consider *how* eco-community residents have achieved a movement from the liberal consumerist lifestyle in which they grew up, to a post-capitalist alternative in the Global North in such an all-encompassing manner. I am therefore interested in the specific details of how these transformations are achieved in practice. That said, I recognise that any insights and lessons learnt from such spaces are 'provincial' (Chakrabarty, 2000) rather than global, and a response that is suitable for 'pluriversal' rather than 'universal' (Collard, Dempsey and Sundberg, 2015) solutions to the current socio-ecological predicament.

1.5 WORK ON ECO-COMMUNITIES THUS FAR

With these rationales in mind, I am now turning my attention to how eco-communities have been studied so far and how my work adds to this body of scholarship. I will provide a brief overview of three broad sets of literature that have studied eco-communities explicitly, and that can give some initial insight into issues and challenges that eco-communities are wrestling with, but also of the opportunities they might offer. As such, they give some clues as to how post-capitalism is made, sustained, and potentially spread beyond the sites.

Beyond the quantitative studies mentioned above, a substantial body of work has focused on classical sociological concerns, such as the impact of socio-economic factors, e.g., class, race and gender (Chitewere and Taylor, 2010; Chitewere, 2010; Pickerill, 2015a; Pajumets and Hearn,

2021), values and ethics (Kasper, 2008), (collective) identity and motivations (Kirby, 2003; Ergas, 2010; Rubin, 2021; Westskog, Winther and Aasen, 2018), and narratives, meaning and discourses (Casey, Lichrou and Malley, 2020) within eco-communities. This work has broadly highlighted the importance of reconfigured values and ethics, including environmentalism, feminism, communitarianism and sometimes feminism. Many of these authors have explicitly linked these values to the motivations of residents (Kasper, 2008; Kirby, 2003; Pickerill, 2016b; Meijiring, Huigen and Van Hoven, 2007; Rubin, 2020, Escribano, Lubbers and Molina, 2017). This gives an important sense of the values and ideologies that animate residents and simultaneously provides useful insight into how even as post-capitalist life is composed on site, 'capitalist' mindsets and ways of doing appear, old inequalities are reproduced, and conflicts emerge.

A second body of literature has been concerned with the 'wider impact' of eco-communities, which has been a central concern for earlier work on eco-communities especially that sought to legitimise their object of research in terms of wider relevance to society and academic research. This body of work has highlighted eco-communities as 'examples, laboratories of sustainability and demonstration sites' (Ergas, 2010; Boyer, 2015; Bossy, 2014; Litfin, 2014; Lockyer, 2010 quoted in Dias *et al.*, 2017: 82). Some of this work has sought to empirically trace the impact eco-communities have had on their surrounding areas or society at large (Levasseur, 2013; J. Anderson, 2017; Boyer, 2015; Greenberg, 2013; Dawson, 2013). Others have foregrounded the struggles in doing so, including the continued influence of capitalist laws, cultural imaginaries, and financial pressures (Ergas, 2010; Temesgen, 2020; Baker, 2013; Cattaneo and Di-Mauro, 2015). This set of the literature is therefore helpful in providing an overview of the extent to which eco-communities may have a wider transformative impact and the issues they may struggle with.

Thirdly, very recent work has started to focus more on practices and is perhaps most interesting for understanding how post-capitalist life is concretely made. Mychajluk (2017) considers the 'social competences' necessary to enable cooperative modes of living and working together (see also Boyer, 2016). Mafle Ferreira Duarte, Sahakian and Ferreira Neto (2021) similarly show in their study how participatory decision-making processes needed to be learnt through self-knowledge and conflict-solving, whilst others have studied how innovative social practices are normalised (Boyer, 2016; Roysen and Martens, 2019; Ulug, Trell and Horlings, 2021) and evolve when sites seek to expand (Temesgen, 2020).

1.6 FILLING THE GAPS

While I will provide a more detailed analysis of this literature in the next chapter, I want to sketch out five key gaps and limitations that I wish to address in this thesis. First, most of the work on eco-communities so far has implicitly or explicitly relied on a strict separation of mind and body and has over-emphasised the former over the latter. As such, there has been much more emphasis on discourses, meanings, and identity rather than embodiment, affect, and the non-representational (or indeed a combination of the two) – exceptions are Pickerill (2015a; 2015b) and Vannini and Taggart (2015 and related publications). In this view, humans are 'self-contained, sovereign subjects' (McCormack and Schwanen, 2011: 2801) that form identities and adhere to particular values that they subsequently choose to put into action, negotiating different visions and discourses on site. Yet, there is by now ample evidence that values alone are insufficient to bring about a change in action (see Coeckelbergh 2015; Solnit, 2017), a phenomenon known as knowledge-action or value-action gap (Kollmuss and Agyeman, 2002). Thus, while much work has been concerned with understanding motivation through the adherence to particular values, only little attention has been directed towards the *affective* experiences that may motivate residents.

Similarly, focusing on values, identities, and discourses alone to understand the dynamics on site as well as the motivations of residents joining eco-communities ignores that those values, identities, and discourses might be shared with wider segments in society that do not choose to join eco-communities. Furthermore, for examinations of on-site dynamics, there is a limited engagement with lived experience, articulated through a myriad of novel reconfigurations of relations between humans, plants, animals, novel technologies, and different spatial arrangements that residents need to get attuned or habituated to, or put differently, learn to be affected by (Latour, 2004a).

Here, I suggest than an engagement with affect, relational ethics, and non-representational theory can serve as a corrective to these overwhelmingly representational, mind-body dualist accounts of eco-community dynamics. This is especially pertinent, I will argue, in the context of understanding motivations, but is also relevant to everyday life in the eco-communities, in that everyday life is shaped through (variable) capacities to 'be affected' by others and in turn the (variable) ability to 'affect' others (see Deleuze, 1988). In the context of motivation, I will draw on, tease apart and build on the work of Jane Bennett (2001: 131) in particular, who has argued that 'ethics requires both a moral code (which condenses moral ideas and metaphysical assumptions into principles and rules) and an embodied sensibility (which organises affects into a style and generates the impetus to enact the code)', and that therefore moral codes, ethics and values are insufficient on their own to bring forth motivation to live in an eco-community and therefore commit to post-capitalist transformations.

A second important gap is that there has been very little ethnographic work focusing on everyday *material* practices (by which I mean practices involving non-humans in some way) that have been reconfigured in a more post-capitalist vein. The third body of literature outlined

above has focused on practices, but authors have mostly focused on social competences, for instance with regards to decision-making processes or conflict resolution. Some have mentioned reconfigured material practices but have not gone into significant empirical depth here (e.g., Roysen and Martens, 2019) to examine how such practices are acquired, endure, and passed onto others. Two important exceptions here are Pickerill (2015a; 2015b) in the context of ecovillages and Vannini and Taggart (2015) in their examination of off-gridders in Canada, who have begun to examine material processes empirically in more depth. Both have paid attention to embodiment in this context, and Vannini and Taggart's work has taken affect seriously in their 'sensuous ethnography' (Pink, 2009). From these promising starting points, I argue that an examination of material practices on site can be pushed further by engaging more with more-than-human geographies (see below).

This leads me to the third significant gap in the literature. With rare exceptions (Brombin, 2019), work on eco-communities has not yet taken into consideration the critique of ontological separations of nature/society/technology that are so pervasive in Western thought. As Latour (1993) has argued, the dichotomisations between nature and society and technology and society are historically contingent and do not describe separate 'domains of reality' (Latour, 2005: 11). Instead, it is a conceptualisation thoroughly embedded in modern Western thought, that understands non-humans as predictable, passive, and irrelevant to politics (Marres, 2012), and as an immutable 'ground' to human action, forgetting a wide array of other world-making projects (Tsing, 2015: 21). Above I have argued that this understanding of non-humans is also reproduced in many attempts to solve these issues (see Head and Gibson, 2012), but this also seems to be the case for most scholars working on eco-communities (mainly by disregarding them altogether as constitutive of post-capitalist living). There has thus far been a relative lack of attention to how precisely eco-community residents have or have not reconfigured relations with non-humans compared to modernist ways of doing so, for instance the ways in which

interdependencies are acknowledged and worked with (Puig de la Bellacasa, 2010). Eco-communities as sites of significant reconfigurations of everyday life according to (broadly speaking) post-capitalist ideals can therefore cautiously be considered as fertile ground for generating knowledge about new ways of relating to non-humans in practice.

To analyse these more-than-human relations on site and the ways in which they constitute post-capitalist transformations, new materialist and more-than-human geographies will be of central importance to this thesis. These literatures have over the last 25 years discussed the liveliness and unpredictability of various non-humans that constitute and significantly shape life and politics (see Greenhough, 2014 for an excellent overview). They also provide a framework that pays attention not to abstract nature-society or technology-society relations, separated out of everyday life, but rather to the more-than-human entanglements that constitute everyday practices. Thus, as has been argued by Latour (1993), Haraway (2008) and Whatmore (2002), rather than viewing nature as non-agential and separate from society, human actors – contra myths of human exceptionalism – are best understood to be part of heterogeneous assemblages or actor-networks, where various non-humans and humans co-act to produce particular outcomes (e.g., a practice). I will specifically draw on Latour's 'Compositionist Manifesto' (2010) to conceptualise practices as more-than-human composing, to draw attention to the active re-configurative efforts that characterise much of the practices that occur in eco-communities, ranging from infrastructural repair to gardening to compost toilets. In so doing, I also seek to add to more-than-human geographies by showing how they may contribute concretely to post-capitalist transformation as a particular way of thinking and doing differently, a theme more touched upon than explicated by much of this literature (see e.g., Clark, 2011: 162; Head and Gibson, 2012: 707).

Fourthly, most of the work on eco-communities has not considered the doings in eco-communities as economic, especially in terms of how economic practices initiated on site can contribute to broader societal transformation towards capitalism. Blažek (2016) and Price *et al.* (2020) are exceptions in this regard while some work has also considered eco-communities as commons but without linking this to broader societal change (see Pickerill, 2016a; Esteves, 2017). This is surprising given that eco-communities are often heralded as a mode of post-capitalist life and means of post-capitalist transformation. Relying on the three terrains of post-capitalist transformation as mentioned earlier by Chatterton and Pusey, I will use Gibson-Graham's (2006; 2008) 'diverse economy' approach – discussed above – to 'read for difference' rather than for dominant economic practices. This will enable me to excavate a significant range (and prevalence) of non- or post-capitalist practices in the eco-communities I study. While such an excavation does not 'automatically produce new ways forward', it can be said to make credible the claim that diverse economic practices can 'satisfy needs, regulate consumption, generate surplus, and main and expand the commons' and thereby 'generate new possibilities and different strategies' for moving beyond capitalism (Gibson-Graham, 2008: 623). Relatedly, there has thus far been little in-depth empirical attention to how particular economic practices have spread beyond the sites, for instance, which techniques have been employed to attract potential consumers or what kind of difficulties eco-communities were faced with when doing so. Here, I suggest an engagement with Callon, Méadel and Rabeharisoa's (2002) 'economy of qualities' and its core mechanisms of attachment and singularisation can provide further insight into how particular economic practices in situ may be spread more widely. Attachment is here understood as an affective relation characterised by a certain durability and intensity.

The final gap that I have identified is that most work on eco-communities is largely synchronic and does not consider *historical* changes within eco-communities, and therefore struggles to develop an understanding of how practices endure and evolve over time and how this affects

the site altogether. A more diachronic analysis of eco-communities is needed, in particular given that so many eco-communities fail (Christian, 2003), and given charges that eco-communities 'de-radicalise' and adapt to the mainstream over time (Metcalf, 2013). While there has been some attention to the conflicts, negotiations, and interpersonal troubles of various kinds between eco-community residents (Christian, 2003; Kirby, 2003; Cunningham and Wearing, 2013), their analysis has usually been disentangled from the practices and spatial organisation which usually causes these issues. Similarly, there has been close to no attention to how changing bodies (age, pregnancy, children, disability, illness, injury), or bodies changed through the repetition of practice (weariness and attrition) and changing priorities over time (children, new professional developments, new personal interests beyond the eco-community etc.) affect the durability of everyday life practices in eco-communities.

Understanding changes in practices over time within eco-communities is important because some post-capitalist practices may (almost by default, given their sheer diversity and the necessity to change so many practices at once) be experienced as uncomfortable or inconvenient. Indeed, society at large often views eco-community life as uncomfortable and harsh. It is also important because eco-community residents' bodies will necessarily change and relatedly, if lessons are to be drawn from these sites, it is worth considering that populations in the Global North' are aging. Vannini and Taggart (2014c) as well as Pickerill's (2015b) work has provided a starting point by focusing on bodily discomforts and inconveniences. This work has focused on how a sense of discomfort is negotiated and reconceptualised in these spaces, paying less attention to how it has changed over time. To enable an account of eco-communities and their practices that is both embodied and diachronic, I draw on David Bissell (2008; 2014), whose work on bodily discomfort and accumulated stress provides useful conceptual tools to further an examination of the endurance of practices on site. I blend this with Bennett's

emphasis on the relationship between embodiment and affect on the one hand and moral codes and values on the other.

1.7 RESEARCH QUESTIONS

With these five gaps in mind in mind, I have formulated four research questions, which I address in Chapters 4, 5, 6, and 7 of this thesis. I consider each of these questions by focusing on particular space-times and empirical themes, that seemed most appropriate or partly emerged from the questions themselves (see Table 1.1):

RQ1: *How does the motivation to visit or join an eco-community emerge in the life courses of individuals?*

I address this question in Chapter 4, which focused most strongly on the first gap concerned with overcoming the pervasive ontological gap between mind and body. I do so by examining the space-times of motivational experiences to move to an eco-community, understood as the amalgamation of affective impulses and moral codes, repeated over time in many places, *before* arrival on site.

RQ2: *How are more-than-human practices composed in post-capitalist sites? In what ways can they be understood as commoning practices?*

I will answer these questions in Chapter 5, which is the first of three chapters to address the second and third gap as outlined above, i.e., a lack of ethnographic attention as well as to its more-than-human dimensions. Here, I start to examine post-capitalist practices on site, as a specific space-time, and focus empirically on infrastructural repair as a particular ubiquitous practice. I consider how such practices are composed in practice, including variable abilities to and levels of interest in composing with non-humans. I also address the fourth empirical gap

concerning the lack of attention to the economic by considering the extent to which these practices can be viewed as examples of (more-than-human) commoning, e.g., as a particular way of organising the economy.

RQ3: *How are post-capitalist practices made attractive to wider publics and disseminated beyond the sites themselves?*

I provide a response to this research question in Chapter 6, where I push my analysis of practices on sites as more-than-human composing further through an 'expansion' of space-times coordinates and consider the transformative potential of economic practices performed in eco-communities, within and going *beyond the site*. Specifically, I examine how consumers and visitors have been attached to post-capitalist economic practices and goods, using the example of beer brewing and gardening.

RQ4: *How do post-capitalist practices, especially those that are perceived as uncomfortable, endure over time?*

This research question is addressed in Chapter 7, the final empirical chapter, where I consider the endurance of practices on site over *prolonged periods of time* and in particular how the repetition of practices may change their affective charge over time, causing discomforts, inconveniences, potential deradicalization and intercommunity tensions. Through a strong focus on embodiment and affect, I return in this chapter more strongly to the first gap concerning the mind-body dualism.

Table 1.1: Overview of the four empirical chapters

Chapter	Space-times	Gaps	Core themes
4	Before and in many places	(1) Mind-body (3) More-than-human	Motivational experiences and narrations
5	On site	(2) Practices (3) More-than-human (4) Economic focus	Composing practices (including commoning practices around infrastructural repair)
6	On site and beyond to achieve wider transformations.	(2) Practices (3) More-than-human (4) Economic focus	Wider transformations, through socially useful production and 'doing' (around beer brewing and gardening)
7	On site over prolonged periods of time	(1) Mind-body (2) Practices (3) More-than-human	Endurance, considering discomforts and incoveniences

1.8 FIELD SITES AND METHODS

To better understand the four identified space-times, I undertook ethnographic fieldwork in Can Decreix, Calafou and Can Masdeu between June 2018 and January 2019. Originally, I had chosen Can Decreix as a single field site, given its unique status as the only site explicitly dedicated to degrowth. It soon became apparent that Can Decreix in its configuration at the time I was visiting with only one permanent inhabitant (though with a wider, more spatially

dispersed community of regular visitors) was not going to be sufficient as a case study. I thus set out to find similarly minded eco-communities. In so doing, I chose to deliberately limit my sites geographically to the 'fertile soil' (Sekulova *et al.*, 2017) of the wider Barcelona area, selecting Can Masdeu in Barcelona and Calafou 60km west of Barcelona as additional field sites. Despite some differences in focus and ideology, all three sites are committed to low-impact and communal living, and an orientation to move beyond capitalism, not only on site, but also by contributing to wider societal transformations.

To gather materials for this thesis, I relied mainly on semi-structured interviews and participant observation. I conducted 84 interviews with 61 participants, in English, Spanish, French and German, including long-term inhabitants and visitors. With regards to participant observation, I took part in daily life, including as much as possible a wide range of material practices as well as activities specifically planned for visitors and volunteers, spending around one month at each site, with three shorter periods spent in Barcelona in July and October 2018 and January 2019, visiting the communities for workdays and events. After returning to the UK, I transcribed interviews and subsequently analysed the different materials, following an 'issue-centred' approach to data analysis (based on Marres, 2005) on one hand, and a form of narrative analysis (see Gubrium and Holstein, 1995; 1998) on the other (for Chapter 4).

1.9 LAYOUT OF THE THESIS

Following this introduction, this thesis will start by providing an overview of the theoretical and methodological choices in Chapters 2 and 3 respectively that I have made to gather and analyse the empirical materials in the subsequent four chapters. In **Chapter 2**, I will review literatures within which I situate this thesis, namely around eco-communities, diverse economies, and

post-capitalist transformations on the one hand, and more-than-human and non-representational geographies on the other. I have organised the review based on four core themes that structure the empirical chapters of this thesis: Motivation, focusing in particular on the relationship between affect and ethics; practices, understood as more-than-human composing/commoning; transformation, particularly focused on the potential of attracting non-residents to diverse economic practices and finally, endurance, considering in particular how repetition affects practice over time. In so doing, I elucidate in further depth the gaps and questions that I have sketched out briefly above.

In **Chapter 3**, I will present and justify the methods and methodology I used. I will emphasise my key ontological and epistemological assumptions, explain the rationale for an ethnographic approach, as well as describe my field sites in more detail. I will also delve into how empirical materials were gathered for this thesis and concentrate especially on the difficulties of doing research on more-than-human practices and affective relations. I will also reflect upon the kinds of attachments I made during the fieldwork, shining light on my positionality as well as the challenges of doing multilingual and more-than-human research. After explicating my choices for data analysis, I will briefly consider the ethics of my encounters.

Chapter 4 investigates the motivations of those moving or staying in eco-communities *before* arriving in the communities. I concentrate especially on 'how' motivation has worked in context. As such, I do not only draw out which motivations are key, but also, crucially, foreground the various space-times and affective experiences as they occurred in context. I am thereby able to move beyond common understandings of knowledge-action or value-action gaps. I focus in depth on the motivational journeys of two visitors and two residents, four individuals whose unique motivational trajectories gave a good representation of the multiplicity of experiences overall. Based on Jane Bennett's work (2001), I examine motivations for ethical action as co-constituted by affective impulse and moral code. I will elaborate how the repetition of

motivational experiences can be conceptualised as a 'journey' of repeated and intensifying affective experiences, including shorter stays in the communities themselves. These congeal into longer-term attachments to post-capitalist modes of living, while also producing detachments from capitalist ones. Such journeys were narrated to me primarily in an interview setting, which can help provide a more complete picture of motivation as embedded in biographical context, including other life goals but also a whole array of incoherences, ambivalences and gaps in the stories themselves.

Chapter 5 is the first of three chapters that firmly focuses on the eco-communities as sites themselves. It examines the dynamics of commoning practices on site, which has been frequently championed as a key strategy to achieve post-capitalism. I conceptualise commoning as a particular mode of *more-than-human* composing on site (with Latour, 2010), to emphasise the constituent part that non-humans play in all commoning processes. Empirically, I conduct a fine-grained examination of infrastructural repair practices and draw attention to the importance of affective relations and skilled practices in these processes, especially around a main technique that I call 'making do'. Here, I will emphasise that while 'making do' commoning generally might be commendable, it sometimes generated disinterest, boredom and 'commoning fatigue' and was therefore not always a practical choice. Thus, other modes of more-than-human composing emerged. Chapter 5 contributes to existing literatures in more-than-human and non-representational geographies by stressing a wide range of affective relations, that often get lost in accounts that frame skilful engagement as highly enjoyable. The importance of this wide range of more-than-human affective relations is also a useful addition to commoning literatures, which are more likely to emphasise 'external' risks of enclosure to the commons.

In **Chapter 6**, I move to the post-capitalist practices that emerged in the sites and to some extent spread *beyond* them. In so doing, I speak to debates about post-capitalist transformation,

by again focusing on the 'how', but this time considering processes involving a wider array of non-residents. Empirically, I examine in a broadly comparative vein beer brewing in Can Masdeu and Calafou and gardening practices in Can Decreix and Can Masdeu. These are emblematic practices that can also be read quite straightforwardly as forms of 'socially useful production', while simultaneously also allowing for self-directed and experimental 'doing' (see Chatterton and Pusey, 2020). I argue that the ways in which consumers 'attached' to specific post-capitalist goods or ways of producing are at the heart of the transformative potential of post-capitalist economic practices. Drawing on Callon, Méadel and Rabeharisoa's (2002) economy of qualities, I will demonstrate how attachments were achieved and crucially passed on to consumers/visitors, and highlight several ways of doing so, thereby influencing wider processes of transformation. These consumer attachments were furthermore co-constitutive of reconfigured ways of relating to non-humans in economic practices. Rather than assuming a priori how post-capitalist transformations can emerge by 'scaling up' 'niches', this chapter contributes to the existing literature by a close examination of how this plays out in variable ways in practice, considering in depth the interplay of more-than-human and interhuman post-capitalist reconfigurations.

Chapter 7, the final empirical chapter, considers the endurance of practices over time, focusing on four different kinds of discomforts and inconvenience as 'intervening' factors that emerged in different temporalities. This chapter picks up and zooms in on various discomforts, reluctances, and variegated affective relations with non-humans that have cropped up in previous chapters. Blending Bennett's conceptualisation of motivation (2001) with David Bissell's work (2008; 2014) on comfort and stress, I conceptualise the endurance of practices as the continuous re-composition of the various elements that constitute them, including variable (human) bodies, their proximate environment (technologies, objects, spatial settings) and moral codes and political values. I examine empirically four different cases of discomforts and

inconveniences and consider particularly how the repetition of practices over time impacts both bodies and practices themselves. Here, slowly emerging but differentially experienced discomforts and inconveniences led to tensions and conflicts, and arguably threatened the endurance of the sites altogether. I contribute to the literature by providing an account of the longevity, persistence, and evolution of eco-communities, that is diachronic and historical as well as embodied and visceral. This is important because apparently small-scale material inconveniences and hesitations have only sparingly been taken seriously, yet are bound to arise, especially considering the wide range of practices that post-capitalist transformations entail.

Chapter 8 will conclude the thesis by reflecting on contributions it makes to the existing literature as well as how its insights might help post-capitalist transformations. I emphasise the importance of more-than-human affective relations – in conjunction with moral-political convictions – in various space-times, in shaping post-capitalist transformations. Examining four different space-times, I examine how they emerge as motivations, how they are cultivated (around commoning infrastructural repair practices), how they are passed on to others (around economic practices) and endure over time (despite emerging discomforts and inconveniences) are crucial to understanding the workings of eco-communities and sustainable living experiments. Examining those already committed to post-capitalist transformations can hopefully contribute to a better understanding of how wider segments of the population can participate in such processes.

2. LITERATURE REVIEW

As outlined in the introduction, this thesis is concerned with understanding how post-capitalist life is made possible in eco-communities as well as how it might travel beyond them. Specifically, my thesis is interested in understanding how motivations to move or visit such spaces emerge in context, how post-capitalist everyday practices are performed on site, how these may contribute to wider socio-economic transformations towards post-capitalism, and how difficulties in doing so may arise over time. Importantly, I conceptualise post-capitalist practices as constituting *affectively charged more-than-human compositions* to overcome pervasive ontological separations between mind/body and nature/society/technology. These distinctions are characteristic of Western modern thought as well as much of the literature on eco-communities. As I have argued in the introduction, they may constitute an important barrier both to the understanding of eco-community life and to realising broader societal transformations towards post-capitalism.

In the following, I will present four core themes that structure this thesis, which I have synthesised from work across literatures about eco-communities, diverse economies, and post-capitalist transformations on the one hand, and more-than-human and non-representational geographies on the other and that resonate strongly with the empirical data that I have generated for this thesis. These core themes address the five gaps outlined in the introduction and form the basis for thinking through four space-times of post-capitalist transformation in four empirical chapters.

The first core theme is motivation (2.1), focusing in particular on the relationship between affect and ethics, that addresses the first gap, namely a lack of attention to affect and to overcoming pervasive ontological dualisms between mind and body. Secondly, I focus on practices (2.2), understood as more-than-human composing (with a particular focus on commoning as a form

of composing), to take on the second and third gap identified, that is, a dearth of ethnographic work that considers everyday material practices and relatedly, the more-than-human dimensions of post-capitalist living. Third, I focus on (wider) economic transformations (2.3), and particularly the potential to attract non-residents to diverse economic practices to attend to the fourth gap, namely that practices occurring on site have for the most part not been conceptualised as economic. Fourth, I explore the theme of endurance (2.4), by shedding light on embodiment and discomforts in this context, addressing a final gap concerning the lack of historical perspectives on eco-communities.

2.1 MOTIVATION, AFFECT AND ETHICS

This section introduces motivation as this thesis' first key concept. I will start by giving a brief overview of how the literature on eco-communities has thus far dealt with residents' motivation (2.1.1), highlighting a strong emphasis on values, before making a case for a more explicit consideration of affect, which I will also set out to define (2.1.2). I will then consider how values or moral codes and affects may be considered as co-constitutive forces (2.1.3).

2.1.1 Brief overview

Several authors have explicitly examined the motivations of those moving to eco-communities, highlighting overall 'long held ecological sympathies and the desire to act on them, but also a longing for community and a safer environment' (Kasper, 2008: 14). These have frequently been associated with values, with an implicit assumption that these values decisively shaped the decision to move to an eco-community. These values have included frugality and 'voluntary simplicity' (Vannini and Taggart, 2013b: 298), a reconfigured relation to nature and a critique of a Western world view (Kasper, 2008), feminism (Rubin, 2021: 460), and variable links to

activism, e.g., direct action (Kirby, 2003: 327; Casey, Lichrou and O'Malley, 2020; Rubin, 2020). In this context, Kasper (2008) is the only scholar to highlight an ethics beyond human exceptionalism and an understanding of community beyond the human. Providing a mixed picture in the Catalan context, Escribano, Lubbers and Molina (2017) have argued that the decision to move to a rural eco-community was usually borne out of a mixture of ideological reasons and livelihood strategies, especially given the 2008 economic crisis.

Furthermore, several authors have highlighted that the decision to move to an eco-community involves a particular affective and spatial positioning vis-à-vis 'mainstream society', i.e., a degree of disconnectedness from conventional social patterns and mores' that is counterbalanced by an attempt to 'to seek reconnection with each other and the natural environment' (Kirby, 2003: 327). Thus, 'moving to an ecovillage therefore constituted a solution to a perceived loss of community and to environmental destruction' (ibid.) or a 'reaction to the unhappiness caused in individuals by the practices of mainstream society' (Sargisson and Sargent, 2004: 1). It also serves as a space for projects of place-(re)making, that simultaneously facilitates exclusion, given homophilic tendencies and longing for a sense of belonging in community (Pickerill, 2016b).[7]

Providing a more differentiated picture, Meijering, Huigen and Van Hoven (2006: 43) in their survey of 496 eco-communities argue that, rather than seeking disconnectedness from the mainstream, some individuals are in search of the right balance between a 'distance from the mainstream while still being able contribute to it' in some way. Rubin (2020) similarly underlines how intentional communities often serve as 'collective action reservoirs' and have a complex relationship to both 'classical' activism and the mainstream, often viewing their engagement as 'prefigurative politics' (Yates, 2015), i.e., the pursuit of political change 'by actively developing [...] political structures' (Maeckelbergh, 2011: 1), enacting 'activism in a whole lifestyle' (Lee,

[7] This arguably also contributes to exclusionary tendencies, with eco-communities oftentimes predominantly white and middle-class (see Chitewere and Taylor, 2010; Chitewere, 2010; Fotopoulos, 2006; Pickerill, 2016a).

2013: 27). These tensions seem to echo humanistic theorisations of place, whereby e.g. Yi-Fu Tuan (1974) argues that places not only reflect environmental values, but also embody conscious attempts to perfect these values.

The emphasis on disconnection, disillusionment, and a yearning for different forms of everyday life arguably points to a second kind of motivational force connected to values, but somewhat exceeding it: affect. Besides Vannini and Taggart (2013b: 308), who examine the 'unexplainable attraction towards the idylls of the countryside and the wilderness' as an affective force, authors interested in eco-communities have given scarce conceptual attention to affective relations.

2.2.2 Towards an affective understanding of motivation

How might an engagement with affect aid a conceptualisation of motivation, and how exactly can it be understood? Much of Western thought has conceptualised humans as 'self-contained, sovereign subjects' (McCormack and Schwanen, 2011: 2801) that make decisions deliberately based on rational thought, buttressed by a strict ontological separation between mind and body. As a result, it is widely assumed that 'beliefs directly determine behaviour' (Solnit, 2017), which has long been discredited in environmental psychology, where instead a frequently observed 'knowledge-action-gap' or 'value-action-gap' (Kollmus and Agyeman, 2002) is highlighted. Relatedly, there is an assumption that ethical actions are deliberate, voluntary, and straightforward (Vannini and Taggert, 2013b). Kasper (2008: 14) for instance considers the first step of 'striving to realise alternative paradigm' within eco-communities to lie with 'establishing intentions' and with 'vision, mission and goals' that are subsequently implemented in specific practices. Yet, despite knowledge of environmental issues, it is an enduring problem in contemporary society that most people have not significantly changed their behaviour to live

according to their self-described values (Coeckelbergh 2015: 1). Thus, "more than" just values seem to be necessary to motivate a move towards an eco-community.

Affect provides a fruitful way to think about this "more than". It sheds some light on the motivation for taking the big step of moving to an eco-community, that one can reasonably assume to differ from those who share the same knowledge and values but do not. As such, motivation can be conceptualised as the 'how' of ethics (Bennett, 2001: 131), in that it 'stimulates or 'moves' toward action (Etymonline.com, 2021). While various authors have mentioned several motivational factors that can be deemed affective, I argue that a more explicit engagement with affect in the context of motivation can be highly generative to gain a better understanding of how motivation 'works', and the ways in which motivation actualises through the materialisation of particular decisions (Barad, 2003).

Whilst there is no stable definition (Thrift, 2004a: 59), I understand affect here primarily in line with the thinking of Baruch Spinoza and Gilles Deleuze, as a 'transpersonal capacity which a body has to be affected (through an affection) and to affect (as a result of modifications)' (Anderson, 2006: 735). Affects do not simply 'emerge from the properties of humans or non-humans', but crucially as a 'composition of harmonious or disharmonious relations amongst diverse collectivities of humans and non/humans', highlighting the highly relational character of affect (ibid.). Affect then takes the 'form of an increase or decrease in the ability of the body and mind alike to act' (Thrift, 2004a: 60). Affects leave 'corporeal traces first of all' on particular bodies (Deleuze, 1988: 48) and are therefore often understood as 'emotions', which Brian Massumi (2002: 28) views as subsequently formed 'semantically and semiotically formed progressions, into narrativisable action'. Thus, the decision to move to an eco-community, more than a collection of reasons identified by a sovereign subject, 'emerge[s] instead as a distributed, relational process' (McCormack and Schwanen, 2011: 2801), whereby a specific composition of non-humans and humans work together to shape motivation.

Furthermore, borrowing at least in emphasis from phenomenological traditions of understanding affect, I want to stress the body as the 'scene of embeddedness and connectedness' with the world (Thonhauser, 2019: 52) and as the site that *registers* affective intensity. The body here is defined through its relational capacities rather than a clear set of 'essentialised or individualised elements' (Bissell, 2009: 913). David Bissell (2009) has been particularly instructive in thinking further through embodied experience as affective intensities, enabling distinctions between 'qualitative experiential dimension of affect as diminished or heightened' (ibid.: 911), with these qualitatively different levels of intensity 'relative to duration' (Bergson, 2001). As has often been examined (e.g., McCormack, 2003), particular practices and dispositions can be engineered or cultivated, though such cultivations are always unstable and contingent on other affective relations in a given space-time (Bissell, 2009). Thinking through embodied dispositions allows me to sharpen an analytical focus on the body as a site where affective tendencies are not only registered, but accrue over time and/or are retained as virtual tendencies over time, that may be actualised in particular settings (Deleuze, 2004). Thus, an embodied disposition can be understood to be an 'repository of affective traces of past relations, events, and encounters, acting in the present as potentials to affect and be affected' (Mühlhoff, 2019: 119) and as a latent tendency or 'active and receptive inclinations of a body' that 'manifests only in specific encounters' (ibid.).

Such an understanding of affect has been central to a range of work concerned with 'relational ethics' which has been thought through the figures of encounter (Bennett, 2010), shared suffering (Haraway, 2008; Greenhough and Roe, 2010; Clark, 2011), and aesthetics (Yusoff, 2012). Thus, 'everyday moments of encounter can be cultivated to build an ethics of generosity' (Thrift, 2004b: 93). Here, through direct encounters humans may learn to 'live more responsibly and harmoniously with nonhumans' (Pitt, 2017: 253). Similarly, with technological objects in mind, 'by actively engaging with things [...] we can rediscover the necessary environmental

virtues to reintegrate ourselves into the material fabric of the world' (Brook, 2012: 109). This line of work also draws attention to the *situated* character of ethical decision-making in the everyday, moving from ethical principle to 'respons-able practice' (Greenhough and Roe, 2010; Haraway, 2008).

2.2.3 Motivation as co-constitution of affect and ethics

Relational ethics alone, however, seem less suited to illuminate the relationship between various affective relations and the values and ethics frequently mentioned in the literature. Rather than simply dismissing these values and ethics, it seems pertinent to consider how they might work together. A useful starting point here is Jane Bennett's work, which has argued that 'enchantment [with commodities] can fuel an ethical will' (Bennett, 2001: 114). For her, 'ethics requires both a moral code (which condenses moral ideas and metaphysical assumptions into principles and rules) and an embodied sensibility (which organises affects into a style and generates the impetus to enact the code)' (ibid.: 131). Moral codes alone are insufficient to compel people into enacting them (ibid.). Therefore, as Shapiro and Bennett (2002: 5-6) suggest, 'to alter moods, emotions, and gut feelings is ultimately, though indirectly and unpredictably, to alter one's politics', with moods and affects providing the 'motivational resources to enact intellectual commitments or political priorities'.

However, Bennett does not go into much conceptual or empirical depth to illuminate this co-constitution of affect and ethics. Enchantment for her is a 'feeling of being connected in an affirmative way to existence – it is to be under the momentary impression that the [...] world offers gifts, and in so doing, remind us that it is good to be alive' (Bennett, 2001: 156). This '*momentary* impression' may encourage us to 'give away some of [our] own time and effort on

behalf of other creatures' (ibid.), though she acknowledges that this is by no means guaranteed.[8] At another point, she wagers that particular 'affective affinities [..] move from wonder to attachment and [from] attachment to generosity [i.e., ethical action]' (ibid.: 162). Though presented as a 'weak onto-tale' (ibid.: 160), this kind of enchantment or 'joyful attachment' to life or to existence (ibid.: 12) is somewhat unspecific in the sense that it is unclear how an ephemeral moment of enchantment produces more durable (as is implied but not explicated) attachments and following from that, a rather generic commitment to ethical behaviour. She therefore stops short of illustrating potentially dynamic relationships between ephemeral affective experience, more durable attachments to particular objects or practices and ethical commitments.

Here, Jamie Lorimer's (2007; 2015) work provides further insight. Within the context of individuals' involvement in wildlife conservation, he has argued that non-human charisma can provide 'the vital motivating force that impels people to get involved in wildlife conservation' (Lorimer, 2007: 911). To specify the spatio-temporal context in which affective experiences arise, he introduces the concepts of *epiphanies* and *jouissances*. *Epiphany* refers to a memory and a lifelong interest, attachment, and concern for a particular species, sometimes referring to 'just one event, or one encounter' and in other cases 'a repeated or seasonal set of events' (ibid.: 921), while *jouissance* is understood as 'emotions and becomings experienced [...] in everyday practices and interactions' (ibid.: 922). The notion of lifelong 'attachment' draws attention further to modes of relating that seem particularly promising in facilitating (post-capitalist) world-building, that is, particularly durable and intense relations. Building on this idea that various affective motivational experiences have different spatio-temporal contours, in Chapter 4, I will add to Lorimer's affective vocabulary to describe eco-community residents' motivations.

[8] And despite declaring herself enchanted with an ad by clothing company GAP that she chose as an empirical example, Bennett does not tell us how this enchantment has motivated her to take any particular ethical action!

Both Bennett's and Lorimer's work along with much of the relational ethics literature outlined above strongly emphasise 'positive' affective forces and relations as driving motivational forces for ethical behaviour. This stands in contrast with some of the more negative affective experiences – disillusionment, alienation, indignation – that have been brought up by those researching motivations in the context of eco-communities (see Sargisson, 2007; J. Anderson, 2017; Rubin, 2020). Negative 'affects', therefore, seem particularly worth investigating. And indeed, in a different context, Lorimer (2015: 42) has highlighted the difficulties with relating to uncharismatic life forms, such as 'bugs, viruses, or parasites' (Beisel, 2010: 46), or micro-organisms (Hird, 2010: 38).

Furthermore, Bennett's and Lorimer's conceptualisation of motivation is concerned with a relatively straightforward connection between an affective experience (e.g., witnessing corncrakes) and an ethical code (e.g., the necessity to preserve corncrakes), whereas motivational factors to move to or visit eco-communities are arguably considerably more multi-faceted and part of complicated biographical trajectories (Vannini and Taggart, 2013b: 296; Kirby, 2003: 327). Motivations may be fraught with contradictory desires and values, opposing affective pulls, expectations from those around us and interest and attractions to some elements of a post-capitalist mode of living but not others.

As an analytical tool of these differing and perhaps oppositional affective pulls, Franklin Ginn's (2014) investigation of detachments around slugs in the garden is helpful. Ginn argues that detachment can function as an 'enabling constituent of more-than-human ethics'– in his case, detachment towards slugs (that result in their removal or death) was necessary to enable the flourishing of spinach, with detachment understood as a 'range of dispositions where life is not drawn together [as is the case with relation or perhaps more precisely, attachment], but pulled apart' (ibid.: 534). Thus, throughout this thesis, detachment, disaffection, and non-relation, in relation with more 'positive' attachments are central themes. While Ginn approaches

detachments from a broadly speculative realist perspective, I believe that detachments and attachments must not be understood as ontologically distinct (see Ginn (2014: 541), but rather be considered as different qualities of relatings, with detachments understood as particularly 'negative attachments' (Lorimer, 2007: 919). Key again, though implicit also in the work of Ginn, is that attachments or detachments signal relations of a certain durability and intensity. Such an understanding can help make sense of detachments and attachments as potentially 'ambivalent, politically ambiguous and not always coherent' (Wilson and Anderson, 2020: 592).

These complexities point towards motivations as fraught with potentially contradictory and incoherent attachments and detachments, but also with various other, perhaps more conventional life course decisions, and personal choices, including coincidences, a new partner, the birth of a child, or moving to a new home. I understand the life course in line with population geographical work as dynamic, locally contingent and unpredictable rather than following 'fixed and predictable life stages' (Hopkins and Pain, 2007: 290; see also Elder, 1998; Bailey, 2009; Hörschelmann, 2011), linked to societal changes (Hörschelmann, 2011: 379) as well as to the lives of others, such as family and friends (Elder, 1998). As Kirby (2003) has highlighted in his study of the ecovillage in Ithaca, New York, motivation often took the form of a 'blend' of personal factors as well as ideological ones, pointing to a general desire for the 'good life' (e.g., Ryff and Singer, 2008; Rosa and Henning, 2017; Fischetti, 2018; Steckermeier, 2021).

2.2 COMPOSING PRACTICES

The second key concept I wish to draw on is practices, which are instrumental to Chapters 5 to 7. I will briefly sketch out work that has only very recently emerged around everyday practices in eco-communities (2.2.1) before proposing my conceptualisation of practices as more-than-human composing, which borrows strongly from more-than-human geographies (2.2.2). I will lastly demonstrate how some forms of more-than-human composing practices can also be understood as commoning, with clear spatial and economic implications (2.2.3).

2.2.1 Practices in eco-communities

The in-depth examination of practices on site has not been a frequent focus in the literature on eco-communities. Chatterton and Pickerill (2010: 475) have long emphasised the importance of 'experimental, messy, and contingent' everyday practices to 'build hoped-for futures in the present'. However, only recently has work taken up this challenge but typically with a focus on relations between humans. It has therefore relied on a rather conventional understanding of the 'social': Mychajluk (2017), from an educational science perspective, uses Wenger's (1998) practice theory to draw out the 'social competences' necessary for learning how to live and work together on site in a cooperative manner (see also Boyer, 2016). Mafle Ferreira Duarte, Sahakian and Ferreira Neto (2021) similarly show how participatory decision-making processes in eco-communities were acquired through self-knowledge and conflict-solving and pay particular attention to how such processes are laden with power relations. Others have relied on Shove, Pantzar and Watson's (2012) conceptualisation of practices as being composed by meanings, materials and competences in order to show how innovative social practices are normalised (Boyer, 2016; Roysen and Mertens, 2019; Ulug, Trell and Horlings, 2021) and how they evolve

when sites seek to expand (Temesgen, 2020). In these accounts, the development of embodied skills – such as car-sharing, composting, bioconstruction, and the use of dry toilets and solar panels – have been mentioned (Roysen and Martens, 2019), but have not been examined in much depth. Similarly, Shove, Pantzar and Watson's (2012) practice theory acknowledges the importance of 'materials', but their liveliness, affordances, and unpredictabilities remain relatively unexplored. Thus, while reconfigured material practices on site are what *enables* a lower environmental footprint and arguably a post-capitalist lifestyle, in the above studies, there has been little insight into how residents have actually altered the ways in which they related to materials (and/or plants and animals) in everyday practices on site. That the materiality of these practices has been largely overlooked speaks to a wider disregard of materiality within much of the social sciences (though this is rapidly changing), and more broadly to the pervasive ontological divisions between nature/society/technology (see Latour, 1993; Whatmore, 2002; Haraway, 2008), with non-humans generally excluded from examination of social phenomena.

Given this failure to attend closely to the ways in which non-humans shape practices in eco-communities, I argue that a different conceptualisation of the social is necessary, that is, one that is focused on *relations* between entities, be they human or non-human, rather than separating out putatively 'social' dimensions of eco-communities from the technologies and objects used, the physical layout of the spaces and the plants and animals that are being worked with. Such an understanding of the social has long been a key feature of more-than-human geographies.[9] Within literatures pertaining to eco-communities, Brombin (2019) has taken a first step in this direction by examining transformed relations with 'natural' entities, such as water and plants,

[9] For Greenhough (2014: 5) more-than-human approaches to geography are characterised by five key elements, that is '(i) an interest in unpacking assemblages of bodies, knowledges, and properties; (ii) a non-anthropocentric perspective on whom (or what) should matter politically; (iii) a recognition of non-human agency; (iv) a conviction that space and time should be defined relationally [...]; a recognition of humans' limited capacities to represent the world coupled with an imperative to hone new sensitivities, skills and affectual capacities'.

but a further examination of the role of various technologies and objects in everyday practice is arguably equally important.

With regards to the latter, the work of Pickerill and Vannini and Taggart proves useful for gleaning insight into material practices in further depth. Pickerill has focused on embodiment in the context of building eco-housing with bricks (2015a) and on comfort around eco-homes' bathroom practices (Pickerill, 2015b), though does not appear to consider non-humans as lively co-constituents of such spaces. Vannini and Taggart (2015) in their sensuous ethnography (Pink, 2009) of Canadian off-gridders have incorporated a strong affective focus (see previous section) on a range of material practices, including those enabling visual comfort and lighting (2013a) and domestic warmth (Vannini and Taggart, 2014c), the regenerative skills of off-gridders (2014a), the life-cycles of off-grid organic food (2014b) and onerous material and energy consumption (2016). At the very least, the broad array of practices examined by Vannini and Taggert's and Pickerill's work demonstrate that a focus on only interhuman practices and competences misses out on much of what is occurring in daily life in such spaces and in fact accounts for many of the significant transformations vis-à-vis more capitalist 'mainstream' practices. Nonetheless, I argue that work in this vein must be taken further, both through continued empirical examination and by going beyond the modern dualisms of nature/society and mind/body (see Latour, 1993).

2.2.2 Practice as more-than-human composing

To do so, Latour's 'Compositionist Manifesto' (2010) serves as a generative starting point. Whilst constituting to a large extent a reformulation of actor-network theory, this compositionist approach draws attention to the *practices* through which we may co-compose worlds with non-humans differently, and in potentially post-capitalist and more sustainable

ways. As Latour (2010: 473-4) highlights, the term composition 'underlines that things have to be put together (Latin *componere*) while retaining their heterogeneity'. Rather than determining 'if' non-humans play a role in shaping life and politics in the different sites, focusing on *how* which various heterogenous actor-networks are composed on site is a promising avenue towards teasing out the variable ways in which post-capitalist space-times are composed in practice. Furthermore, rather than simply determining which non-humans 'are' sustainable (e.g., washing detergents, wood fuels or organic food) in an essentialist reading of their qualities, focusing on the composition of particular practices helps refocus attention towards more-than-human relations in the eco-communities' particular contexts (e.g., it depends *how* the washing detergent is used, the wood is sourced or vegetables grow). This also entails abstaining from any a priori determination about which entanglements are good or bad (Hawkins, 2009; Roberts, 2013; De Wolff, 2017).

This in turn renders it possible to assess whether something is 'well or badly composed' and how something may 'decompose' over time (Latour, 2010: 474). Such an approach is focused on the particularities of 'building a common world' with a motley crew of non-humans, while recognising that it is made of 'utterly heterogeneous parts' which constitute 'fragile, revisable, and diverse composite material' (ibid.). Furthermore, these heterogeneous parts need to be continuously recomposed and reassembled (ibid.: 484) – compositions are therefore always processes of continuous composing and as such precarious achievements, requiring repetitions that differ slightly each time (Deleuze, 2004) (see more in 2.4.3). While eco-community residents foreground certain practices, arguably demonstrating a greater awareness of their interdependencies with other beings, their practices are still by no means the only way of assembling a 'common world' and require re-compositions all the same.

In line with the previous section, focusing on the ways of *composing* post-capitalist sites also allows for an attention to the *qualities* of relating within more-than-human compositions (see Candea, 2010; Ginn, 2014; Pitt, 2017), which brings more strongly to the fore that such compositions are profoundly affective and rely on various actants 'learning to be affected' by each other (Despret, 2004; Latour, 2004a; Greenhough, 2014). While earlier work in an ANT tradition has not considered affect much (McCormack, 2020: 182), in this thesis, it is a working assumption that these traditions work well together (see e.g., Navaro-Yashin, 2009; Çalişkan and Callon, 2010; Anderson, 2014), although their specific emphases might diverge somewhat (McCormack, 2020: 183).

This arguably also adds nuance to the 'geography of making' (Carr and Gibson, 2016), which to varying extents has incorporated a more-than-human lens in examinations of single practices, for instance working with stone (Paton, 2013; Edensor, 2020), beer-brewing (Thurnell-Read, 2014; Myles, 2020), glass-blowing (O'Connor, 2005) and repair practices (Brook, 2012; Graziano and Trogal, 2019; Schmid, 2019b; Strebel, Bovet and Sormani, 2019; Udall, 2019), and which has often foregrounded the benefits of material practices as a chance to 'reintegrate ourselves into the material fabric of the world' (Brook, 2012: 109). Similar to the literature on 'relational ethics', this had led to accusations of a 'feel-good' materialism (Last, 2017: 73), that (perhaps over-) emphasises the 'additive, addictive, enchanting' (ibid.) qualities of material practices. Recent work has acknowledged, though without further elaboration, that such material practices can also contain 'negative bodily experiences', that are 'weary, repetitive, and arduous' (Price and Hawkins, 2018: 9). This is perhaps particularly pertinent in spaces where humans learn not only one but many practices around a plethora of non-humans. I will expand on this in Section 4 of this chapter.

As a final component of how more-than-human composing as practices work, I want to draw attention to ethics, discourse, and representations as particular forms of human 'worlding'

(Haraway, 2018). Noortje Marres (2012: 7) has in this context has criticised that non-humans for instance in Bennett's work (2001; 2010) have often been deemed 'an underappreciated dimension of participation' with the liveliness of things 'exerted surreptitiously'. In subsequent work, she has therefore considered the 'deliberate investment of non-humans with moral and political capacities [....] paying attention to the ways in which politics and morality are designed into material objects, devices and settings' (Marres, 2013: 423). While this may smack of an uncomfortable anthropocentrism, the ways in which humans make sense of non-humans can be deemed a crucial factor in understanding how particular more-than-human compositions are formed. Marres' agenda here coincides with classical STS work, focusing more on how artefacts are scripted (Akrich, 1992; Jensen and Morita, 2015: 84) rather than how novel compositions might be co-created. Jensen and Morita (ibid.) by contrast promisingly propose instead to study the 'incessant interplay between *(intended) design* inscriptions and the varied, unpredictable, and often overlooked responses of other actors, especially a motley crew of non-humans'. Put differently, various non-humans may as much 'object' to various design intentions (see Bingham, 1996) as facilitate them to varying extents. Such a 'composing' *approach* enables a focus on the explicit attempts to deliberately invest various objects with moral and political capacities, but simultaneously emphasises how these objects exceed the (variable) normative charges with which they have been previously invested, demonstrating that humans 'are not running the show' (Morton, 2012: 164).

2.2.3 Commoning as a form of more-than-human composing

Finally, I want to bring this conceptualisation of material practices as more-than-human composing more closely in conversation with the literatures interested directly in post-capitalist transformation with which it resonates to some extent. In this context, I argue that commoning

as economic and spatial practice may be conceived of as a particular type of composing worlds with non-humans 'well' or 'harmoniously' (Latour, 2010). Thus, I want to read commoning practices on site, focuses in particular on infrastructural repair practices, through the prism of more-than-human composing. The commons literature can help shed further light on the uneven and complex processes through which commoning as a promising form of post-capitalist life can be achieved.

Commons and commoning have often been hailed as important strategies of post-capitalist transformation and are indeed one of the three arenas of transformation highlighted by Chatterton and Pusey (2020; see also Gibson-Graham, Cameron and Healy, 2013; 2016; Chatterton, 2016b; Bauwens and Ramos, 2020). Pickerill (2016a: 32) has explicitly argued that eco-communities are 'examples of actually existing commons', whilst acknowledging that they remain 'incomplete, partial and sometimes problematic' (see also Esteves, 2017). As such, in eco-communities 'spaces, objects, knowledge and time are shared' (Pickerill 2016a: 50) in multi-layered processes that involve emotional support, listening and dialogue, facilitated by accordingly adjusted physical structures (ibid.: 51).

Scholars have long been working on the commons within the Common Pool Resources tradition, where the focus is on how small-scale resources are shared thanks to proper rules, incentives, and sanctions, without which individuals would degrade and ultimately destroy common resources (Singh, 2017: 751-2, see also Ostrom, 1990). By contrast, autonomous Marxists have considered 'the common' as a 'principle of organised production and as shared commonwealth of humanity' (Singh, 2017: 751) that celebrates 'co-ownership, co-production and co-management of social goods and spaces' (Chatterton and Pusey, 2020: 30). Here, the commons also imply a generalised 'commitment to fostering common interests in every aspect of our lives and political world' (Caffentzis and Federici, 2014: i103), which have also been conceived of as 'mutualisations' as 'reflexive, planetary responses' (Bauwens and Ramos, 2020:

111-113). Commoning has been conceptualised to occur at a wide range of spatial scales, and in ways that link practices occurring in different places and times together through an attention to their mutual impacts.

Building on this, reading commoning through the prism of more-than-human composing draws attention to the ways in which the former are concerned with 'composing' or putting together 'a common world', based on particular principles and ideals, such as mutual care and co-ownership. Thus, commoning as a particular form of composing more-than-human relations builds on particular value sets, principles and ideals through which relations with particular non-humans are organised. Importantly, in this reading, humans are 'caught up in a world that is intimately shared' (Bresnihan, 2016: 99) with a heterogeneity of non-human actors, as Latour's compositionist approach also highlights. Consequently, in order to remain 'well composed', any attempt to common necessitates the 'ongoing participation in the production and care' of a 'collective of humans, animals, artefacts, and elements' (ibid., see also Gibson-Graham and Roelvink, 2010). This also implies a spatial understanding of commoning processes as 'complex spatial entanglements containing interdependencies and obligations with other beings, near and far in both space and time' (Metzger, 2016: 141; see also Jeffrey, McFarlane and Vasudevan, 2012; Metzger, 2016). The commons thus consist of 'frayed and porous membranes' (Grear, 2020:351), complicating notions of clearly defined spatial and temporal boundaries. Complementing this and further highlighting the porousness of the category of the commons, Gibson-Graham, Cameron and Healy (2016: 208-9) emphasise the importance of attending to 'different temporalities, including those of the more-than-human world', marching to an 'irregular beat'. Commoning takes place in a world that is already shared, exceeding a particular site, and consisting of repeated collaborations between humans and non-humans.

Relatedly, commoning is best understood as a process of 'complex relations between humans and non-humans' (Bresnihan, 2016: 95), maintained through continuous activity (see

Linebaugh, 2008; de Angelis, 2017). Given this processual character, commoning must be considered as 'always contingent, ambivalent outcomes [...]' creating 'inclusions and exclusions.' They are always 'partial' and 'transitory', and therefore, like composing practices generally, need to be '(re)performed to remain stable over time' (Nightingale, 2019: 16), whilst being subjected to negotiations and struggles (De Angelis, 2014: i174). Importantly, commoning processes have been considered to be deeply affective (Nightingale, 2019: 30), eliciting a whole range of affective relations, an understanding which departs from the rational, self-interested accumulation of CPR (Bauwens and Ramos, 2020: 127). To make sense of these negotiations and struggles, Gibson-Graham, Cameron and Healy (2013) propose a typology of understanding them in terms of access (how widely shared?), use (who or what manages?), benefit (how widely distributed?), care (performed by whom or what?) and responsibility (assumed by whom or what?). Given the sometimes deeply contested nature of the commons, it may be worth attending to 'where and when to promote commoning' (Nightingale, 2014: 981) as well as to the ways in which commoning processes transform over time. Such an approach to commoning with the more-than-human also allows for a detailed attention to how non-humans are composed with in practice, for example during the repair practices that are the empirical focus of Chapter 5.

In conclusion, with Latour's compositionism as a starting point, I have emphasised that what is at stake in commoning processes are attempts at more or less harmonious or 'good' compositions between a range of humans and non-humans, based on particular value sets around shared mutualisations, responsibility, and benefits. Thus, paying attention to various techniques and styles of more-than-human commoning sheds light on the negotiations, struggles, and complexities that are central to political economic analyses of the commons and that are always accompanied by a plethora of affective relations towards more-than-human co-composers. This opens the door for an investigation that considers jointly the ways in which

more-than-human practices are composed in practice – including commoning as a particularly promising and adequate form of post-capitalist composing – as well as their political economic potential.

2.3 (WIDER ECONOMIC) TRANSFORMATION

The third key concept that I elaborate on is the potential of eco-communities for broader transformative impact on society at large. This has been a central concern for many authors working on eco-communities, of which I will provide a brief overview (2.3.1). I will then draw out my own understanding of broader transformations (2.3.2), in particular focusing on the 'how' of transformation, by firstly considering more thoroughly the economic character of transformation, based on the diverse economic geographies of Gibson-Graham (2006; 2008) (2.3.3). Secondly, I will highlight how Callon, Méadel and Rabeharisoa's (2002) 'economy of qualities' can provide a clearer understanding of how *specific* economic practices attract and attach wider publics beyond the eco-communities and therefore contribute to their wider diffusion (2.3.4). This key theme of *wider* economic transformation is understood slightly differently here than the overall emphasis in the thesis on post-capitalist transformation, where post-capitalist life is understood as *transformational*.

2.3.1 General overview

Much literature focused on eco-communities has sought to demonstrate the relevance of eco-communities to society at large and to socio-economic transformations, with eco-communities functioning as 'examples, laboratories of sustainability and demonstration sites' (Meijering,

Huigen and Van Hoven, 2006; Ergas, 2010; Lockyer, 2010; Bossy, 2014; Litfin, 2014; Boyer, 2015 quoted in Dias *et al.*, 2017: 82). From a historical perspective, Dawson (2013), a former president of the Global Ecovillage Network, shows significant shifts in the position of eco-communities, that have moved from a position of relative isolation as 'countercultural experiments' to 'increasingly working in formal and informal alliance with the more progressive elements in today's society' (ibid.: 217). He conjures an imagery of ecovillages as "islands' of sustainability related activities' enabling 'networks of engagement' in the eco-communities' surrounding 'bioregion' (ibid.), central and local governments (ibid.: 223). Similarly, LeVasseur (2013) has interviewed former participants of a five-week training program in the ecovillage of Findhorn, Scotland from 2000, with participants starting permaculture initiatives and moving to co-housing projects and one participant calling the training a 'reference vibrating for many years to come' (ibid.: 264).

Presenting a more mixed picture, Anderson (2017) has investigated the influence of eco-communities by examining a strategy of 'tactical withdrawal' from and subsequent engagement with the mainstream, through an examination of visitors to the 'Centre for Alternative Technology' in Wales. He highlights its function as a 'meeting place' for visitors who share similar goals, that, however, cause a 'cultural shock' in those who do not. Greenberg (2013) has foregrounded the potential eco-communities represent for tertiary education, with 400 universities world-wide involving eco-communities in their programs, though it remains unclear how precisely students are shaped by these initiatives. Perhaps providing most empirical detail is Boyer (2015), who, based on the socio-technical transition literature (Geels and Schot, 2007), has analysed three types of diffusion pathways of various practices in three US American eco-villages, including tours and educational programs, workshops, influencing curriculums and land use regulations, in terms of their ability to replicate, scale up and engage in niche to regime translation.

By contrast, other authors have been more sceptical about eco-communities' potential for wider societal impact by considering 'structural' dimensions in more depth: Fotopoulos (2006), perhaps one of eco-communities' fiercest critics, considers them insufficient as anti-systemic projects, given that they are unable to spark a wider anti-systemic movement and/or consciousness. From an urban-planning perspective, Xue (2014; 2018) has also raised doubt about whether scaling up eco-communities is the most sustainable way of achieving a degrowth transition, a perspective contested by Nelson and Schneider (2018).

Others have sought to study the impact of eco-communities more empirically by tracing the impact of capitalist pressures that eco-communities struggle with and partially resist. Baker (2013) argues that eco-communities function as anti-capitalist 'islands' within a wider system of unsustainable capitalism, emerging in 'cracks' (Holloway, 2010), while Cattaneo and di Mauro (2015) view them as 'spaces that entwine various forms of resistance' to capitalism while experimenting with 'alternative ways of living'. Some studies have focused on more specific financial and legal challenges: Ergas (2010: 45) in her study of an ecovillage in the Pacific Northwest highlights local laws, housing codes, neighbourhood zoning, mortgages, slowly moving bureaucratic processes, financial insecurity, the continued need to work in the capitalist system, but also derogatory neighbourly attitudes and the creeping influence of unsustainable norms within eco-community themselves. Temesgen (2020) has similarly examined the kinds of compromises residents reached to allow for expansion, which included selling land to private developers and cutting back on educational courses offered to the wider public.

All in all, this work has presented a mixed picture of the wider impact eco-communities may have. While certainly demonstrating the viability of eco-communities and some influence on visitors, volunteers and students, others have stressed the difficulties eco-communities face when seeking to have a wider influence in a world dominated by capitalism and its legal and financial pressures.

2.3.2 What kind of transformation? What kind of impact?

The above literature has been useful in understanding possibilities, challenges, and potential pathways for wider impact on society, but what exactly are they taken to be 'examples, laboratories of sustainability and demonstration sites' of (Dias *et al.,* 2017: 82)? I argue that much of the above literature could be sharpened by a clearer understanding of what kind of wider transformation is sought after and *how* it may be achieved. This might help assess eco-communities' failures and successes in transforming wider publics. Here, the nascent body of work on what has been dubbed 'transformative geographies' (Schmid and Smith, 2021) is useful in providing further clarity about what kinds of goals eco-communities are meant to achieve.

First, it provides an understanding of transformation towards post-capitalism as 'temporally distributed patterns of broad-based paradigm change', and a 'recalibration and re-imagination of economic and political and social institutions beyond accumulation and growth' (Schmid and Smith, 2020: 254). Sharpe *et al.* (2016) have argued that transformation involves a 'repatterning of collective lives rather than an expansion of the current pattern' and needs to bring together 'personal and wider structural aspects of change'. What distinguishes transformation from other kinds of social change is the depth, breadth, and speed of change (Fazey *et al.*, 2018), along with a clear commitment to naming, confronting, and reversing harmful features of capitalist modes of running the economy (see Chatterton, 2016a). It must be noted that some authors of relevance to this thesis refer to such processes also as 'transitions' (Chatterton and Pickerill, 2010), but I prefer the term 'transformation' to clearly distinguish it from the literature on 'socio-technical transitions' (e.g., Geels and Schot, 2007), that has overwhelmingly omitted any discussion of capitalism and typically focuses on examples where 'organised technocrats deploy smart technologies on an ordered citizenry with the intent of making life more efficient and low carbon, floating free from oppression, poverty, power, corporate control or the deep social and

spatial inequalities underpinning capital accumulation' (Chatterton 2016a: 405), and thus arguably remain reluctant 'to name and advocate for the more radical nature of transitions that society needs to embark on' (ibid.).

Chatterton and Pusey's (2020) recent piece is helpful for mapping out three potential *terrains* of transformation towards post-capitalism: from enclosure to the commons (see previous section), from commodification to socially useful production, and from alienation to purposeful, self-determined activity. With this second move, they foreground a shift from commodification understood as 'privatisation, alienation, individuation, abstraction, valuation and displacement' (Castree, 2003 in Chatterton and Pusey 2020: 31), encompassing ever increasing parts of daily lives under capitalism, to 'socially useful production' (ibid), as a form of producing 'non-commodified forms of goods', based on 'actual needs and desires' that serve 'human flourishing' rather than profit (ibid.) and require 'new forms of social organisation' and 'alternative conceptions' of the economy (ibid.) Finally, Chatterton and Pusey (2020: 32) propose moving from alienation to 'doing' (Holloway, 2010) as 'purposeful concrete activity', 'not determined by others' and therefore not 'subsumed into abstract [and alienating] labour' (ibid.: 84).

These terrains of transformation are also useful in identifying difficulties, i.e., persisting capitalist inflections and dynamics, that may arise when trying to build up diverse economies. This allows an understanding of post-capitalist transformation as emergent in messy, contingent, and incomplete practices, rather than in 'clearly bounded, pure territories outside of capitalism that can be defended or expanded' (Chatterton, 2016a: 405). These terrains of transformation also do not represent a clear-cut 'meta-narrative' or a clear vision about 'how the future could or should unfold' (ibid.), but rather a rough guideline to (modestly) evaluate the many attempts in eco-communities and elsewhere to go beyond capitalism.

2.3.3 The how of transformation 1: Economic practices

How might such a transformation towards post-capitalism be achieved? While critics have viewed eco-communities through the lens of their post-capitalist or anti-systemic potential (and found them lacking), those that have highlighted their generative possibilities to have engagements 'beyond' the community have not considered *economic practices* as potential ways to transform wider publics. Apart from Dawson (2013) who views eco-communities as nodes for sustainability-related networks, there is no mention of how activities that can be understood as economic have spread beyond the sites. After all, eco-communities are often taken to be or understand themselves as examples of a different socio-economic order, at a distance from or in opposition to hegemonic capitalist economic practices. In the previous section, I have highlighted some of the literature that has considered eco-communities as commons, however, they were conceptualised as taking part mainly *within* the communities, but less so as a way of enacting different economic practices beyond the sites.

Only Price *et al.* (2020) and Blažek (2016) explicitly consider economic practices in eco-communities and their wider impact, with Blažek (2016: 379) emphasising that there has been a failure to examine eco-communities as 'economic structures'. He conceptualises eco-communities as economic micro-systems capable of 'producing goods and services to meet the needs of members and also of the local community directly through non-market activities' (ibid.: 385), constituting a non-market economy of scale. Price *et al.* (2020) examine more explicitly how the confluence between market economies and the economic activities on site are negotiated. They draw on Gibson-Graham's (2008) diverse economies to flesh out non-monetary practices of gifting, sharing, bulk buying and the sharing of costs for green infrastructure, that are nonetheless reliant on visitors and the wider local economy. Eco-communities therefore constitute 'places where this convergence may be incubated,

experienced and experimented, before being transitioned to broader local economies' (Price *et al.,* 2020: 219).

With Price *et al.* (2020), I believe that an emphasis on the diverse economic practices of Gibson-Graham (2006; 2008) allows the wider transformative potential of economic practices to be articulated and understood. But unlike them, I believe that the performative dimension of Gibson-Graham's diverse economic practices deserves further emphasis: Gibson-Graham (2006; 2008) have focused on how diverse economic practices can be rendered visible and performed, viewing diverse economic practices as a performative ontological project. As such, they seek to 'read for difference', instead of succumbing to a capitalocentrism that deems all non-capitalist economic practices as irrelevant. Their explicitly poststructuralist understanding of economic practices involves an 'ontological reframing to produce the ground of possibility' and re-reading 'to uncover or excavate the possible', which they show reveals that "marginal' economic practices and forms of enterprise', including most notably care and housework, 'are actually more prevalent', accounting for more hours worked and/or more value produced than the capitalist sector (ibid., 2008: 617). Finally, they advocate to creatively 'generate actual possibilities where none formerly existed' (Gibson-Graham 2008: 620), and through performance help 'other worlds' (ibid.: 626) to come into being. This stands in contrast to 'realist epistemological project[s] of capturing and assessing existing objects' (ibid.: 616), that arguably unites many critics of eco-communities.

Gibson-Graham's approach has proven highly generative (see e.g., Roelvink, St. Martin and Gibson-Graham, 2015; Gibson-Graham and Dombroski, 2020) and might be especially promising given the geographical focus of my thesis: In their survey of 800 residents of the city of Barcelona, Conill *et al.* (2012) show that 20% of the population had recently engaged in 10 (out of a list of 26) non- or post-capitalist practices (see also Kallis, Kerschner and Martinez-Alier, 2012). These have included including growing food for themselves (18.8%), performing

home repairs themselves (55.6%), repairing or making their own clothing (39.0%) and sharing equipment with non-family members but also in 'post-capitalist' practices, such as participating in consumer cooperatives (9%), community gardening (7%), community currencies (2.3%) or ethical or cooperative banks (2%). Conill *et al.* (2012) have thus 'uncovered' a wide array of diverse economic practices occurring in Barcelona, to which the eco-communities that I studied unquestionably contribute.

2.3.4 The how of transformation 2: Attracting wider publics

But if eco-communities are participating in and performing a wide array of non- or post-capitalist economic practices, that may spread beyond the site itself, how exactly does this process work? How do specific economic practices become attractive to potential consumers? Gerda Roelvink, writing in the diverse economy tradition, has *generically* highlighted the importance of affective experiences to fuelling action on climate change (Roelvink and Zolkos, 2011) and in the realm of diverse economic practices (Roelvink, 2020), but not gone into more depth as to the specific affective relations involved.

More precise is Callon, Méadel and Rabeharisoa's (2002) work on 'economy of qualities' which sets out an agenda to 'investigate empirically the ways in which socio-technical devices act to produce attachments in markets' (McFall, 2009: 271). This occurs through two structuring mechanisms, i.e., the singularisation of goods and consumer's attachments to those goods. Callon, Méadel and Rabehariosa (2002) understand singularisation as the recurring process of classifying and qualifying goods in particular ways, a process in which both consumers and producers participate (ibid.: 202). A good's singularity is established by a combination of characteristics, relying on comparisons with other goods (ibid.: 198), for example by labelling something as organic, fresh, carbon neutral and so on. Furthermore, as the product develops

through various stages of production, these characteristics and their definition may change, implying regular processes of qualification and requalification (ibid.: 199).

This allows for the second key mechanism to occur, whereby consumers form attachments to particular goods (ibid.), with all attachments constantly threatened by economic competitors. The focus on attachment highlights the importance of non-human products, whereby their purchase is the result of a 'process of attachment' (Callon and Muniesa, 2005: 1234) or of 'co-elaboration' between humans and non-humans (McFall, 2009: 271) rather than the 'result of a subject-object encounter'. Note here that the term attachment is used in slightly different way than in section 2.1.3, in that it is less concerned with the ethical potential of affective experiences and more interested in understanding economic strategies to attract and retain customers, against potential competitors. What Callon, Méadel and Rabeharisoa (2002: 211) are explicit about is an understanding of attachment as 'lasting relations', with attached customers 'caught up in routines' (ibid.: 206), which is an important element throughout this thesis. After all, for post-capitalist compositions of the world to persist, durable (if ever-evolving) relations must be created, rather than momentary encounters with different ways of doing and thinking. As such, attaching as a way of composing with relatively high levels of both intensity and durability is particularly relevant to this thesis. Compared to the more subtle or intuitive processes of cultivation and encounter as presented in previous sections around attachments/detachments (Ginn, 2014) and 'learning to be affected' (Latour, 2004a; Greenhough, 2014), here producers actively develop *strategies* to attach and attract a wider array of people to economic practices or goods.

Whilst most work deriving from this perspective focuses on capitalist markets, Callon (2015: 326) has argued that the 'economy of qualities' is also essential to 'promote the emergence of economic alternatives' to answer the question 'what should be produced and how'. Indeed, as Le Velly, Goulet and Vinck (2020: 2) argue, it seems highly likely that diverse economic actors

share a concern for attaching consumers. Studying the 'arts and devices' (Mcfall, Cochoy and Deville, 2017) of attachments is therefore important because they provide insight into how more people become amenable to *particular* post-capitalist economic practices (see also Ahmed, 2004: 11-12). This will allow me to draw out various attachment strategies, including but exceeding the socio-technical devices such as labels and signs foregrounded by Callon, Méadel and Rabeharisoa (2002). This also helps take under consideration the continuing influence of 'capitalist' mindsets (Latouche, 2009; Feola, 2019) and gives clues as to the strategies of 'attachment' used by different groups and how this interlinks with imaginaries of transformative potentials.

The emphasis on attachments also brings the particularities of various non-humans that assemble various economic practices into focus: As I have emphasised previously, the relations with non-humans in commoning practices on site are important to understanding wider dynamics, particularly in attempts to produce post-capitalist worlds. This is of particular importance, because most economic practices occurring in eco-communes involve more sustainable modes of producing and consuming, implying a different relation towards non-humans. At the same time, these reconfigurations may also contribute to difficulties in attaching non-residents to particular products, e.g., when particular 'capitalist' expectations such as product uniformity or regular supply are no longer fulfilled.

Thus, by conceptualising economic practices as explicitly material, more-than-human, and affectively charged processes of attaching or indeed composing, an examination of how non-humans co-constitutively shape such practices, and how this in turn affects their transformative potential, is possible. As has been highlighted by Tsing (2019), making things scalable has implications for how non-humans in economic practices are related to, in terms of interhuman work practices (in terms of alienation and doing) as well as of environmental impact. As such,

the particularities of how non-humans are related to during economic practices, both by consumers and 'producers', impact how exactly wider publics may be attached to economic products of eco-communities, and thus how a wider transformative impact may be achieved.

This latter insight is also a useful addition to the 'transformative geographies' literature in that it focuses on the diffusion pathways of *particular* diverse economic practices. Much of the geographical literature has arguably worked to disrupt popular notions of 'scaling up' niche-based innovations, to highlight a plethora of 'horizontal connections' (Chatterton, 2016b) or 'non-contiguous, networked, transnational activisms' (Chatterton and Pusey, 2020: 37). These are aligned with Deleuze and Guattari's (1987) concept of the rhizome, 'an underground or shadow network of, or decentred set of linkages between, multiple branching roots and shoots' (Scott-Cato and Hillier, 2010: 872), for example 'a proliferating, somewhat chaotic and diversified system of growths' (Grosz, 1994: 199). Such conceptualisations are often used to describe processes of 'intentional eco-localisation', i.e., the intentional choice to seek local solutions to climate change and capitalism (North, 2010), highlighting a multiplication of endeavours rather than their scaled-up maximisation (Cameron and Hicks, 2014: 67-8). This points to a 'geography of ubiquity' (ibid.: 62) of many small post-capitalist alternatives and approaches a conceptualisation of space as 'non-hierarchical', 'ontologically flat' and 'site-oriented' (Schmid and Smith, 2021: 267). But what this work is missing is a closer attention to why some may spread better than others within these networks. In short, the 'economy of qualities' helps to further examine the fine-grained nature of specific transformative practices, and specifically, the interlinkages between reconfigured more-than-human practices and the ways in which producers and consumers (or visitors to the site) attach to them, and how both these processes are linked to the particular spatial contours of their wider transformative potential.

2.4 ENDURANCE

The fourth concept that I wish to build on is endurance, which is of particular importance to Chapter 7, but also crops up in subtle ways in the other chapters. I understand endurance as having two applications, that is, first, the ways in which eco-communities endure and evolve over time and second, the ways in which residents endure various perceived discomforts and hardships that may stand in the way of living a post-capitalist life in eco-communities. After sketching out the ways endurance has been studied in the literature, I will argue that considering these two applications together bring the body and embodied practice into view, thereby allowing for an understanding of how eco-communities evolve and persist. To bridge the gap between the two, I will draw primarily on the writings of David Bissell, who has provided some valuable insights concerning the specific temporalities of discomforts and inconveniences. Building on these, I will conclude by providing my own conceptualisation of endurance.

2.4.1 Type 1: endurance over time

Only a small body of literature has examined how particular eco-communities have endured and evolved over time, despite three quarters of eco-communities failing within 5 years (resembling new businesses, see Metcalf, 2012). Mirroring some divisions of the previous sections, this literature has mostly considered 'external' challenges to the longevity of eco-communities, i.e., the influence of factors outside of the site, *or* internal challenges (and solutions), pertaining to the common organisation of the site, though without going into much empirical depth or critical examination.

First, a variety of external challenges, emanating from outside the community have been brought up. These have included the resistance of mainstream local actors requiring lengthy

planning processes (Magnusson, 2018: 131; Westskog, Winther and Aasen, 2018), outsiders' disgust with some of the practices on site (Magnusson, 2018: 131) and the economic crisis, including the housing crisis (Papadimitropolous, 2018: 49, Temesgen, 2020). Here, Westskog, Winther and Aasen (2018) have provided some empirical insight into adaptations to external challenges in the case study of the Hurdal Sustainable Valley, Norway. After difficulties with the county administration and experiencing steep cost in self-building, the community moved from self-sufficiency and self-building to the construction of ready-made, eco-friendly housing built by external developers. While this was viewed as a 'more pragmatic approach to the values and principles guiding' (ibid.: 13) the site, there was also a concern of 'losing one's identity' (ibid.: 15), illustrating some of the choices eco-communities that attempt to endure are facing.

The relation with outside actors has also appeared as particularly important to ensure the survival of squats against the threat of eviction: In their examination of 368 squats in Barcelona between 1977 and 2013, Debelle *et al.* (2018) have emphasised the importance of alignment between the (local) institutional system and elites, but also of their embeddedness within broader social movements and protest cycles that can give legitimacy to these sites. In the context of the 'free town' of Christiania in Copenhagen (founded in 1972), Coppola and Vanolo (2015) and Amoroux (2009) have highlighted the fraught politics of engaging with 'mainstream' actors, with the state attempting strategies of 'neoliberal normalisation' and partial legalisation, which made the site lose some of its radical edge and 'distinctive qualities' (Coppola and Vanolo, 2015: 1163). In this context, the authors also hint at processes of 'internal normalisation', with for instance many more families living there. This seem to suggest and confirm a tendency of enduring eco-communities to change towards 'being less radical over time' (Metcalf, 2013).

Another set of literature has considered internal challenges, such as a lack of technological systems (Magnusson, 2018: 131), organisational difficulties, including a lack of clear decision-

making procedures (Christian, 2003; Cunningham and Wearing, 2013; Magnusson, 2018), the postponement of important decisions (Christian, 2003), interpersonal challenges involving consensus, boundary and communication issues (Kirby, 2003: 329), ideological purity and rigidity (Hamelin (2013) and 'emotional fatigue, isolation and power imbalances' (Boyer, 2016: 5; Mafle Ferreira Duarte, Sahakian and Ferreira Neto, 2021). With regard to how eco-communities tackle some of these organisational and emotional issues, Diana Leaf Christian (2003: xv) has noted the importance of 'rules, structures, and social mechanisms', while Kirby (2003: 329-330) has highlighted that professional facilitators providing training in conflict resolution helped significantly in solving interpersonal challenges in his case study. Forster and Wilhelmus (2005: 367) meanwhile argue that it was thanks to 'a handful of practical visionaries' that eco-community Findhorn, in Scotland (founded in 1962) adapted to internal challenges.

Rather unusual is by contrast the stronger focus in Forster and Wilhelmus' (2005: 367) and Davis and Warring' (2011) work on the eco-community inhabitants' changing bodies and life priorities. The former emphasise a tendency towards 'more diverse and complete lifestyles' (ibid.: 368) in Findhorn, including 'children, illness, disabilities, old age, and death'. Almost reverse in focus, Davis and Warring (2011) have examined the changing life goals and/or bodies of *former* Danish and British commune residents from the 1970s, none of whom live communally today. This was explained as an eventual return to 'nuclear family life', with commune life experienced as unsuitable for small children and even for life as a couple. Despite these rare exceptions, the study of endurance in eco-communities has been somewhat 'disembodied', overall neglecting how variable human bodies experience particular (material) practices differentially, especially over time.

The literature on practices in eco-communities has similarly not attended much to the endurance of practices in eco-communities, with the key focus being on the normalisation of

particular practices, i.e., the initial transformation from 'mainstream' practices to their eco-community equivalent. Roysen and Mertens (2019: 1) highlight here rather typically the importance of social norms on site, that encourage uptake of practices, which in turn leads to 'new circuits of reproduction' that eventually become a 'structure' (see also Mychajluk, 2017; Pisters, Vihinen and Figueiredo, 2020). This implies a single transformation from mainstream to sustainable alternative, rather than ongoing evolutions on site and as such, does not attend to subsequent changes to practices over time. Two recent articles at least mention *conflict* around practices. Boyer (2016: 5) highlights conflict around car-sharing practices in Dancing Rabbit Ecovillage (USA), when a teenager wants to join, but does not connect this with the specific ways in which, as he argues in the conclusion, 'practices have evolved as new meanings, competencies, and materials circulate within a dynamic population' (ibid.: 10). Binay, Brace-Govan and Oppewal (2020) are similarly concerned with how ideals and practice are 'balanced' in a Turkish eco-community, noting that the tensions between the two are frequently ignored, denied, and overlooked. In this context, some practices did not endure, with some residents refusing to use lye for cleaning and avoiding electricity-producing bicycles. This arguably hints at the ways in which particular technologies, objects, and practices are the source of discomfort or inconvenience, which shapes the endurance and evolution of eco-communities.

2.4.2 Type 2: enduring discomforts

There is a second way that 'endurance' can be thought, and that is as the endurance of discomforts and inconvenience, which seems particularly pertinent given that sustainable living and/or eco-communities are often perceived to be uncomfortable by the general public (Pickerill, 2015b; Shove, 2003). I want to suggest that the ways in which practices are experienced (especially over time) is a crucial contributor to evolutional change within the communities, and thereby how post-capitalist life is lived in these sites.

Thus far, only Vannini and Taggart (2013a; 2014c; 2016) and Pickerill (2015b) have considered questions of comfort and discomfort in eco-communities, though discomforts around sustainable living practices (Shove, 2003; Cole *et al.*, 2008; Shove *et al.*, 2008) and especially around thermal discomfort (i.e., cold temperatures and off-the-grid heating) have been explored more widely (Royston, 2014; Forde, 2017; Roberts, 2020). Pickerill (2015b: 1061) has specifically considered how comfort was reconceived around bathing practices in British eco-communities, with comfort 'defined as an ongoing process, a negotiation between different elements; climate, materials, bodies in a particular place', rather than a predetermined or fixed attribute (ibid.: 1064). Whilst she notes that there is 'a need to explore how people negotiate and overcome' barriers to reconceive of comfort and that this has incurred through 'skill-sharing, creativity, trial and error, and invention' (ibid.: 1075), there is scope to think through these questions in more depth and extend this to consider how such re-conceptions of comfort may be partial or reversed over time.

Vannini and Taggart (2014c: 5) have focused on how domestic warmth is achieved in off-the-grid housing in Canada and note that to do so requires 'greater intensities of participation in socio-technical and spatio-temporal processes' which they dub 'hot energies'. Off-gridders had to reinvent and reassemble 'the technology and resources needed to generate and experience everyday bodily comforts' (ibid.: 4) as well as use their sense of 'thermoception', the capacity of bodies to be affected by temperature changes. Vannini and Taggart similarly view residents as willing participants in this reworking of (thermal) comfort, even if this requires significantly more effort than on-grid warmth. In later work, Vannini and Taggart explore 'onerous consumption' (2016), which considers a 'type of hedonistic consumption characterised by burdensome involvement in the gathering, conserving, channelling, utilisation, and disposal of resources' (ibid.: 80) in similar terms: These practices spell out 'moral and practical obligations

and orientations [are] woven into ordinary routines and accepted and even embraced as inevitable necessities of one's everyday existence' (ibid.: 84). This seems to imply that off-gridders have significantly reconceptualised their sense of comfort, without any mention of contestation, negotiation, or attrition around these practices. Relatedly, neither work examines discomforts that might emerge more slowly with time.

2.4.3 Bodies as sites of endurance over time

While the work of Vannini and Taggart as well as Pickerill is instrumental in understanding the endurance of discomforts through an embodied lens, I argue that a more *diachronic* perspective on bodily comforts and discomforts can give further insight into how practices (and sites) endure over time, and thereby shape the particularities of post-capitalist life. As such, they can also be considered to complement and/or constitute the internal and external pressures as outlined above.

Here, the work of David Bissell (2008) is highly instructive: He explicitly considers comfort as a specific affective resonance that is achieved as an 'embodied contingency forged between the body and the proximate environment' (ibid.: 1703). Comfort therefore 'circulates' between and through both objects and bodies (ibid.: 1701) as a 'non-intense sensation of relaxation and reassurance: a middle ground' (ibid.: 1707). Bodies here are active and agentive, but objects – e.g., a chair that one sits on – equally 'act on the body' (ibid.), with relationship between the two requiring ongoing readjustments. This idea of continuous re-composition is of great importance to practices in eco-communities that might be experienced as uncomfortable or inconvenient in some way. As such, in Bissell's case study of sitting, too much stillness without altering one's position on the chair might lead to pain, so bodies tend to reposition themselves to find a comfortable position anew. Discomforts are thus always emergent, as bodies themselves and/or

the particular compositions between bodies and the objects that form the bodies' environment evolve. Furthermore, discomforts are always relational, in ways that is better expressed as degrees of dis/comfort, rather than a strict dualistic opposition.

Myriam Winance's (2006) ANT-inflected work on the interactions between humans with neuromuscular disease and their wheelchairs to explain how action is possible for this group of people has similarly pointed to the continuous adjustments of such processes. But by focusing on how action, rather than comfort is made possible, she draws attention to the ways in which a comfortable (here: seated) position can be conceived of to some extent as a *precondition* for further action. Relatedly, comfort is not only relational, but also 'comparative', with different compositions/constellations constraining or opening up ways of engaging with the world, which can be contrasted and compared. Comfort can therefore be understood as a negotiable, comparable and relational precondition for composing new worlds (Latour, 2010).

In subsequent work, Bissell (2014) also examines how commuting habits change bodies over prolonged periods of time. Drawing on one single particularly impactful interview, he showcases the 'subtle, slow creep transformations' within daily commuting habits, that build up to 'tipping points', a kind of threshold of bearability', that are retroactively recognised as a point after which a particular practice can no longer be endure and some form of affective change occurs (ibid.: 199). Thus, the repetition of a particular practice, in a Deleuzian vein, produces 'mini-metamorphoses' in the elements that constitute them, in ways that may eventually alter the practice itself (Bennett, 2001: 37): Hence with each repetition, there is potential for difference. Bissell's conceptual intervention therefore allows for a historical and situated account of how discomforts and inconveniences come to be.

Bissell's account also demonstrates the 'limits of the body' in terms of its 'boundaries, capacities, and thresholds' (Abrahamsson and Simpson, 2011: 331) and its maximum or minimum capacities to act (ibid.). The body is here defined relationally with Deleuze and Guattari (1987: 284) by what 'it can do [...] what its affects are, how they can or cannot enter into composition with other affects, with the affects of another body' rather than 'by any essence or self-contained entity, independent of an outside' (Abrahamsson and Simpson, 2011: 333). And yet, by considering the boundaries, thresholds and limits of a body, there is also the possibility that these can be 'pushed or reached beyond' or experimented with (ibid.), perhaps by adopting practices commonly perceived as uncomfortable. These limits of the body can also be understood temporally (ibid.: 344), since bodies change over time, become ill and 'deteriorate' and have a certain finitude in death. This attention to a body's temporal limits as well as to how practices as particular compositions alter bodies through repetition thereby provide further analytical edge to Latour's relatively high-level theoretical 'Compositionist Manifesto' (2010). An analytical focus on bodies, bodily evolutions, and (dis)comforts also give us clues as to how practices endure over time.

2.4.4 Conceptualising endurance

Bissell's and Winance's work is useful for providing ways to think about how embodied practices may or may not endure over time, which serves as a generative way to reflect on the longevity, endurance, and evolution of practices. The endurance of practices can thus be understood as the result of continuous re-compositions (Latour, 2010). It is shaped by the particularities of bodies that change with time and age, but also by the particular affects that the continuous repetition of practices triggers in those bodies, as well as contextual factors and processes, such as collective habits or customs, adopted both within the eco-communities and beyond.

Nonetheless, what is missing in the work of Bissell and my own conceptualisation of endurance discussed so far are firstly, the ways in which moral codes and political values shape what is comfortable or endurable and secondly, the role of community dynamics to these processes. The importance of that first missing element may not be pertinent in the work by Bissell discussed above. However, in another piece on the 'virtual infrastructures of habits' (2015) around long-distance flying, he outlines differential affective relations of gracefulness, restlessness, and clumsiness, but in no way considers how these might be experienced differently for someone who is ethically opposed to flying. This is what surfaces in the work of Vannini and Taggart and Pickerill above: that values were instrumental in reshaping comfort. Read through the lens of Bennett (2001) and the conceptualisation of motivation above, one can therefore conceptualise the (comfortable) endurance of practices as the successful negotiation between different (human) bodies, their technologies and local environment, but also crucially their moral codes and political values. Put differently, the endurance of practices can be understood as motivation sieved through the ongoing, repetitive experience of everyday life in the eco-communities, which brings forth ongoing evolutions or re-compositions of the constellations of bodies, their proximate environment (both human and non-human) and their moral codes that are continuously aligned and altered.

Secondly, Bissell and Winance's conceptualisations do not account for the particularities of community-living and especially how differential capabilities to endure may be experienced and negotiated within the eco-communities. For practices to endure on site, the ongoing participation and collaboration of many community members may be required, particularly with regards to commoning practices that are meant to be shared between members (e.g., maintenance, cleaning, gardening, repair). Conversely, commoning processes on which the sites depend may be imperilled if not enough residents perform them (well) because of experienced discomforts and inconveniences. This is particularly important given that they are limits to how

many practices eco-community residents can undertake individually and collectively, with some degree of competition between different practices taking place. There is thus the possibility that some practices may be displaced if priorities and/or embodied capabilities of community members change, for instance because of bodily ageing or because of a greater emphasis on practices outside the community (i.e., professional work). Greater attention must therefore be paid to the ways in which embodied dispositions towards practices impacts community dynamics and potentially also the endurance of the sites overall.

In this sense, it is worth emphasising that Bissell's 'proximate environment' in this thesis explicitly includes other residents performing the same practices (sometimes in different ways). Such a conceptualisation also leaves space to consider *other* practices, performed as more convenient or comfortable alternatives to a given practice 'outside' of the eco-community (e.g., electric or gas heating vs. wood heating), with which sustainable yet uncomfortable practices stand in competition. John Dewey (1922) has for instance argued with regards to society more generally speaking, that different habits may clash with each other (Schwanen, Banister and Anable*,* 2012: 526), in particular when personal habits stand in a tension with customs held by wider social groups. Such clashes and tensions can however also lead to processes of 'reflective deliberation', further 'reorganisation' and experimentation (ibid.).

2.5 CONCLUSION

In this chapter, I have introduced literatures around four key themes – motivation, practices (as more-than-human composing), (wider) transformations and the endurance of practices – that help answer the four research questions as outlined in the previous chapter. I have assembled these ideas emanating broadly from non-representational theories and more-than-human geographies and brought them to bear on geographical research on post-capitalist

transformation as well as bodies of literature working on eco-communities. While I have emphasised various gaps in the latter, they have provided analytical tools for assessing and specifying how post-capitalist transformation comes about and therefore guide the ways in which more-than-human affective relations should be composed and recomposed to facilitate this process.

More specifically, non-representational theories and work on relational ethics, in particular the work of Jane Bennett, is instrumental for answering RQ1 that is concerned with understanding how motivation to visit or move to an eco-community emerges in context. More-than-human geographies and work in STS helps me understand how more-than-human practices are composed in post-capitalist sites (RQ2), while economic geographical literature around commoning provides some conceptual tools for understanding these practices as explicitly economic. To answer RQ3, concerning how post-capitalist practices are made attractive to wider publics beyond the sites, I have put literatures on post-capitalist transformation in conversation with Gibson-Graham-inspired work on diverse economies and economic sociology following Callon, Méadel and Rabeharisoa's (2002) idea on the 'economy of qualities'. Finally, to answer RQ4, that is concerned with understanding how post-capitalist practices endure over time, I am building on work that has focused on discomforts and embodiment and particularly the work of David Bissell. I summarise key concepts that I have highlighted in this literature in the glossary below (Textbox 2.1). Following this literature review of theoretical key themes, Chapter 3 will explain how I sought to examine these empirically.

Textbox 2.1: Glossary of key concepts

Affect: Affect, after Spinoza and Deleuze, is defined as the transpersonal capacity to be affected and to affect others, in ways that result in an increase or decrease in the ability to act. Affect is often articulated as 'emotion', even though it is understood not as the properties of particular humans or non-humans, but rather of their relations. In this thesis, I also examine bodies as sites that register affective intensity.

Motivation: Building on Jane Bennett (2002), motivation is understood as constituted by affective relations and moral codes or values, with the former necessary to impel the latter into action. I understand motivation as firmly embedded within the life courses of individuals and as part of varied, complicated, and potentially contradictory and uneven trajectories.

Composition/Composing: Drawing on Latour's Compositionist Manifesto (2010), I understand composing as the practices of assembling (and reassembling) heterogenous parts to produce particular outcomes, such as the building and maintaining of post-capitalist sites. This draws attention to the ways in which such sites are co-composed with non-humans in practice. I have highlighted that (more-than-human) commoning can be considered as one type of post-capitalist composing that strives towards mutual care and shared responsibility.

Attachment/Attaching: A way of composing that is characterised by a relatively high degree of intensity and durability, and that can be imbued with multiple additional qualities, including negative ones (as detachments). Attachment stands in contrast to the fleeting and momentary affective experiences often highlighted in the literature (see Bennett, 2001) and serves as an important tool for durable post-capitalist world-building.

(Wider economic) transformation: I understand transformation as a significant recalibration of economic, political, and social institutions beyond capitalism and growth, based broadly on three terrains of transformation as outlined by Chatterton and Pusey (2020), that is, from enclosure to the commons; from commodification to socially useful production and from alienation to self-directed 'doing'. To understand how transformation may be achieved, I focus on the ways in which economic practices may be performed differently, and more specifically, how wider publics may be attached to post-capitalist products and ways of producing.

Endurance of practices: Blending Bissell's work on embodied comfort and Bennett's conceptualisation of motivation, I understand the endurance of (post-capitalist) practices as the continued negotiation between human bodies, their proximate environment, as well as moral codes and political values. Differences in the embodied experience of practices by different eco-community members need to be negotiated and furthermore impact their endurance.

3. METHOD AND METHODOLOGY

This chapter will present the methods and methodology I have employed. I start by sketching out key ontological and epistemological assumptions that shaped my methodological approach in Section 3.1, before going into further depth with regards to the three chosen field sites (3.2) and the materials I gathered (3.3). I then focus on the kinds of attachments I formed during fieldwork, shining light on my positionality as well as the challenges of doing research on more-than-human practices and in a multi-lingual context (3.4). I will explain how I analysed the materials I gathered (3.5) before concluding with a brief section on the ethics of my encounters (3.6).

3.1 METHODOLOGY

Which basic ontological and epistemological assumptions are most appropriate for an examination of how post-capitalist life is made possible in eco-communities? First, ontologically speaking, my work was motivated by a desire to generate new knowledges around the question of how to live well in the Anthropocene (Clark, 2011; Tsing, 2015), with a multiplicity of earthly others, and more specifically, to uncover diverse economic practices to disrupt capitalocentric understandings of the economy (Gibson-Graham, 2006; 2008). My work was therefore concerned with 'difference' in a Deleuzian sense, a difference that is 'generative, originary and primary', and that stands in a productive tension with more common understandings of difference as 'identity-based, representational categories, or dialectical forms of contradiction and opposition' (Cockayne, Ruez and Secor, 2017: 580). Difference is therefore not understood as 'negative or contradictory', but rather as the basis of possibilities for 'new methods of

creation', which nonetheless have to wrestle with the consequences of the work of representation and identity (ibid.: 582).

Secondly, I have been committed to understanding this difference as constituted by lively materialities that are in relation with each other, based on Latourian and Deleuzian ontologies beyond the nature/society/technology and mind/body divides that cast non-humans as passive and irrelevant to life and politics (Marres, 2012), and humans as sovereign, self-contained decision-makers (McCormack and Schwanen, 2011).

Thirdly, an examination of more-than-human relations producing 'difference-in-itself' required a focus on everyday practices, both in how they were spoken about and how I experienced them during my fieldwork. To make sense of these differences emerging in the specificities of everyday practice, I relied on a 'baroque' understanding of complexity, following John Law (2004b; see also Kwa, 2002). The baroque is concerned with finding complexity by 'looking down' and 'discovering limitless internal complexity within, which is materially heterogeneous, specific, and sensuous' (Law, 2004b: 13). The baroque stands here in contrast to the much more pervasive romantic modes of inquiry, that find complexity by 'looking up', to see things 'as a whole' that emerge through the 'multiplication of distant connections' (ibid.: 13-16). Thus, rather than considering what makes post-capitalist transformations achievable by looking up to the complex structural impediments of capitalism, I examine complexity in the heterogeneous specificity of practices, 'within' (ibid.: 24). Here, I have found 'a host of phenomena' that were not (as) visible in many other accounts on eco-communities. For Law, baroque and romantic modes of inquiry are two ideal types in a Weberian vein, which means that in some aspects, my work still carries within it some romantic traces, most obviously in my questioning of how the practices can be understood to contribute to post-capitalist transformations.

Furthermore, epistemologically speaking, following Isabelle Stengers and Bruno Latour, I viewed myself as an 'interface' becoming affected by 'more and more elements' (Latour, 2004a: 206), including the many humans and non-humans I encountered during the fieldwork as well as the 'collective body of science' (see Knorr-Cetina, 1999), all of which allowed me to 'register differences' (Latour, 2004a: 208). In this vein, I tried to conceive of myself primarily as a 'modest witness' (Haraway, 1997), taking seriously both humans and non-humans as co-fabricators of this thesis.

Based on this, I wished to articulate 'good propositions', which, while obstinate, have no definitive authority (being merely pro-positions), and 'may negotiate [themselves] into com-position[s] without losing [their] solidity' (Latour, 2004a: 212). Thus, I did not wish to provide a definitive account of eco-communities as enactment of post-capitalist transformation replacing all others, but rather 'add' to existing propositions by enabling 'connections of new differences' (ibid.: 220) and hopefully adding to a 'multiverse' of articulated propositions. At the same time, there is a possibility that some non-coherences or tensions between my more baroque analysis and more romantic accounts focusing on external impediments (capitalism, finances, laws, etc.) emerge. With Law (2004b: 23), I want to argue that it may be inappropriate to find an authoritative, cohesive account of 'how' post-capitalist transformations (in eco-communities or elsewhere) may occur, simply because the world itself is not coherent. This thesis therefore rejects positivist and realist claims towards unified and generalisable truths about the world, discounting all other knowledge claims, despite being produced 'locally' (ibid.). To produce 'good propositions', I tried to uncover 'interesting' (Latour, 2004a: 215) insights by putting my knowledge claims 'at risk', paying attention to situations that allowed non-human and human participants to 'differ' and to 'object' (ibid.: 215-218), in ways that jeopardised my 'privilege of being in command' of the research process (ibid.: 216).

Finally, I considered my propositions to be 'interventions in the world' (Hinchliffe and Whatmore, 2006: 136), not simply describing the world but also enacting it (see Law and Urry, 2004: 390). Indeed, with Gibson-Graham (2008: 615), I consider this performativity to be a kind of 'activism inherent in knowledge production'. This implies a 'new kind of scholarly responsibility', in that I considered the 'effect of theorising things' in ways that broadly support, yet critically examine attempts at post-capitalist world-making.

Given these ontological and epistemological commitments, an ethnographic approach seemed particularly suited to me. Not only did this approach enable an in-depth examination of complex dynamics in situ, especially everyday practices, but it also allowed me to be surprised by my encounters and redirect my attention towards instances of 'difference'. Relatedly, doing ethnographic work permitted the generation of a variety of materials, through which the participation of both humans and non-humans were best able to come to light (Whatmore, 2003: 93). Furthermore, an ethnographic approach allowed me to adapt my approach iteratively over time (Flick, 2014: 321), and adjust it progressively to various inputs from non-human and human collaborators.

3.2. FIELDWORK DESIGN

Originally, Can Decreix (Figures 3.1 and 3.2) in Cerbère, France, was chosen as my key field site, given its status as the only place seeking to apply degrowth into practice, with 'degrowth living experiments' being the initial focus of my DPhil. However, during my pilot visit in April 2018, Can Decreix had only one permanent inhabitant left, although many more, especially other degrowth academics linked to the Autonomous University Barcelona (UAB) spent time there regularly, arguably constituting a looser and more spatially extended community around Can Decreix.

Figure 3.1.: Drawing of the two lower levels of Can Decreix (top) (Source: Degrowth.org)
Figure 3.2. A busy patio on the highest level in Can Decreix (bottom). Source: Author

My access was limited further given the (relatively spontaneously announced) reduced availability of this main inhabitant and I thus set out to find similarly minded ecological communities. In the absence of other eco-communities *explicitly* dedicating themselves to degrowth, I widened the scope to include those were committed in some way to contributing to post-capitalist transformation more broadly understood, rather than solely seeking to 'retreat' (see Vannini and Taggart, 2013b), as some eco-communities do. I therefore chose the 'rurban' squat Can Masdeu on the edge of Barcelona, and the post-capitalist eco-industrial colony Calafou, 60km west of Barcelona (Figure 3.3) as additional field sites. Whilst degrowth was perhaps not necessarily the main intellectual and political background of these two sites, residents in both sites were aware of degrowth as a political ideology, with Can Masdeu being mentioned by Cattaneo and Gavaldà (2010) as an example of degrowth in practice. Calafou also mentioned 'degrowth' as one of its core values, though this was, like 'post-capitalism', a partly contested label. Thus, while I choose 'post-capitalism' as a framework for constructing and delineating the field, I inevitably had to wrestle with making sense of how such a highly abstract concept would play out in practice (Nadai and Maeder, 2009: 233), including that post-capitalism as a term or idea might also sit uneasily with some residents.

Furthermore, all three sites have been considered to be part of the wider Barcelona area (Sekulova *et al.*, 2017), which is known for its proliferation of 'many and diverse environmental communities' (Escribano, Lubbers and Molina, 2020: 1). Whilst Can Decreix is just on the other side of the border with France, Sekulova *et al.* (2017: 2362) have included it in their study of six sustainability-related community initiatives in the 'region of Barcelona (Spain)' as a 'rural community house dedicated to degrowth' (ibid.: 2369), with its name – 'house of degrowth' in Catalan - being further indicative of its link to Catalonia. Thus, despite some differences in ideologies and practice (more below), they can be assumed to be at least partly shaped by a similar cultural context. Beyond these eco-communities, the city of Barcelona has also been

home to various squatting cycles over the past decades (Debelle *et al.,* 2018) as well as to a rather pronounced non- and post-capitalist economy (Conill *et al.,* 2012).

Finally, whilst examining these three sites as cases of post-capitalist transformation, it was at the forefront of my mind that that they did not represent a neat 'fit' or 'blueprint' (see Mol and Law, 2002: 15) of post-capitalist transformation. I attempted to take their specificities seriously, rather than simply using them to *illustrate* and provide generalisable insights into a broader phenomenon, e.g., post-capitalism. However, I consider them to be 'instructive beyond [their] site and situation' (Mol and Law 2002: 15), because they may sensitise you, as readers, to other situations, times, and places with which my work might resonate, provide new insights and hopefully most of all, incite new questions and comparisons. As a resonance or sensitisation device, I hope this thesis offers *you* new ways of 'registering differences' (Latour, 2004a). I will now provide a brief introduction to the sites themselves.

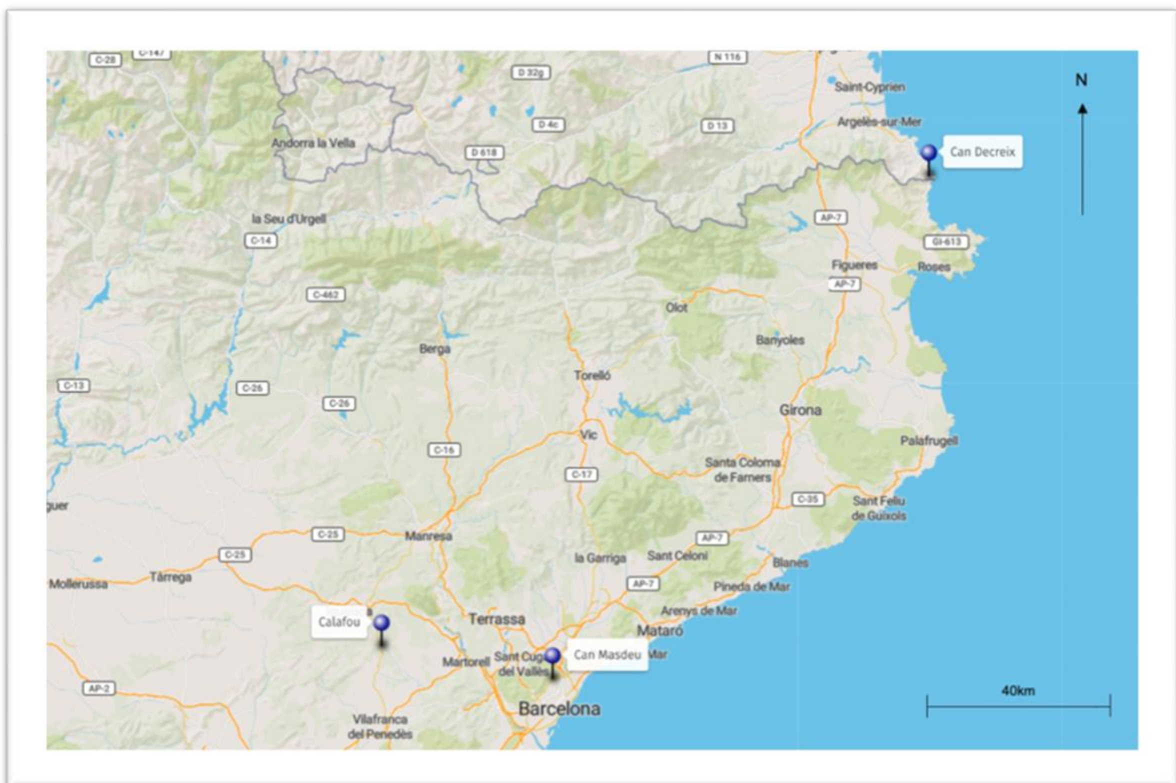


Figure 3.3: Map of three sites (Source: OpenStreetMap)

3.2.1 Can Decreix

Can Decreix is located in Cerbère, France (population: 1355), a seaside village in the Department of Pyrénées-Orientales, directly at the border with Spain. It is perhaps best known for a busy border railway station, which Can Decreix directly overlooks. It was bought in 2012 by two brothers, with one of them living permanently on site. Previously, Can Decreix has had another one or two permanent residents and several longer-term term volunteers and visitors; however, at the time of my fieldwork, there were mainly short-term volunteers and visitors, including friends, often linked to degrowth activist and academic circles as well as "wwoofers",[10] who stayed for a short period of time in return for work and/or donations.

Can Decreix consists of an old farmhouse, built over three levels, connected by upwards-sloping paths, that are surrounded by various edible plants. With only three bedrooms and one guest room, Can Decreix is rather small, but allows for bigger groups to join and sleep in either the yoga room/wine cellar, and/or a bigger bike shed. In the warmer months, the patio is the heart of its social life (Figure 3.2).

Can Decreix cultivates wine and is involved in (unusual) permacultural practices, including the cultivation of wild plants and cacti. It also uses a lot of idiosyncratic 'frugal' technologies, such as a pedalling washing machine, ash soap, compost toilets, elaborate composting systems and solar ovens. It places great value on thinking through 'cascades' of various materials, such as wood, water, and fabrics, informed by life cycle assessments in its attempt to find the most carbon neutral ways of living. Can Decreix also places a strong emphasis on foregoing unsustainable habits, including coffee, sugar, tea, and salt (since compost toilets are in use and

[10] Wwoof.net; world-wide opportunities on organic farms; or willing workers on organic farms: participants generally work on farms in exchange for food and lodging.

a high salt content in the compost subsequently applied to fertilise plants would impact plant growth).

Amongst other events, Can Decreix has hosted the Degrowth Summer School, organised by ICTA (Institut de Ciència I Tecnologia Ambientals) at UAB, for one week, with around 30-40 participants. An additional eight volunteers spent a month to prepare the site for the Summer School. During this month, this group of volunteers followed a 'holacratic' model of horizontal decision-making (after Robertson, 2007), whereby each person was assigned a specific 'managerial' responsibility, e.g., hygiene. This meant that this person was responsible for delegating tasks to others in that particular domain, rather than having to do all the tasks pertaining to the latter themselves.

After the initial pilot visit in April 2018, I attended the Summer School and stayed for another ten days thereafter. Between September and December 2018, I conducted repeat interviews with visitors and volunteers to get a sense of the impact their stay in Can Decreix had had on them and reached out to some former residents. Whilst the main residents had initially been a bit reluctant about me doing a 'sociological study', explaining that he did not consider Can Decreix to be 'ready', after some further discussion, he agreed that I could join Can Decreix for a month in June/July 2018.

3.2.2 Can Masdeu

Can Masdeu is a 'rurban' anarchist squat situated in the outskirts of Barcelona with an ideational background in environmentalism, communitarian anarchism, and self-management. The space, a former leper colony abandoned in the 1950s and owned by the Hospital de Sant Pau, was first squatted in late 2001, in order to '*host a gathering of activists against climate change in March 2002'*

(Canmasdeu.net, no date a), which attracted around 200 people. Their history is therefore not only linked to anti-capitalist but also anti-globalisation and climate change movements, which was rather unusual for the squatting movement at the time. In April 2002, the police unsuccessfully attempted to evict the squatters, who had hung themselves off '*harnesses on the building and balancing seesaws*' meaning that neither of the squatters '*could be removed without dropping the other*' (Libsoc-wiki.fandom.com, no date, see Figure 3.4). Later, a judge ruled that the '*right to life comes above the right to property*' (Canmasdeu.net, no date a). Since then, Can Masdeu claims '*social legitimacy*', given that it has opened up half its agricultural space for community gardens, hosts Open Days twice a month and engages in environmental education.

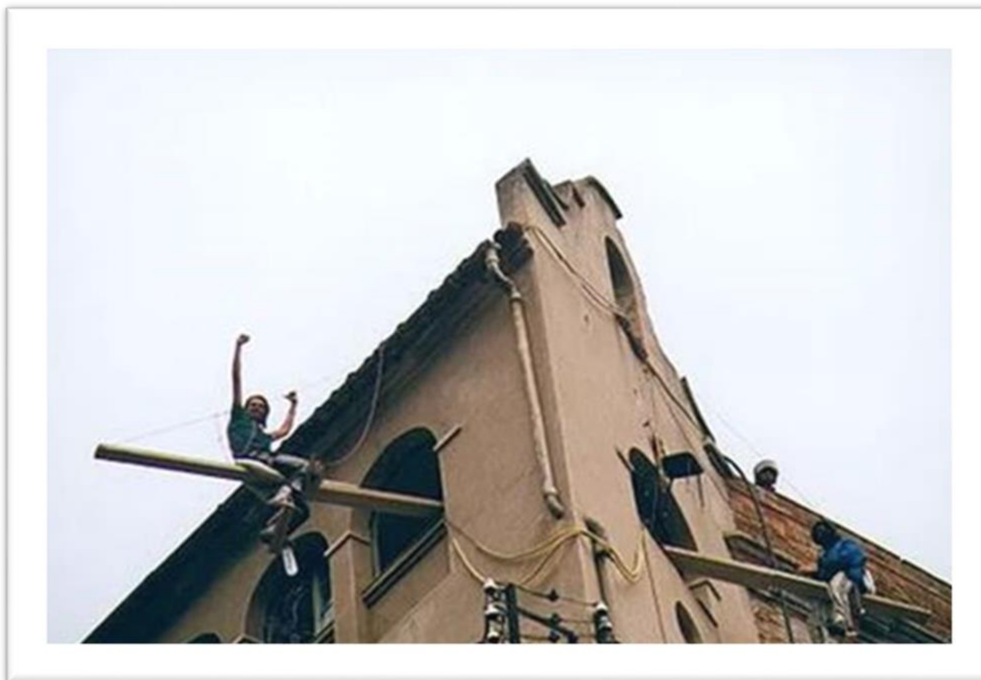


Figure 3.4: The 'Battle of Can Masdeu', April 2002 (Source: Libertarian Socialist Wiki, no date)

Can Masdeu consists of a large, convoluted house (see Figure 3.5 and 3.6), where the majority of its 25-30 residents (excluding 5-10 children, most of whom stay there on a part-time basis) live, in either individual rooms or smaller flat shares. It contains a big kitchen, which is the community's social heart, a social centre/library, a free shop (where people can deposit and take clothes for free), a seed bank, a yoga room, a guest room, a shared medicinal corner, bike shacks,

workshops, and storage areas. Two residents had built themselves separate small dwellings in the gardens. Two compost toilets and a pissoir are situated outside, as are solar-heated showers. Can Masdeu's vocation is '*not self-sufficiency, but self-management and exchange'* (Canmasdeu.net, no date b), though residents manage to produce a significant amount of their (organic) fruit and vegetables, eggs, and honey on site.

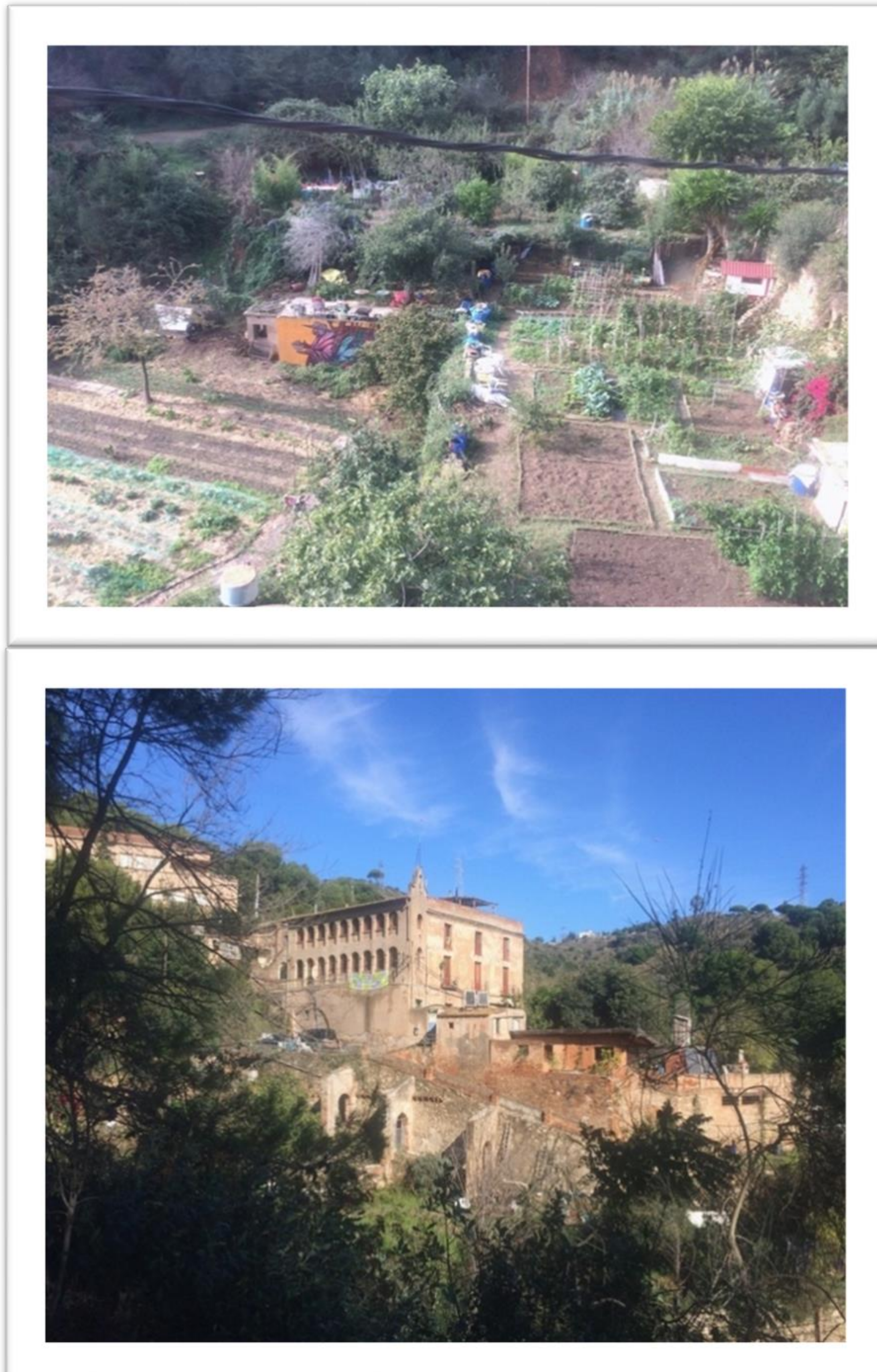


Figure 3.5: Can Masdeu's gardens (top). Source: Author
Figure 3.6: And its main house (bottom). Source: Author

Next to these agricultural activities, the residents open their 'social centre' every other Sunday, organising a range of talks, activities, workshops, and a tour as well as selling food and drinks, including their own beer. Furthermore, every Thursday is a workday, where gardening, cleaning, repair and maintenance work is done, which volunteers are welcome to join.

Can Masdeu organises itself through a general assembly, as well as rotating commissions for different activities on site, that are both practical (infrastructure, agriculture, bulk-buying) and social (social cohesion, guests, social centre). Every member must participate in the general assembly, participate in the weekly workday, cook two meals/month for everyone, and participate in one commission. Can Masdeu is the most organised site of the three, although members continue to experiment with organisational formats. Every member is obliged to contribute 80 Euros monthly to cover basic needs, including most foods, an amount that has substantially risen over time (compare with Cattaneo and Gavaldà, 2010).

Visitors are welcome to stay for two weeks at a time every other month, an opportunity which I took up in October 2018. During this time, I conducted interviews and participant observation with long-term inhabitants, visitors and 'community gardeners', who worked on individual plots in the garden. I spent a further three weeks living in Barcelona and went to Can Masdeu for specific occasions such as beer brewing and the workdays. I returned in January 2019 to gain a clearer understanding of Can Masdeu's positioning within various alternative communities and squats, conducting further interviews with Can Masdeu residents as well as members of other squats and cooperatives in the city.

Given Can Masdeu's longevity and fame in Barcelona and beyond, research fatigue was comparatively common. It was the only place where several members did not want to be interviewed, with some eyeing me warily, which left me timid and with a strong sense that I was

an unwanted intruder. Whilst there was a committee to welcome and manage guests, I initially felt somewhat lost, especially with many participants gone during the day to Barcelona proper. I also noticed that after I had left and moved into a flat in the city, only coming up for specific reasons, their reception of me was significantly friendlier.

3.2.3 Calafou

Calafou describes itself as a post-capitalist, industrial eco-colony, built in the 'ruins' of a former industrial textile factory,[11] next to the village of Vallbona d'Anoia (population: 1399) in the province of Barcelona, some 60 km west of the city. It consists of a block of 27 two- or three-bed room flats, occupied by individuals, couples or friends. It also includes a significant number of industrial buildings (28.000 sqm), that host many workshops (mechanics, wood, 3D printing, plastic recycling, electronic, storage rooms); a guest house, a church (converted into a concert hall), a social centre, an office, and assembly spaces (see Figures 3.7 and 3.8). It was first set up in 2011 by the 'Integrated Catalan Cooperative' (CIC) as a more technologically minded intentional community, a rather unusual focus. It is currently inhabited by roughly 30 inhabitants, though with much higher fluctuation (and conflict) than in Can Masdeu. Calafou is being collectively purchased from the former owner and set up as a housing cooperative. The

[11] Making use of former industrial colonies for diverse living and working projects appears to be a current trend in Catalonia.

'right of use' (derecho de uso) can be purchased by paying 180 Euros monthly for 17 years for a two-bedroom flat, or alternatively, single rooms can be rented for 60 Euros monthly.

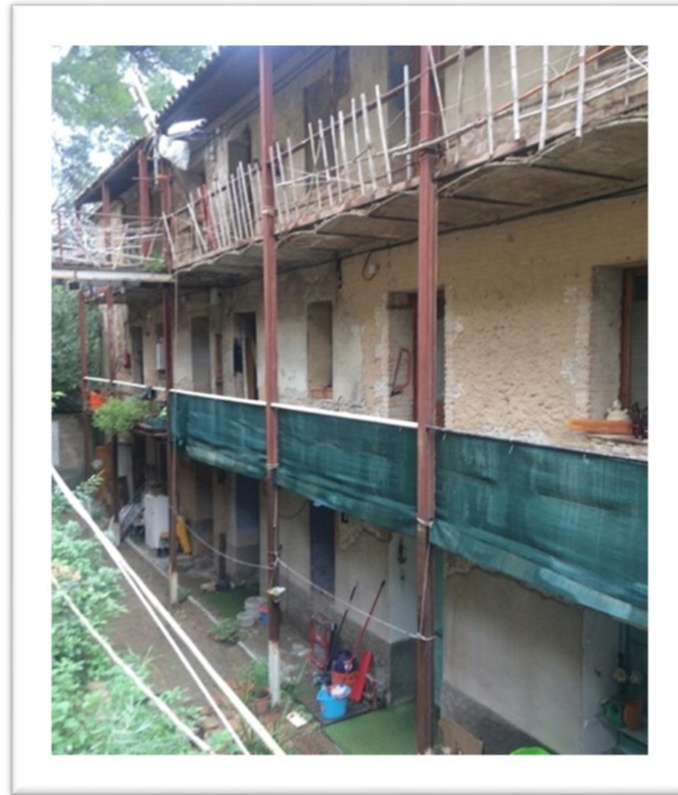


Figure 3.7: The housing block in Calafou (top). Source: Author
Figure 3.8: Some of its industrial buildings. Source: Author

Some of its industrial buildings are structurally unsafe and ruinous (see Figure 3.8). It is also situated next to the river Anoia, one of Spain's most polluted rivers, adding to the site's post-apocalyptic atmosphere. This makes agriculture nearly impossible, although there have been some experiments around water and soil quality. Its stated principles are transfeminism, self-management, free culture, degrowth, and permaculture (Calafou.org, no date). Every member is obliged to participate in or initiate one collective project, with current and past projects including beer-brewing, mushroom growing, soap making, plastic recycling, ceramics, carpentry and building dry toilets. Next to a general assembly, Calafou organises internal affairs through several sub-committees, for instance on finances.

Calafou host regular events, such as their Opening Days (Cadon, 2017), along with events catered to more specific interests. Calafou has also established a protocol for researchers, with one resident becoming my 'godparent', who was responsible for me and hosted me (see more in 3.6). I took part in the Opening Days in July/August 2018 (10 days) and stayed around a week longer, establishing trust and conducting initial interviews. During this time, I assisted with recycling, bioconstruction, and glass-cutting, and attended workshops on diverse topics including mushroom growing and digital modes of organising. I also gave a quick presentation on my research proposal. I returned for two weeks in November 2018, interviewing, and conducting participant observation. I was specifically asked to help one resident rehabilitate an old workshop, which was my main activity during this time, but also helped with other tasks, such as renovating a flat, cutting wood, and harvesting olives.

Given this clear set-up of responsibilities and activities, I did not perceive myself to be a daily intrusion into the residents' everyday lives. Rather, my godmother facilitated activities and contact with various members, effectively functioning as a 'gatekeeper', allowing me easy access (see Blackburn, 2019: 172). Occasionally, I reached out to residents, and we would organise

specific activities, meals, or drinks together. Overall, I found myself much better received than in Can Masdeu, with people generally receptive to my (more occasional) presence.

Whilst it has been impossible in these short introductions to detail the wealth of diverse practices the three communities engaged in, Table 3.1 below summarises the practices, activities and tools/objects used that I observed or participated in.

Table 3.1: Overview of 'post-capitalist' activities/objects on site

Activities	Can Decreix	Can Masdeu	Calafou
Compost toilet	x	x	x
Free shop	x	x	x
Apiculture		x	
Beer Brewing		x	x
Wine, vinegar	x		
Ash soap	x		
Wood/wood stoves	x	x	x
Social money			x (nominally)
Chickens		x (in chicken 'tractors')	x (roaming freely)
Bioconstruction	x	x	x
Glass cutting			x
Mushrooms experiments			x
Solar oven	x	Formerly in use	
Chabrot/licking plates	x		
Olive harvesting			x

Plastic recycling/reusing			x
Composting	x (very elaborate)	x	x
Food restrictions	Vegan, local, no tea/salt/coffee	Mostly vegetarian, local	Tendency towards vegetarian, local
Gardening, agroecology	x	x	
Wild plants	x (extensively)	x (limited)	x (only herbs)
Washing dishes with buckets	x	x	x
Pedalling washing machine	x		
Communal showers	x	x	x
Baking bread	x	x	
Irrigation systems	x	x	x
Shampoo alternatives	x		x (individually)
Recycling	x	x	x
Bulk-buying		x	x
Links to consumer coops	x	x	x
Communal eating	x	x	Failed
Assemblies	x	x	x
Communal workdays	x	x	x
Social centre		x	during Opening Days

3.3 GATHERING MATERIALS

As key elements of my ethnographic approach, I relied strongly on participant observation and semi-structured interviews. In the following, I will briefly explain how I used these methods to examine motivations and practices in and beyond the site.

3.3.1 Participant observation

With regards to participant observation, my goal was to combine the cultivation of a sensibility to lively non-humans with the apprenticeship of new skills (Greenhough, 2014: 115). Such an approach was particularly important with regards to understanding more-than-human practices on site, and therefore instrumental to Chapters 5 and 6 and to a lesser extent, Chapter 7.

Key to this was my participation in a variety of material practices on site (see section 3.2) so that I could 'learn to be affected' (Latour, 2004a) by non-human collaborators, as well as observe the specific ways in which others got affected by them. In this way and in line with my epistemological commitments, I hoped that my becoming affected by various non-human and human bodies would allow me to articulate interesting 'propositions' about how post-capitalist practices on site were reconfigured and how they spread beyond them.

Whilst I gained variable amounts of familiarity with different practices, my participant observation did not allow me to fully 'enskill' myself, as proposed by some as a method for engaging with material practices (see Ingold, 2011; Krzywoszynska, 2017; Pitt, 2017). In no way did I acquire the skill level of some, such as Paton (2013), who spent three years training as an apprentice in a stone quarry. Nonetheless, I believe this more cursory engagement with many different practices to be very valuable given that this mirrored in effect my participants'

experiences, with many celebrating a diversification of skillsets over specialisation (see Chapter 5). It also allowed for a particular attention to non-human and human recalcitrance when initially attuning oneself to particular non-human collaborators, an experience that can be deemed typical for many newcomers.

I also followed a 'showing' method in all three sites, after Hannah Pitt (2015) and Franklin Ginn (2014) whereby visitors showed me non-humans that were of particular importance to them. This allowed me to 'become more sensitive to non-humans in the environment' (Pitt, 2015: 50). Often this meant joining guided tours for visitors, where particular more-than-human arrangements were frequent topics of discussion, for instance compost toilets, chickens, or vegetarianism. This gave further insight into the particular moral and political values residents accorded to various non-humans, and how this was presented and 'qualified' to outsiders (key to Chapter 6).

Apart from these more specific techniques, I attempted as much as possible to participate in all kinds of everyday activities, including meals and drinks together, but also assemblies and meetings. Similarly, I attended workshops meant for visitors, for instance a tutorial on cactus planting in Can Decreix, a brief introduction to permaculture in Can Masdeu and a seminar on different modes of collective decision-making processes in Calafou. Throughout my fieldwork, I usually proceeded by jotting down notes during the day, often furtively, and subsequently typed them up, adding more descriptions as necessary. I usually did this in bursts given the intense nature of my fieldwork which often left me with few breaks between interviews and instances of participant observation.

3.3.2 Interviews

Next to participant observation, I conducted interviews in all three sites. Specifically, I conducted 84 interviews with 61 participants, in English, Spanish, French and German.[12] Interviewees included long-term inhabitants, visitors, and volunteers, as well as so-called community gardeners in Can Masdeu (see Table 3.2). Visitors were overwhelmingly in their 20s and 30s, whereas most inhabitants appeared to be mostly in their 30s to 50s and community gardeners in their 40s to 70s.

Table 3.2. Overview of interviews

Community	Groups	Count	Repeat interviews	Defined as	Total interviewees / interviews
Can Decreix	Long-term inhabitants	4	1	Over 3 months	25/39
	Volunteers	13	10	1 month	
	Short-term visitors	8	4	10 days or less.	
Can Masdeu	Long-term inhabitants	10	4	Over 3 months.	18/ 22
	Visitors	3	0	Less than 3 months	
	Community Gardeners	5	0	Gardening regularly	
Calafou	Long-term inhabitants	15	4	Over 3 months	18/23
	Visitors	3	1	10 days or less	
Total					61/84

[12] These were the main languages spoken, along with Catalan.

Next to a majority of Spanish citizens (22), including Catalans, other participants identified as French (7), British (4), German (3), Italian (3), Ukrainian (2), Colombian (1), Argentinian (3), Canadian (1), Swedish (1), Indian (1), Brazilian (1), Bulgarian (2), Singaporean (1), Serbian (1), Egyptian (1), Austrian (2), US American (2), Danish (1) and Polish (1). Nationalities were somewhat unequally distributed, with Can Decreix being the most international site by far, whereas the majority living in Can Masdeu and Calafou were Spaniards and Catalans. Interviews lasted from between 37 minutes to over 2 hours, with most taking around 1 hour to 1 hour 15 minutes.

I interviewed a third to half of Can Masdeu's and Calafou's residents along with a small number of visitors and volunteers, while in Can Decreix I interviewed all volunteers, most organisers, and some participants of the Summer School (often frequent visitors), along with the current and several former long-term inhabitants. In my choice of residents, I attempted to get a diverse sample, of various backgrounds, age groups, and interests, but generally took the opportunity to interview those interested in being interviewed. I typically gave preference to those who appeared involved in material practices over those who seemed more interested in social and communitarian dynamics. To get a sense of the different ways in which Can Masdeu had an impact on its surroundings, I also interviewed some community gardeners.

The participants were overall privileged in many ways: Most seemed to come from middle class backgrounds, almost all were white, most were European, and as far as I was aware, all held a legal citizenship status. Most were highly educated, with an overwhelming majority of participants having studied at university, often with master's degrees or PhDs. Particularly in Calafou, I was often struck by the diversity of knowledge and areas of expertise many had in academic disciplines, manual skills, languages and/or political and social theory. The exception

to this were the community gardeners in Can Masdeu who mostly came from the working-class area of Nou Barris, in the immediate neighbourhood of Can Masdeu. None had mobility issues (though one summer school participant had broken her leg), with only a few residents alluding to long-term health issues and injuries and most seemed to be relatively fit.

Next to the demands of the sites, residents were dedicated to varying extents to other life projects, including children, education, activism, and work. Here, three of my interviewees were completing or had just finished PhDs, seven were employed part-time (mainly in education, care work, and alternative small businesses), five were self-employed (doing music, teaching yoga, but also harvesting vines and working on time-limited social or environmental projects) and finally, three were working full-time, all in academia. One mother exclusively dedicated herself to her child. Seven worked only on site, financing themselves with economic projects on site, predominantly the breweries. Seven had children to my knowledge (five in Can Masdeu, and one respectively in Can Decreix and Calafou), with three of them (all men) sharing part-time parenting responsibilities with someone outside the communities. One woman in Calafou furthermore gave birth shortly after I left in November 2018. Many were also involved in activism or volunteering projects elsewhere.

Overall, I believe this to be a slight misrepresentation of the residents, given that it was easier to interview people who were more on site, who I believe were employed less frequently and for fewer hours per week than the average. Still, I believe that some form of part-time work or self-employment was the most common way of making or complementing a living. By contrast, for a significant minority, their professional careers had taken on a rather big significance, working for local councils, in academia or teaching.

Finally, gender distribution was unequal: While in Can Decreix, there were significantly more female visitors, which my sample reflects (9 men vs. 15 women), there were around two third men in the other two sites: I interviewed 5 women and 11 men in Can Masdeu, and 9 men and 7 women in Calafou, slightly overrepresenting women in the latter. These gender disparities may be related to gendered dynamics of care and responsibilities as well as a masculinist appeal to a putatively harsh lifestyle in eco-communities. Indeed, there was a significantly larger number of (mostly separated) fathers than mothers living on site and no mothers without their children (as far as I know). It is important to highlight these relatively privileged positions (that largely mirror my own) as they clearly limit the extent to which their insights and modes of living can provide 'lessons' to large segments of society, even within the Global North.

Interviews were instrumental to all my chapters but were indispensable to Chapter 4 and the narrations of motivations and to Chapter 7's account of (historical) endurance. With regards to the former, understanding the motivation of visitors and residents was one of my long-standing research aims, which I explored almost entirely through interviews. The first focal point of my interviews was therefore on motivations – in particular, rather than asking 'why' residents or visitors had chosen to come to the specific sites, I asked 'how', which usually led to an examination of key biographical moments that led interviewees to move or stay to the three sites.

When possible, I conducted repeat interviews, to explore 'frictions, discrepancies and silences' (Whatmore, 2003: 99), delving deeper into issues that were of interest to me. Crucially for Chapter 4, repeat interviews palpably increased trust and familiarity and therefore lent themselves well to the expression of affective experiences that are sometimes at 'the edge of being articulable' (Rose, 2003: 49) or deemed irrelevant. Furthermore, repeat interviews were particularly salient with regards to visitors and volunteers (mostly in Can Decreix), who I

interviewed around two months after their initial stay, to examine the impact the experience had had on them. This allowed me to assess the extent to which visits to the different sites could be conceived of as motivational experiences in and of themselves.

Nonetheless, I often found that participants did not articulate their experiences in affective terms, frequently reciting more generic reasons for their decisions rather than the personal experiences that led to them. I refined my questioning further and encouraged participants in repeat interviews to draw connection maps of various influences on their decision to live/stay in the sites (see Wheeldon and Faubert, 2009; Boschmann and Cubbon, 2014), such as people, ideas and places, in order to refocus the emphasis on the personal histories of motivation.

Still, only after I had explained my interest in affective experiences as crucial parts of motivation to two interviewees, did one participant mention recurring intrusive thoughts about asphalt '*everyday*', which contributed to her desire to go to Can Decreix (Field Notes 17/10/2018). The other interviewee similarly mentioned that she frequently thought of the '*carbon being dug out of the ground*' whenever she thought of cars (Field Notes 22/09/2018). Crucially, both these conversations were outside of an interview setting, which perhaps suggests that to participants, such experiences were unworthy of discussion or too embarrassing to talk about. I subsequently wondered how I could integrate this insight into my interviewing technique and pondered about the ethics of asking more pointed or potentially leading questions. I decided that asking follow-up questions that were concerned specifically with repeated affective experiences or key moments in their lives (after a discussion of various life course decisions had taken place) was an acceptable choice, also because I was by then certain that most participants seemed confident and able to 'speak back' and correct me when necessary. These more pointed questions at the end of interviews further refined my understanding of motivation and how it was rationalised and narrated. Overall, I consider that these (unavoidable) methodological challenges and

reflections were in fact instrumental to my conceptualisation of motivation as narrated in context, highlighting their partial, necessarily incomplete, and inchoate character (see Chapter 4).

Interviews were also important to my examination of practices in and beyond the sites. In my interviews, I explicitly asked participants about the everyday practices they were engaged in, focusing both on the practical know-how of various practices and the affective dispositions towards them, for instance whether certain habits had been hard to give up. To get another angle on practices on site and how non-humans were related to, I asked whether and in which ways they considered their lifestyle or particular practices as experimental. This similarly yielded interesting discussions about the role and the kinds of experiments present, and how this was connected both to building the commons on site and spreading them further through society, whilst also connecting to important ideas around joyful, self-directed doing and alienation.

To centre the more-than-human in our conversations, I also asked participants to bring a photo or video (see Rose, 2016:315) or to spontaneously show me an important non-human, for example, a plant, animal or tool. It has been argued that this encourages 'talk that is more emotional, more affective, more 'ineffable'' (Bagnoli, 2009: 548 in Rose, 2016: 315). Elicitation may also help explore 'everyday, taken-for-granted things' in participants' lives (Rose, 2016: 316). For instance, photo elicitation yielded a photo of a lemon tree, which led to an in-depth discussion of lemon trees' tropic responses as

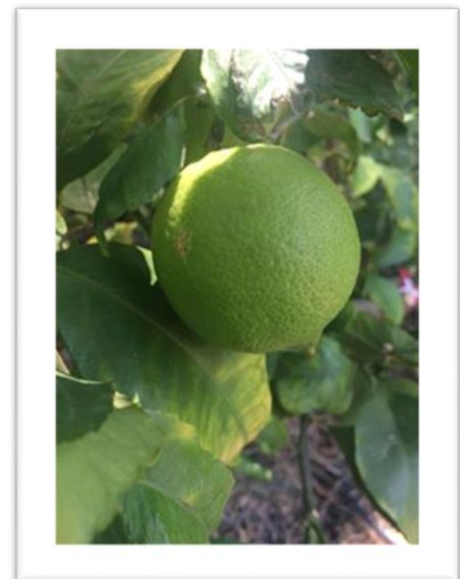


Figure 3.9: Example of photo-elicitation. Source: Michelle (pseudonym)

compared to other trees and what this meant for wider socio-economic transformations (Figure 3.9), with direct implications for Chapter 6.

While it has been argued that there is an urgent need to 'supplement the familiar repertoire of humanist methods that rely on generating talk and text with experimental practices that amplify other sensory, bodily and affective registers' (Whatmore, 2006: 607), I found that interviews were in fact rather helpful in understanding practices in a more-than-human, affective lens. Noortje Marres (2012: 7) has maintained in the context of household technologies such as smart meters that non-human agencies are not exclusively 'exerted surreptitiously, below the radar of official discourses'. Rather, non-humans are frequently talked about, and their agency is at least implicitly accounted for by many. Whilst 'familiar practices are often awkward to speak of' (Pitt, 2015: 51), some people appear perfectly capable of talking about everyday practices (see Hitchings, 2012) and those who did became important informants to me. Their capacity in 'learning to be affected' by particular practices as well as their ability to talk about them were an excellent and necessary addition to my more cursory and gauche engagements with various practices. Furthermore, as Hitchings (2012: 66) has pointed out, the manifest disinterest or inability of some to talk about manual labour and/or everyday practices is insightful in itself. For instance, how quickly participants veered from the everyday to overarching political and ideological themes seemed indicative of the importance accorded to the nitty-gritty of socio-ecological transformations compared to often Marxist-inflected grand political visions.

Interviews were also instrumental to Chapter 7 on the endurance of practices. While participant observation helped me understand to some extent how practices had been taken up by new arrivals (thereby ensuring the endurance of practices), interviews seemed equally valuable in discussions of discomforts and inconveniences, with residents and visitors often – though not always – frankly discussing such limits. In some cases, however, I detected small incoherences

between what was said and done, which allowed me to deepen an understanding of how such discomforts were sometimes (often counterproductively) dismissed, an important point in Chapter 7.

Interviews were crucial for developing a more 'historical' perspective on the sites themselves and how they had changed over time. When appropriate, I asked about the initial set-up of the different places – often as a starting point for discussion of material practices such as repair work on site – which frequently brought us to discussions of how the sites had changed over time, and with it, particularly practices. These descriptions were not always very detailed, but rather painted a broad picture of the sites' evolution, providing the necessary long-term perspective that was impossible for me to gain through my comparatively short bouts of participant observation.

3.4 ATTACHMENTS IN THE FIELD

In the following, I will reflect on my positionality and the situated knowledges (Haraway, 1988) I was able to co-produce by considering 'attachments' and 'detachments' to and from non-human and human others in the field. I loosely speak of attachments and detachments to reflect on the kinds of knowledges that come with various affective states and degrees of proximity. I will briefly consider the impact of my physical appearance and socio-economic markers, before considering how my language skills and bodily capacities to attach to non-humans impacted my positionality and the knowledges I was producing. This I hope will provide some detail to the position of a 'modest witness' (Haraway, 1997) I tried to take on.

3.4.1 Positionality, homophilia and friendship in the field

In many ways, I was like many other visitors: I was in my 20s, white and European, able-bodied, relatively fit, childless, multilingual, well-educated, middle-class, politically left-wing, and broadly sympathetic to the projects I was investigating. All three communities had experience with researchers, with attitudes towards them ranging from indifference, research fatigue and a refusal to participate on political grounds, to interest, curiosity, and enthusiasm. These elements marked me as a 'known' figure, which probably overall facilitated attachments with other humans.

Still, I felt that my appearance and in particular my choice of wardrobe tended to somewhat set me apart during my fieldwork. Although I took care to dress casually, my idea of casual dress was still more formal than that of many participants. This was particularly the case in Can Masdeu and Calafou, where some actually commented on my choice of clothing, an experience other researchers have shared in similar 'alternative sites' (e.g., Amouroux, 2009). These worries about my appearance caused me some anxiety and left me wondering whether this left my participants feeling more judged or detached. Without any all too obvious markers of 'alternativeness', I felt it took participants longer to situate me and to assess their potential relationships with me. In hindsight, this is potentially to some extent indicative of how my participants respond to someone appearing to be more embedded within the 'mainstream', although I can of course never be entirely sure about how participants truly felt about my work and presence.

To remedy this and to allow for attachments to form more quickly, I made sure to discuss political and social issues through which I could demonstrate shared affinities. Talking about issues not directly related to the sites themselves facilitated bonding and a greater level of trust.

Furthermore, I tried to be as open as possible and allowed others to 'situate' me by encouraging them to ask me questions at the end of interviews, which many used as an opportunity to quiz me on my personal thoughts about eco-community living, a process that potentially mirrors the experiences of many newcomers and visitors.

Relatedly, I also significantly grappled with my own homophilia, that is, my tendency to attach more quickly to those similar to me, i.e., mainly younger participants, English, French or German rather than Spanish speakers, visitors and volunteers rather than full-time inhabitants, and women rather than men. Whilst I very much tried to build up friendly relations with everyone, these kinds of similarities (along with personal sympathies) ended up being a big factor in determining whom I developed attachments to. For my own wellbeing and sanity, I relied on bonding with others for friendship purposes, given that my research and life during this half year period 'bl[ed] into each other' (Billo and Hiemstra, 2013: 313). Still, I often felt guilty about spending more time with some than with others, though ultimately decided that such tendencies were probably to some extent inevitable.

On reflection, I feel that such personal attachments probably *enhanced* the quality of the materials gathered. I inadvertently followed a method of friendship as an additional research strategy (Owton and Allen-Collinson, 2014) against more positivist inclinations to separate researcher(s) and participants. For instance, my closest contact from Can Decreix ended up being Pauline (pseudonym), a fellow human geographer, who moved to Barcelona in the autumn at the same time as me, and with whom I ended up establishing a friendship. Whilst I experienced our first interview together as a bonding experience in itself, our repeat interview was a favour to me within our budding friendship and was one of several activities we did together that day. Given that trust had been established within a friendship, I had the impression that Pauline was more open in an interview setting than those with whom I had more superficial relationships.

At the same time, my own positionality and homophilia heightened the sense that certain issues eluded me somewhat, including, for instance, practical difficulties related to mobility or childcare or other responsibilities that might stand in the way of people joining eco-communities. Often these kinds of points were raised by friends and family, after my return to the UK.

3.4.2 Attachments in a multilingual context

My language skills as well as the multi-lingual context I found myself in heightened the ways in which language as a particular embodied skill shaped my field positionality, an aspect often elided in geography (Watson, 2004) and shrouded in a 'fieldwork mystique' (Borchgrevink, 2003: 115). Importantly, it impacted the ways I was able to bond with others, and therefore the knowledge claims I was able to make.

I conducted my interviews in English, Spanish, French and German, to allow participants to speak in their native language as much as possible and to enable establishing a 'good rapport' (Tsang, 1998: 511, cited in Welch and Piekkari, 2006: 422). Linguistic research has also found that interviewees perceive themselves to be less confident and clever when talking in a second language (Murray and Wynne, 2001 quoted in Reyes, 2010: 183). Using the participants' native language therefore also served as a corrective of the power imbalance between researcher and researched (Watson, 2004: 59; Reyes, 2010: 183).

I believe this kind of multi-lingual research to be crucial as a means to register 'difference' in a Deleuzian vein: While geographers working in a non-representational tradition have often emphasised the 'limits of verbal communication in meaning-making', even in multi-lingual

contexts (Krzywoszynska, 2015: 311), words were throughout my research the tool through which participants could express their affective experiences often most precisely (as opposed to, say, gestures). This in turn required a significant amount of linguistic finesse to be adequately expressed, and relied on figurative expressions to convey their richness (Polkinghorne, 2005: 139). While there is of course never the possibility of 'complete and transparent representation' (Krzywoszynska, 2015: 311), interviewing participants in their native language allowed for nuance, which would have been lost had I insisted on doing my research only in English. The ability to register nuance is after all what 'learning to be affected' (Latour, 2004a; Greenhough, 2014) is all about.

At the same time, the very recalcitrance of expressions that do not translate easily, or patterns of speech that sound awkward in English offered opportunities for my (human) participants to unsettle my research in subtle ways. I tried to make use of this further, by asking 'stupid' questions or requesting detailed explanations, which I felt being a non-native speaker gave me licence to – which also meant that native speakers could 'hide' less behind technical language and were therefore led to focus more on modes of more-than-human relating. Using a 'wrong' word or descriptor equally seemed a generative way of questioning how specifically participants' felt about a particular practice or place.

Furthermore, I hope that emphasising the multilingual but culturally predominantly Southern European focus of this thesis somewhat disrupts the extreme dominance of English in academic work, which often seems to write out linguistic difference as if it were irrelevant (see Latour, 2004a: 220). As such, this thesis contributes to a 'multiverse' of propositions that, even if I hope they may provide insight and lessons more widely, are (co-)produced 'locally'. This is perhaps especially important given that many degrowth-related and/or communitarian anarchist initiatives are thoroughly Southern European and are arguably more radical than Northern

European equivalents, also perhaps given that the economic and financial crises of the last two decades have impacted these countries differently.

Overall, I considered myself well-suited for this kind of multilingual research, given that I am fluent in those four languages, as a German native speaker, who has spent three years in French schools and universities and (by now) seven in the UK. Furthermore, I had reached roughly a C1 level after taking Spanish classes in my undergraduate degree and spending three summers in Spain and Colombia. In preparation for fieldwork, I dedicated some time to learning some basic Catalan. During fieldwork, I also sought to integrate some Catalan words into Spanish, as is often done by non-Catalan speakers in Catalonia (see Papa, 2013). Whilst I did not have the impression that anyone expected me to speak Catalan, such adaptations seemed particularly relevant in a context where the choice of language is quite symbolically charged and politicised (Reyes, 2010: 181).

While I am considered fluent by all official standards of language acquisition and was at ease in most conversations one-on-one or in a small group, I sometimes faced small challenges, such as a lack of exposure to technical vocabulary in Spanish, and trouble understanding heated discussions between multiple Spanish speakers, as well as slippages between Spanish and Catalan ('Catalanismos'/'Catalanadas' or 'castellanadas'; Papa, 2013). This left me feeling 'vital emotional pressures' (Blackburn, 2019: 174), including feeling somewhat worried about being judged as not competent enough to conduct fieldwork. I remedied this partly by asking participants about particular issues in one-on-one conversations or interviews. Still, I believe that my non-native Spanish presented a small additional barrier to easily integrating myself into the fabric of the different sites, whilst all the while heightening my awareness of the situated and partial position from which I operated (Tremlett, 2009; Tanu and Dales, 2016).

3.4.3 Attachment through embodied labour

Finally, embodied labour served me well as a tool for attachment, particularly while learning practices. Being an able-bodied, yet clumsy and inexperienced body created its own set of complications when attempting to attach myself to various humans and non-humans. First, the fact that I could be used for relatively unskilled bodily labour allowed me to bond with other humans, who seemed to appreciate the usefulness of my labour. I was happy to participate in (unpleasant or boring) tasks when needed and spent for instance several hours washing up an endless stack of slightly dusty dishes in Can Masdeu. Furthermore, I made sure to contribute to the diverse economies on site, by for instance borrowing appropriate clothing when needed from the sites' free shops. These bodily practices, I hope, assuaged some potential concerns on the residents' part as to me being a potentially sceptical outsider and/or clueless foreigner. Still, this clumsy and inexperienced body further marked me as a newcomer, albeit a kind to which inhabitants were used.

Embodied labour was also a key way for me to directly learn to be 'affected' by the non-humans present on site, and explore more 'tactile and largely tacit relationship[s]' (Krzywoskzyska, 2015: 315) with plants, bacteria, and materials, complementing the verbal accounts of residents' and visitor's embodied practices. At times, embodiment also made up for any failure to find the right words, especially given my occasionally limited technical vocabulary, though I found this to be contingent on specific practices and instances, rather than a categorical failure of language, as is often argued (see e.g., Harrison, 2007).

3.5 From transcriptions to final write-up

After returning to the UK in late November 2018, I transcribed the vast majority of my interviews (around 75), all of which were audio-recorded, attempting to capture pauses, repetitions, and hesitations as much as possible. In a few cases, when participants spoke particularly rapidly, I used the GDPR compliant software Trint for transcription, carefully checking and amending transcriptions afterwards.

3.5.1 Issue-centred analysis

Rather than employing a strictly inductive or deductive approach, I worked to understand my data initially through vignettes around particular issues that sparked my interest or had caused controversy or problems on the site. I did this particularly with Noortje Marres' American pragmatist-inspired earlier work (2005; 2007) in mind, where she highlights the ways in which 'issues' spark publics as 'affected communities' into being (Marres, 2007: 759). Whilst Marres is not concerned with explicating a methodological approach, I felt that an 'issue-centred' approach to data analysis was suited to an examination of the more-than-human dimensions of enabling post-capitalist transitions.

I found resonance with some authors who understand research analysis to be guided by 'astonishment, mystery and breakdown in one's understanding' (Brinkmann, 2014: 720, see also Alvesson and Kärreman, 2011). Their attention to astonishment chimed well with the emphasis to both more-than-human and non-representational elements of my work, as well as Gibson-Graham's performative diverse economy approach that seeks to excavate novel and overlooked economic practices. The goal of my data analysis was therefore not the construction of 'fixed and universal knowledge through the collection of data', but rather to make sense of particular

situations I was seeking to understand (see Brinkmann, 2014: 722). This process, far from being linear and one-directional (Chew, 2020: 6), ended up blending my 'life, research, theory and methods' into one (Brinkmann, 2014: 722). I hope that this back and forth allowed me to develop (some) new and useful theorisations (see St. Pierre, Jackson and Mazzei, 2016: 104). This approach worked particularly well with regards to practices, that are central to Chapters 5 to 7, both as they appeared during participant observation and interviews.

By way of example, what would eventually become Chapter 6 started off with a comparison between different gardening practices, where I found myself intrigued by the differences between the sites, and how they were justified and linked to post-capitalist world-building. Perhaps most of all, eating and planting cacti and wild plants in Can Decreix struck me as a highly unusually economic activity, and made me wonder about what kind of agriculture, and indeed food provisioning more broadly speaking this stood for. On my mind were articles that criticised monoculture as well as academic work around relating to non-humans in the garden (Pitt, 2017; Ginn, 2014). I ended up reading up on hunter-gatherers (Scott, 2011; Suzman, 2017), which durably changed my view on agriculture and indeed economic systems. At the same time, like most visitors, I was reluctant to actually *eat* cactus frequently, which sharpened my attention to the hard work of convincing people to live differently in the nitty-gritty of the everyday, which would eventually become the main focus of this chapter (applied to four economic practices). Here, academic research, my own experiences, and empirical data all coalesced as I tried to understand the unusual and astonishing 'issues' at hand.

To organise the vast array of empirical material that I had gathered around issues and the non-humans that were key to them, I decided to use nVivo software for the process of qualitative coding. As a first step, I engaged mostly in descriptive coding (see Cope, 2017), including general codes such as 'material engagements' (e.g., 'compost toilets' or 'repair work'), 'places'

(to track where people came from and were going), 'inter-human reconfigurations' (e.g., conflict resolution or working hours), and 'taking with me' (to gauge what kind of impact a visit had had on visitors). This gave me a sense of the frequency with which particular issues or non-humans came up.

To push my analysis further, I started to superimpose more analytical codes or codes informed by previous reading, adding for instance 'ethical codes' and 'modes of relating' as codes that yielded more specific subcodes, e.g., 'strong affective moments', (different types of) 'experimentation', but also 'discomforts' (with various subcodes). This allowed me to understand not just which issues – usually around non-humans – were of importance, but crucially, how non-humans were engaged with. While I was interested in the unusual and astonishing, these codes helped me discern what was typical and what was not. Both have found their way into my writing, even if the latter lends itself less to broadly applicable insights and more to potential performative world-making.

3.5.2 Narrative analysis

I also started coding according to various 'motivations' as they were brought up in interviews, which ended up being a list of all the reasons that my interviewees mentioned. But as I was preparing for the write-up of Chapter 4 on motivation, I realised that this was an important, but ultimately insufficient first step. While coding for various political and/or affective motivations allowed me to again gain a sense of common and less common reasons for joining eco-communities, I found that such a method truncated life course narrations – in which accounts of motivation were necessarily embedded – into bits. This made it impossible to analyse the participants' personal motivational *stories* in context.

I therefore started going through the relevant sections of interviews in their entirety, reading first cursorily over many interviews to get a sense of whose motivational stories might be of interest, with the explicit goal of choosing several individuals' paths into eco-community living (rather than outlining a-contextual reasons 'why') and to retell their (abridged) stories in this chapter. Here, I found the emphasis on astonishment and intrigue that was key to other chapters somewhat less useful, and focused instead on finding distinctive, yet typical life stories. Once I had settled on two visitors and two residents, I schematically mapped out the timelines of the chronological stories, before zooming in on particularly rich key experiences, to illustrate motivation in context.

In particular, I drew on Gubrium and Holstein (1995; 1998) to foreground the fact that motivations were narrated to me as motivational stories pieced together in an interview setting. This attention to the narration of motivation allowed me to flesh out the various spatio-temporal patternings to motivation. Gubrium and Holstein argue that the storytelling process that occurred during interviews is both 'actively constructive' and 'locally constrained' (1998: 164), as narrators attempted to 'construct coherence' around life choice decisions. From this perspective, the focus does not lie with whether such stories are 'illusion or reality' (Denzin, 1989: 62), but rather how various experiences and practices are understood to be meaningful in context. This (more traditionally) constructionist perspective thus goes beyond an emphasis on various (a-contextual) 'reasons', to highlight the situated nature of storytelling as a practical activity (Gubrium and Holstein, 1998: 165). Furthermore, interviewees as storytellers constantly engage in 'narrative editing', as they 'constantly monitor, manage, modify, and revise the emergent story' (ibid.: 170), taking most obviously what is 'locally relevant and acceptable into account' (ibid.: 173). They also make use of different story formats, for instance by relying 'on critical moments' (Thomson *et al.*, 2002: 335).

At the same time, these stories are constrained by the 'disparate items and available plots from which a story is composed' (Gubrium and Holstein 1998: 166), which I suggest includes a motley crew of more-than-human affective experiences that have co-constituted motivational experiences. This latter point allows me to slightly reconceptualise this constructionist approach by Gubrium, Denzin and others as a compositionist account of narration, in the Latourian sense (2010). Here, the event of storying motivation in an interview setting forms part of the active assembling of motivation as an outcome of a plethora of experiences and practices (Latour, 1999), that inevitably involve various more-than-human components, but also implicate the dynamic between interviewee and interviewer. Furthermore, writing Chapter 4 on motivations also meant that my own sense of what is 'locally relevant and acceptable' (Gubrium and Holstein, 1998: 170), as well as my discretion as to how to 'cut' various stories were key to re-composing motivational narrations anew. In this sense, my chapter constitutes another re-composition of 'motivational narrations'.

3.5.3 Translation

Finally, I only translated direct quotes that were used in the chapters. To ascertain that I understood nuances in Spanish, I occasionally solicited native Spanish speakers, usually DPhil students in the department (Elena Pierard, Nico Raab and Jose Luis Ramirez-Mendiola). As has been emphasised by Borchgrevink (2003: 107), for second language ethnographers, it is particularly important to be 'diligent in double-checking information and critically testing interpretations', whilst being open to the polyvalence of all terms, rendering translation subjective and political rather than a neutral exercise (Müller, 2007: 206). I generally privileged 'pragmatic' translations over extremely literal ones, though I occasionally included Spanish terms or expressions if they were particularly hard to translate. This also served to de-naturalise

the target language in translation (Smith, 1996) with the 'words in the source language' functioning 'as a visual marker of indeterminacy' (Müller, 2007: 212). I also try to convey the somewhat idiosyncratic, wordy, and slightly repetitive style of many Spanish speakers in my translations, but also keep the errors others made when speaking English as a foreign language.

Throughout the process of partial translation, as with other steps, I have been aware of the 'circulating reference' (Latour, 1999) at work, and often worried about generating slightly 'reduced and distorted representations' of the voices of my participants (Smith, 1996: 162). Whilst I have explored 'differences, tensions and conflicts' as 'conceptual and indeed political opportunities' (ibid.: 165), for word count reasons, I often found myself unable to include many of the decisions I made around choosing particular terms over others.

3.6 ETHICS

In keeping with the AAG's guidelines for good practice,[13] I made every effort to ensure my work was honest as well as to avoid plagiarism and harm to humans and non-human participants. I also received informed consent from all my participants, following the protocol outlined in my CUREC ethics form[14] as much as possible. Although I had prepared participant information and consent sheets, almost all participants gave oral consent without hesitation. I assured participants that I would anonymise their names and use pseudonyms in my written-up work. I kept the participants' name and only their pseudonyms in a file to identify them, with all other information, including contact information kept in a separate file. When taking photos

[13] See: Professional Statement of Ethics of the American Association of Geographers (2009), available at: http://www.aag.org/cs/resolutions/ethics (consulted November 3, 2021)
[14] CUREC, the Central University Research Ethics Committee at the University of Oxford oversees the ethical review of research that involves human participants and personal data. See: University of Oxford(2021), available at: https://researchsupport.admin.ox.ac.uk/ctrg/sponsorship-approvals/curec (consulted November 3, 2021)

and videos, I asked for explicit consent each time, and adjusted the focus to exclude their face, if participants so desired.

I also made sure to store audio, video, and transcript files as well as my field notes in a password protected file on my laptop, protected by FireVault, to be destroyed after the research is completed and potential related publications are published. These issues were of particular importance to the residents of Calafou, for whom data protection was of the utmost importance as part of their political activism. I also made sure that only I as principal researcher could access this data.

Furthermore, I attempted to view fieldwork as a two-way encounter, and an opportunity to 'work together' (Whatmore, 2003: 91, following Isabelle Stengers), rather than simply following a 'ethics checklist' (see Thrift, 2003; Greenhough and Roe, 2010). To this end, I endeavoured to use the above-mentioned repeat interviews as much as possible. Serial interviews privilege depth over breadth of experiences and were meant to dismantle a 'hierarchy of knowledge between research and researched' (Crang and Cook, 2007: 75) Furthermore, they allowed for 'sufficient time, space, and trust to plumb the depths of people's taken-for-granted biographies and life worlds' (ibid.). Therefore, this method gave interviewees more opportunity to 'talk back', develop more trust, and rectify previous misunderstandings. Nonetheless, despite this effort at a slightly more collaborative approach, I found myself having the 'final power of interpretation' (Gilbert, 1994: 94). This left me frequently worried about 'misappropriation and misrepresentation' (Daigle, 2015: 31) or doing types of analysis that would be pointless or obvious to my participants.

Furthermore, I endeavoured to 'give back' in various ways. First, I hoped that my active hands-on participation in various material practices contributed to the projects as a whole. When I

first reached out to the three sites, I explained that I was happy to help with more particular tasks (translation, research, writing, etc.), but this was only taken up to some extent in Can Decreix, where the main inhabitant and I spent several afternoons drafting a 'degrowth living manifesto', which I hope has been useful for subsequent work. I also donated/paid around twice the suggested amounts per day of my stay (still a rather small amount). I also made sure that I sent back the transcripts of the interviews back to participants as much as possible (see Thrift, 2003: 118) and encouraged them to correct any mistakes.

Calafou had already set a research protocol, which meant I had to present my research project during the opening days in July 2018 and commit to sending back all transcripts and chapters as I wrote them, on which I have received some feedback. Furthermore, I am expected to present my research in person after the completion of the thesis. Any future publications will also be required to be published as open-access or creative commons.

Finally, I wanted to take seriously the performative character of my research (Law and Urry, 2004; Gibson-Graham, 2008), in particular the need to amplify diverse economic practices and therefore contribute to the worlds the sites I worked with wanted to 'help make' (Law and Urry, 2004: 390) bringing to light 'marginalised, hidden and alternative economic activities' 'to make them more real and more credible as objects of policy and activism' (Gibson-Graham, 2008: 613). I also became aware of the subtle ways in which my methodological choices, in particular the repeat interviews, reinforced my participants' interest in more bottom-up sustainable initiatives. For instance, after a repeat interview with a summer school participant in London, she messaged, telling me that she had finally stopped by a 'remakery' (a repair café) which she had wanted to '*check out for ages'* and that '*after talking to you that made go in and I'm so glad I did*' (Facebook message from Norah, 22/09/2018). This was a stark reminder of the extent to which my research was always an intervention in the world.

After having outlined the theoretical and methodological foundations of this thesis in Chapter 2 and 3, I will now turn to examine some of the empirical material I have gathered, starting with motivational narratives in Chapter 4.

4. Motivation in context: Narrating journeys towards post-capitalist living

4.1 Introduction

This chapter examines the motivations that have driven individuals to visit and/or move to eco-communities. Taking Jane Bennett's work (2001) as a starting point, I conceptualise motivation as a motivational *journey*, during which repeated and intensifying affective experiences are co-constituted by moral codes, which work to condense 'moral ideas and metaphysical assumptions into principles and rules' (Bennett, 2001: 131) and eventually (though not inevitably) lead to a life in an eco-community. I am therefore concerned with understanding the 'how' of motivation, and relatedly, how motivation was narrated in context. I build on Bennett's argument by developing a vocabulary of different affective experiences that were key to the motivational journeys of eco-community visitors and residents. Central to these motivational journeys are also the ways in which detachments from capitalist modes of living and attachments to post-capitalist practices – as relatively durable and intense affective relations – dynamically evolved over time, worked together and were occasionally held in tension. Motivational experiences are therefore also firmly embedded within the life courses of individuals and part of varied, complicated, and potentially contradictory and uneven motivational journeys.

In this chapter, I contribute to the somewhat disparate literature on motivations for eco-community, which have hitherto primarily focused on different 'reasons' of why individuals decided to move to a community (see 2.1.1), for instance a passion for environmental issues of many residents. But overall, this work has focused less on how motivation evolves over time, emerges in context through specific experiences, and changes the course of people's lives. My

approach may also help explain the often referred to knowledge-action or value-action gap (Solnit, 2017; Kollmuss and Agyeman, 2002), whereby most people may know about or share a concern for an issue, but do not act in accordance with their beliefs and values. Furthermore, by focusing on *motivational journeys,* I contend that paying attention to the ways in which motivational experiences are rationalised and narrated in an interview setting (Gubrium and Holstein, 1998), rather than taking for granted the 'reasons' articulated by participants, may help provide a fuller picture of motivation in (biographical) context. Motivational journeys also allow for an understanding of dynamism, non-linearity, and incoherencies in life course decisions (see Hörschelmann, 2011).

In the following, I will examine the motivational journeys as narrated to me (mainly) in an interview setting by two volunteers at the degrowth summer school, Michelle and Iris (4.2), and two residents, Sebastián in Can Masdeu and Antonio in Calafou (4.3), though when relevant, I will also weave in life experiences of other residents and visitors. While of course some overlaps are inevitable, each of these four individuals has had a unique motivational trajectory, which gives a good sense of the scope and diversity of backgrounds and experiences of visitors and residents in the communities I studied.

4.2 VOLUNTEERS IN CAN DECREIX

Michelle and Iris spent around a month in Can Decreix, preparing and partially participating in the degrowth summer school of 2018. Both had studied abroad for master's degrees in Scandinavia, where they had learned about Can Decreix. They had also changed towards more sustainable habits before their arrival in Can Decreix, including consuming less and adopting a plant-based diet. Both engaged regularly with environmental and social justice questions within

and beyond their academic career and shared a level of disenchantment with mainstream approaches to addressing climate change.

Despite these similarities in background, the motivational journeys of Michelle and Iris were in fact quite distinctive, and arguably constituted opposite sides on the spectrum of attitudes towards the volunteering experience: Iris wholeheartedly embraced life in Can Decreix and was eager to repeat similar experiences elsewhere, while Michelle felt more ambivalent. In the following, I will trace their motivational trajectory in a broadly comparative perspective, identifying three rough 'phases', that is, the narration of the origins of motivation, their build-up, and finally, the extent to which Can Decreix could be conceived of as a motivational experience.

4.2.1 Origins

4.2.1 a) Michelle and epiphanies

Michelle was able to recount a rather linear story of how she had heard about degrowth and Can Decreix, with her academic development featuring very strongly. This story culminated in what I will qualify as an epiphanous experience, based on Jamie Lorimer's (2007) work. Michelle identified her undergraduate degree as the start of her motivational journey, which focused on '*a mixture of economics and textile technology […] Then we went to Shanghai with Uni and we looked at factories. All of that was pretty fucked up, I couldn't square this with my principles, and from there somehow came the idea of sustainability, and then I did an internship with Adidas in their sustainability section […] and now I am studying this master's* on top[15] [in sustainable development]'.

[15] Like many young German speakers, Michelle used a lot of anglicisms, which I am highlighting by leaving them un-italicised.

Michelle did at first not explain her '*principles*' but later clarified that she found distressing the '*dull work, and that is really, neo-colonialism* at its best*, they sit there, sowing those pieces for H&M and Zara, so that we can buy those for little money […] I thought it was very depressing that I am responsible for this, that this exists in the first place.*' Interestingly, despite this initial focus on working conditions, '*from there somehow'* emerged an interest in the '*concept of sustainability*'. This implies that visiting a sweatshop seemed not only to trigger ethical considerations that were actively evoked by the encounter, but also other ethical considerations, such as sustainability, that exceeded those directly experienced in the moment. This hints at the possibility that certain affective experiences may produce or reinforce *other* moral codes, and/or trigger reflection processes on ethical life choices more generally, suggesting a kind of 'spillage' of affect's 'excessive' qualities.[16] The 'neatness' of this epiphanous experience can nonetheless also be read as part of Michelle's attempt to impose coherence on her life story, constructing this instant as a particular 'critical moment' (Thomson *et al.*, 2002).

How did Michelle consider the visit of the Shanghai sweatshop coming to bear on subsequent decisions? First, she connected this experience directly with her academic and professional path, including an internship in the sustainability section of Adidas and the master's programme in sustainable development. She therefore chose to expose herself *more intensely* to issues pertaining to sustainability, creating something of a virtuous cycle, in ways that durably shaped her life. Furthermore, this experience changed her disposition towards clothes shopping: '*in the first two years of my studies [...] I shopped like a crazy person, so the amount of stuff I have in my cupboard [...] it's*

[16] This was indeed not the first time that this had apparently happened to Michelle: In a follow-up interview, Michelle remembered how a visit to a slaughterhouse during an exchange year in Kentucky (2008) inspired her to become vegetarian, and '*kickstarted that I even got interested in this topic.*' In a similar dynamic to the above, I had asked her about her initial interest in climate change, not vegetarianism.

incredible. And it makes me so unhapp-, every time I go into my childhood bedroom, and see the moving boxes, I think, this is madness.'

Here, the visit to a textile factory in Shanghai was presented as a first trigger for Michelle's interest in sustainability and a fairer economic system, which functioned as a relatively clear moment of 'epiphany'. For Lorimer (2007: 921), an epiphany constitutes an experience in which one is 'strongly moved', and which is 'retrospectively acknowledged' as 'formative for their subsequent career choice', and the 'foundation for a lifetime attachment, interest and concern'. An experience that she could not square with her '*principles*', left unexplained, incited a greater interest in ethical economic relations. This fits squarely within Bennett's (2001: 131) argument that 'ethics requires both a moral code (which condenses moral ideas and metaphysical assumptions into principles and rules) and an embodied sensibility (which organises affects into a style and generates the impetus to enact the code)', whereby an 'affective energy' (ibid.) generated by the new experience sparks the motivation to 'enact the code'. This 'complex interplay of code and sensibility' (Bennett, 2001: 156) went on to produce changed affective relations in the everyday. Crucially, motivation generated new attachments – to new academic and professional futures – as well as detachments from particular modes of consumption. Michelle's stance towards the fashion industry and her past shopping hereby constituted a form of 'cultivated detachment' as an ethical orientation (Candea, 2010: 244).

4.2.1 b) Iris: love of nature as structure of feeling?

By contrast, Iris located the genesis of her environmental interests in her love of nature, which I will characterise as a structure of feeling, borrowed from Ray Williams (1977). She explained '*when I started backpacking [...] mostly because I went to hike in the Rocky Mountains',* she had her first strong affective experiences with 'nature': *'The beauty and simplicity of the nature, but also awe, some*

kind of fear of how the nature is much more powerful, but also the feeling of serenity that it gives you, that's the sensations that I have with nature.' While many volunteers and residents mentioned outdoor activities as key, Iris was rather unusual in emphasising a sense of 'awe' and 'wonder', chiming with romantic conceptions of nature (Canniford and Shankar, 2013; Coeckelbergh, 2015). Awe has been deemed a particularly potent affective relation, elicited by the 'extraordinary, unfamiliar and unusual' (McShane, 2018: 474) and implying an experience 'thrust upon' an individual, in a 'forceful, immediate and involuntary' way, provoking a 'sense of humility and relative smallness' (ibid.). At the same time, and more in line with the narrations of other volunteers and residents, Iris noted that in nature she would '*relax [...]It makes me very calm. All the anxieties go away. I just feel free, good.'*

These affective encounters with 'nature' made her re-evaluate the relationship between humans and their environment: '*I think of the mountains, how powerful they are, and they are much stronger than the human [...] even though we think that we have conquered the whole nature, that we are so much more powerful and so much smarter than nature and the fact that we just separate ourselves from nature*.' This suggests that that a strong affective experience instigated, at least partially, the adoption and appropriation of a different set of 'moral codes' (Bennett, 2001), namely a critique of common assumptions about the superiority of humans over and separation from nature, a point that Iris stressed frequently as the issue at heart of environmental issues. Unlike Michelle, Iris did *not* link these affective experiences in the outdoors to previously held values, clarifying that '*going into nature*' came before '*learning about environmental issues*.' Iris' account seems to confirm the potency of 'relational ethics' in cultivating 'an ethics of generosity by stimulating affective energy and refining the perceptual toolkits necessary to build moral stances' (Thrift, 2004b: 93), with Iris later declaring that '*this connection with nature made me very conscious about what's happening to nature*', with environmental destruction apparent to her '*all the time […] in every action that we make'*.

While the wider literature in several disciplines has been divided on the motivational potential of outdoor leisure activities (see Coeckelbergh 2015, Whitburn, Linklater and Abrahamse, 2020, Chawla, 1998; 1999), I propose that it can be best understood as a 'structure of feeling' (Williams, 1977: 132), exerting 'palpable pressure' and 'setting effective limits on experience and action'. In this context, the modern concept of 'nature' (Latour, 1993) has bestowed on this 'love of nature' an 'enigmatic coherence' (Pfau, 2005). As a 'generalised, dispersed affective quality', it has developed as 'a particular form of presence across different domains of life', cutting through academic interests, everyday living choices and leisure activities, delimiting 'how other people, groups and things appear' (Anderson, 2014: 119). As such, it seems likely that these varied activities may have instilled a generic appreciation for 'nature', exerting subtle pressures on subsequent life choices. As a potential genesis of environmental interest, broad structures of feeling leading to a vague interest in environmental issues were doubly unspecific compared to Michelle's clear-cut epiphany, rendering it difficult to closely follow how moral code and affective disposition were to be identified and how they interacted.

4.2.2 Build-up

4.2.2 a) Iris: A blur of everyday experiences

Importantly, the ways in which this love of nature emerged was deeply connected to Iris' everyday life. Rather than telling a linear story like Michelle, Iris mapped out a landscape of various elements, a proliferation of 'mundane' experiences and affects. This was often explained in terms of a 'progressive' interest or passion for environmental issues, the details of which were often blurred. I suggest here that these everyday experiences, often with the backdrop of 'nature' experiences, constitute a particular form of cumulative and intensifying affects, that impelled Iris and other volunteers to adopt sustainable behaviours and learning more about sustainability

and degrowth. The *intensity* of embodied experiences can, with David Bissell (2009), be thought of as a critical way of differentiating the qualitatively diverse affective charges experienced by volunteers and residents, with the latter heightened or diminished through repeated or enduring exposure/cultivation to particular elements. This was accompanied by a progressive change towards detachments from unsustainable elements and attachments to sustainable counterparts.

Iris highlighted on several occasions the potpourri of different influences that had shaped her interest in environmental issues, including '*my classmates, my friends, [the] media, documentaries, I watched a lot of documentaries about environmental justice and how the global North affects the global South – it just came to me, everything in the world depends on the Global North, how people consume, how people live. So, I understand that it's up to me if I want to make some changes*.' This multifaceted exposure and/or cultivation also suggests that a single occasion, exposure, or special occasion was insufficient on its own to trigger a change in affective disposition, value, or habit. Instead, repeated exposure to particular sets of people and materials over time produced a change in disposition and behaviour. For instance, in the above, watching '*a lot of documentaries*' (rather than a single one) led to a new understanding of global inequalities and a particular solution to this problem – a detachment from previous consumption habits. On a different occasion, she noted that her thoughts on nature-society relations '*had been* building up *for a long time [my emphasis],'* originating from '*a lot of different things, [...] reading stuff and different information from people that I talk to*.'

One striking example of how such a cumulative, repetitive concern played out was a particular kind of everyday affect that 'afflicted' some of the participants: Natasha, a summer school participant, told me that after *'she realised how everything was fossil-fuelled',* every time she thought *'of the car and I think of the carbon dug out of the ground.'* (Field Notes 22/09/2018), while Marie, a volunteer, mentioning how '*thinking about asphalt also made her 'want to go to Can Decreix [...] every day thinking about how awful asphalt is*' (Field Notes 17/10/2018). This seems to highlight how

ethical codes became an uneasy background hum to everyday life that facilitated a detachment from mainstream lifestyles. In both cases, these insights were shared after the interview had ended, perhaps hinting at their ubiquity, but also that such experiences may be unworthy of discussion within an interview setting and may not fit into clear narrative patterns (see Gubrium and Holstein, 1998).

This also demonstrates the extent to which these motivational stories are not the result of lives lived in accordance with fixed and clearly defined moral values, but rather, how a cultivation of detachments and attachments facilitated an intensifying motivation to actualise these concerns in particular life choices. What I found striking in Iris' and other people's stories is how often the narrators switched between passive and active accounts (sometimes grammatically so expressed) of how motivation operated, sometimes with motivational experiences 'happening' to them and sometimes with them seemingly actively seeking out particular experiences: The insight about global inequalities '*just came to*' Iris, while Gabriel noted that '*things got switched up*' but also that '*he switched*' towards more sustainable options. Finally, underlining the concept of a 'blur' of everyday experiences, Iris often found it hard to retrace how she came to specific decisions or insights, noting for instance that it was '*really hard for me to remember*' how she came to the realization that '*nature was disappearing*'. This further highlights the extent to which motivational experiences were 'distributed, relational processes' (McCormack and Schwanen, 2011: 2801) rather than the actions of a sovereign and self-contained human agent.

4.2.2 b) Iris and Michelle: assembling more knowledges

After these initial affective experiences, Iris and Michelle both sought to gain more knowledge around environmental issues, particularly through their university degrees as well as through books, documentaries, and newspapers. What difference, then, did knowledge make to

Michelle's and Iris' motivational story? In the following, I will show how different forms of 'knowledge' were wrapped up in dynamics of detachment and attachment, as *one* of the elements inciting environmental motivation, often intensifying (in line with the 'blur of experiences') motivation.

Michelle furthered her interest in environmental issues through a master's degree and found herself particularly enchanted by *'lectures on degrowth, with Tim Parrique [a degrowth academic] […] And he is French, with a moustache, super attractive, [...]the lectures were really the best lectures in the whole master's […] he brought it across so attractively, and he said, this makes so much sense, people.'* The combination of his physical attractiveness and the appeal of his 'message' can perhaps be understood as a form of charisma, which Thorpe and Shapin (2000) consider being evoked through both bodily features and behavioural characteristics, provoking enchantment and enthusiasm. The exposure to new academic knowledge thus got entangled in a dynamic of enchantment, to which Michelle happily attached herself.

Michelle's response to this was to spend '*more time on the topic, in my group of friends, [...] we founded a chapter of 'Rethinking Economics' […]. It's about that you change the curriculum in universities for economics students. […] we did a lot of seminars on Marxist perspectives, feminist perspectives.*' Here, rather than focusing solely on degrowth, Michelle proceeded cautiously, arguably practicing a stance of almost 'scientific' detachment by examining a plethora of heterodox economic theories (see Ginn, 2014: 534; Candea, 2010). Her decision to volunteer in Can Decreix was in this vein also motivated by desiring '*academic proof*', whilst doing something '*practical*' in contradistinction to desk-based work.

Conversely, while Iris also cultivated academic knowledge on environmental issues, e.g., by writing her dissertation on the Transition Town movement, she admitted that she only knew

'*very slightly [sic]'* about degrowth itself. Overall, she privileged '*experiential knowledge'*, which she distinguished from '*intellectual knowledge'* and therefore spent time with a friend who lived in a collective in Germany, did an internship with a fair-trade organisation in India, participated in a silent meditation retreat before Can Decreix, and a permaculture course immediately after. This emphasis on 'experiential knowledge' aligns closely with the 'know-how' of environmental living that Coeckelbergh (2015: 2, emphasis in original) argues is key for environmental motivation: 'what is needed is a different, more practical and active relation to our environment, which involves better know-how rather than more know-that: we need *better environmental skill*.' Those experiences also functioned as impulses to refine her ethical stance around non-anthropocentric ethics. For instance, her silent meditation retreat which involved seven hours of daily meditation made her aware that she was '*made of the same molecules [...]as any other thing in the natural world, as a tree or anything else, organic material*.'

This pursuit of 'experiential knowledge' also motivated her to apply for a volunteering position at Can Decreix – she wanted to know more about '*that kind of lifestyle', 'to find out what it is, how it is*.' This was also because she had become – perhaps unsurprisingly – '*lately very much into that lifestyle'*. In this context, Coeckelbergh (2015: 2) argues that by 'skilfully engaging with our environment', we 'become motivated by moving', rather by 'something external, such as theoretical knowledge' (ibid.: 3): By actively cultivating additional experiences, Iris was already motivated, already attached, thereby bridging the much discussed 'knowledge-action gap'. This stands in contrast to Michelle's more 'detached position', that seemed to allow a 'gap' between theoretical knowledge and practices of environmental living to emerge.

Overall, 'knowledges' can be considered an additional form of exposure, contributing to an intensification of attachments/detachments. Importantly, while Iris privileged experiential knowledge, it is worth highlighting that 'representational' materials similarly contributed to an

intensification in interest in environmental issues, facilitating attachments to more diverse economic or sustainable practices. Furthermore, as particularly apparent in Michelle's narrative, gaining academic knowledge was not clearly distinguishable from other types of experiences in terms of their impact on motivation. Both Michelle's academic interest in degrowth and Iris' more experiential interest in a sustainable lifestyle made them seek out Can Decreix, though they arrived there with rather different dispositions, which shaped their experience there significantly.

4.2.3 Can Decreix: a motivational experience?

4.2.3 a) Iris: the booster shot

In this subsection, I want to highlight the extent to which Can Decreix was a motivational experience for Iris that catapulted her life further on a pathway towards a life in an eco-community. Indeed, Iris viewed Can Decreix in exceptionally positive terms, declaring that she '*would love to live in a place like this'* and that she could not '*think of anything that I didn't like.'* Importantly, she argued that her stay in Can Decreix was a '*booster shot of this kind of lifestyle*': *'from that kind of lifestyle, I really felt a lot of energy, boost – like a lot of energy and meaning, [...]and motivation.'*

The term 'booster shot' seems to imply that an intensification of affect through a particularly strong experience, resonating through time, is an important strategy for heightening the intensity of (more or less virtual) affective dispositions (see Bissell, 2009). Most of the other volunteers articulated a similar sense of encouragement. Michelle, despite her reservations, noted '*a feeling that it is possible*, [...] *that there are so many people all around the world that are dealing with this and that believe in this, that has given me strength'.* Quentin, another volunteer, pointed out that

'*in some way'* he found himself '*inspired, motivated to invest himself more, yeah, for the cause*'. Thanks to this affective boost, many volunteers felt more determination to work against what constitutes arguably another structure of feeling, that of 'capitalist realism', i.e., 'the widespread sense that not only is capitalism the only viable political and economic system, but also that it is now impossible even to imagine a coherent alternative to it' (Fisher, 2009: 2).

Crucially, the notion of a 'booster shot' also denotes that any memory of past experiences might fade with time and therefore requires refreshers. In Iris' account, Can Decreix seemed to be a particularly powerful 'refresher', one that she would think of *'all the time, when I feel out of place in the city, like I do now, and I think of Can Decreix and I feel this lifestyle, I am really looking forward to it again.'* Gabriel, though less keen on living permanently in an eco-community, similarly explained that he could '*very well imagine returning'* to Can Decreix with the goal of getting *'this inspiration on so many levels, that comes with this place, to take with me, and to bear in mind [vergegenwärtigen] again, [...] all the things that are possible*'. This comment further highlights how remembering and cultivating possibilities for remembering and re-living further helps solidify particular affective dispositions and related life choices. As argued by Jones (2011: 875) memory is a 'fundamental aspect of becoming', with potentialities and creativities emerging 'from the legacies of the past carried into the present'.

After her stay in Can Decreix, Iris' motivation materialised in rather significant decisions that she took that same year. Shortly after Can Decreix, Iris returned to her family's country of origin, in Eastern Europe, for a 6 weeks' stay. Rather than staying in the nearby city as she had done on previous occasions, she went to her grandparents' countryside farmhouse, equipped only with '*very simple technology'*. She noted her changed disposition towards this place: '*Before Can Decreix [...]I really disliked going there',* whereas afterwards she sensed that it allowed for a '*very fulfilling'* lifestyle. She hence tried to apply and replicate various elements that she had learned in

Can Decreix, including washing dishes using several buckets, and '*taking care of all the creatures*', harvesting fruit and vegetables, and making jam, parts of which she attributed to knowledge passed on from her grandparents. Later that year, Iris joined an eco-community in Latin America, where she continues to live to this day.

4.2.3 b) Michelle: compromised attachments

By contrast, Michelle was one of the least convinced by Can Decreix amongst the group of volunteers. Her disposition demonstrates the extent to which an eco-commune life should be viewed as an extremely specific lifestyle choice, far exceeding a generic interest in environmental living or in climate change. In the following, I will consider her difficulties with 'attaching' to various parts of an eco-community lifestyle and with detaching from the 'mainstream', whilst simultaneously articulating contradictory values. Taken together, her experience in Can Decreix points to a co-constitutive but uneven shift in both values and affective dispositions, that seemed 'ambivalent, politically ambiguous and not always coherent' (Wilson and Anderson, 2020: 592).

Michelle was quick to point out her reservations about Can Decreix, starting with its relationship to '*society out there*': '*It is of course a bubble, and I find it super interesting to live such a* lifestyle*, but I think that most people wouldn't want to live like this. And I include myself in this.'* A life in an eco-community would 'necessarily occur at the expense of other possibilities' (Giraud, 2019: 172), including life within the 'societal norm'. While such a binary between 'within' and 'outside' the norm appears simplistic, it perhaps hints at fears of isolation, given the '[o]therness of intentional communities' (Sargisson, 2007: 403). Relatedly, Michelle was unique in her candour about her discomfort with some aspects of 'alternative culture', signalling her attachment to more

conventional lifestyles, noting that '*It's maybe [...] a little bit too alternative, so especially those* jam sessions *in the evening, and the* contact dance.*'*

Michelle also struggled to detach herself from common ideas around efficiency, particularly when confronted with 'frugal' (and slow) technologies such as the pedalling washing machine, noting that '*the idea of efficiency that is very deep inside of me, where I think, there has to be a way to make this faster [...]in my own day-to-day life I want to have more time for other things.*' Here, deeply internalised norms of efficiency and affective dispositions around (the value of) reproductive labour rendered attachments to practices of 'deceleration' difficult.

Finally, Michelle highlighted political doubts, that possibly co-constituted her affective struggles with Can Decreix. Particularly in the context of the Biannual Degrowth Conference in Malmö she attended later that summer, which offered more '*practical possibilities*', '*applicable to the broad mass*', she argued that Can Decreix was '*often thought too* narrow*'*, in ways that were incompatible with most of society, leading her to '*reflect for myself, how much is [...] individual responsibility and how much the responsibility of the system.'* This more structuralist thinking was in fact relatively common in many volunteers, who often viewed eco-communes as instances of 'individual behaviour change', unable to change 'social structures' (Kenis and Mathijs, 2012: 45; Fotopoulos, 2006).

Until now, I have construed a seemingly 'coherent' account of Michelle's reservations about Can Decreix, where affective attachments and particular sets of values align or are perhaps made to align to rationalise these reservations (see Gubrium and Holstein, 1998). This seems to highlight a mismatch between the values that degrowth promotes and her own attachments and cultural expectations towards speed, efficiency, hard work, and individualism. And yet, her time in Can Decreix brought about many smaller changes in Michelle's everyday practices: She ate

less salt, showered less often, started picking apples, grew some watercress on the windowsill, and ate more locally.

These practices were arguably indicative of the value shift that Michelle seemed to be going through, as she tried to find a way to square her previously held values and affective attachments with those encountered in Can Decreix. During our first interview, she explained: '*What I will take with me definitely is [...] taking more time, or rather, valuing [my time] more, to eat with friends, instead of being extra efficient [...]that I don't value my work as much, but maybe rather family, friends, perhaps a partnership.'* Some of these takeaways were precisely the things she had criticised about Can Decreix, which on balance seems to suggest an 'oscillation between forms of attachments and detachments' (Wilson and Anderson, 2020). They can also be read as attempts of square contradictory impulses, signalling a weakening of her attachment towards 'efficiency' and a 'regular' job along with a strengthening attachment towards a slower, more convivial lifestyle. The experience in Can Decreix did not fully break her attachment to these more common expectations, but simultaneously started off (or continued) an attachment to a different set of values and affective attachments.

That Michelle was struggling to combine these different priorities in a meaningful way was perhaps most apparent when she declared that she '*could imagine for myself a kind of flat share or collective [...] with people that I know well, somewhere in the countryside, to buy a house, and garden a bit, repair things yourself, buy furniture, that sort of thing, I could very well imagine a weakened version of this, but I think, properly an* ecovillage*, that is a little bit too alternative*', whilst simultaneously mentioning an interest in a career in political consulting in Berlin. As emphasised by Wilson and Anderson (2020: 592), it may be hard to fully 'detach from normative forms of the political world' (Berlant, 2011: 229). Instead, Michelle found herself with various 'compromised attachments' (Wilson and Anderson 2020: 593).

4.2.4 Summary so far

This section has highlighted the extent to which motivation is ever evolving, non-linear, and often unexpectedly sparked into being. It has also foregrounded that the intensification of affective experiences may explain a significant personal investment in sustainable lifestyles and post-capitalist ideas, in ways that presumably qualitatively differ in intensity (Bissell, 2009) from many others in society who may share (some of) their beliefs, but do not take action. As such, intensely experienced affects are achieved through repetition and cumulation of experiences, and the semi-deliberate process of cultivating embodied dispositions (see Mühlhoff, 2019).

Michelle's story also highlights the extent to which processes of attachments and detachments, while related, are distinct and may occur at different speeds and generate tensions and contradictions. They are therefore far from 'neat'. Motivation can therefore be understood to produce particular life course outcomes that 'cut' (Barad, 2003; Giraud, 2019) into biographies replete with other impulses, interests, desires and pressures. At the same time, I am stressing Michelle's 'incoherent' affects and values not as flaws, but to work against any account that reality 'should be a coherent account, a meticulous enumeration of direct and contributory causes' (Law, 2004a: 96). Rather as John Law has argued, 'coherence' can only be achieved in theory or, in a narrative (see Gubrium and Holstein, 1993). I have therefore tried to do justice to Michelle's motivational story by attempting to 'represent non-coherence and multiplicity' (Law, 2004a: 92).

4.3 Long-term inhabitants

This section is concerned with understanding the motivational trajectories of long-term residents in Calafou and Can Masdeu. I will explore the motivational narratives of Sebastián, a Spanish activist, historian, and Can Masdeu resident since 2005 and of Antonio, a Western European engineer who joined Calafou in 2017. Both men were in their early 40s, a typical age in both communities.

Sebastián has had thus far, I believe, a fairly common life course trajectory for long-term residents, sharing his activist background with many Spanish-born residents in both sites. By contrast, Antonio stands in for a more heterogeneous group of residents in both Calafou and Can Masdeu whose motivation to move to eco-communes was in response to the alienation they experienced with mainstream modes of living without (initially) relying on a capitalist critique or activism to make sense of them. While a relative minority, this group of people is perhaps most interesting to the general public, given the high proportion of today's workforce who believe that their jobs are not worthwhile (Graeber, 2018). Despite these differences in motivational trajectories, I will argue that moving to the eco-communes was in both cases motivated by a quest for a good life, that despite differing in conception, aligned well in practice. In the following, I will sketch Sebastián's and Antonio's very different backgrounds in life, before fleshing out a broad alignment of goals around convergent, though not identical notions of a good life and the avoidance of 'incoherence'.

4.3.1 Background

4.3.1 a) Sebastián: Immersion into the intensive milieus of social movements

Key to many participants' narration of their motivational journeys was the immersion into the 'intensive milieu' of social movements in Barcelona, which can be understood as another way of intensifying (or even sparking) affective (pre)dispositions (see Bissell, 2009). The intensive milieu in question comprised pacificist, student, anti-globalisation, and housing movements, in which Can Masdeu has been firmly embedded for two decades. Indeed, Barcelona in the early 2000s can be imagined as a rich tapestry of squats, social centres, marches, protests, and cooperatives: The period of 2001-2005 saw the emergence and consolidation of 35 squats in and around Barcelona, that increasingly merged with wider alter-globalisation movements (Debelle *et al.,* 2018: 65). Enzo, one of Can Masdeu's co-founders, accordingly remembered this period as '*sort of the height of the anti-globalisation movement, [...] there was a large network of squatted social centres. [...] Any night of the week you could go out, for a popular meal that would be cheap, the money going to support the local social movement and then the weekend, you had a choice of parties to go to*.'

More than providing opportunities for political expression, the intensity of social movements was such that they enabled an 'alternative' life altogether, which can tentatively be conceptualised as an 'intensive milieu' (from Angerer, 2017). This term is meant to capture the 'repeated, patterned interactions' (Diani and Mische, 2015: 308), characterised by a relatively high frequency, affective intensity (ibid.: 307), and 'ideological affinity' (ibid.: 309), *within* a physically concentrated socio-spatial setting (e.g., greater Barcelona). These aspects coalesced towards a 'coordinated formation of mutual affecting and being affected' and sustained a 'local sphere of affective intensity' and subsequently 'gave shape to characteristic affective relations and agentive routines' (Slaby, 2019: 109-110), which included direct action along with 'cultural' activities, such as parties or shared meals. I argue that within such a milieu many like-minded

people's life trajectories got bundled up, allowing for the (collective) *intensification* of ethical stances and affective dispositions.

Sebastián's introduction to social movements began, rather unusually, in his home city in the South of Spain, where '*we had the opportunity [...] to manage an occupied space, like a social centre [...]. And this for me was like a school. It was a place where I learnt a lot*.' Through a contact there, Sebastián also *'got to know Can Masdeu [...] The first time I went was for a party and then later, I participated in the first [...] summer work camps, that were very lovely*.' This arguably constituted a form of 'immersion', following a 'dense involvement of the subject in an interactive and inter-affective context that entangles thinking, feeling and acting' (Mühlhoff and Schütz, 2019: 231).

These processes of immersion were usually presented as the actualisation of particular affective predispositions (ibid.). As such, Sebastián had articulated a 'structure of feeling' around justice, that he linked to his parents, who were members of '*progressive Christian groups'*. He remembered: '*I believe that I have had a sensibility for justice [...]. I've had a tendency to react when I saw unjust situations from a young age onwards. My family is a bit like this, too. My parents aren't militant, but I believe that they have a strong sense of justice that they have transmitted*.' He therefore started to *'participate in those kinds of movements, since 14 or 15 years of age',* including in *'antimilitarist movements, solidarity movements with Latin America, the student movement.'*

Whilst Sebastián was comparatively young to make such experiences, this fitted with the 'spectrum' of affective predispositions towards activism mentioned by other residents. Several residents have highlighted either the militance of their parents or the values they had embodied and passed on, such as social justice or frugality. For others, this interest in social movements was apparently almost entirely 'virtual', i.e., not yet actualised (Sharpe, 2014). For instance, Umberto, also from the South of Spain, noted that he '*had an interest, and I wanted to, but I didn't*

find a space where I could work on this more. And here in Barcelona, there were many social movements, there was a lot of social dynamism on this level.' To varying extents, the encounter and subsequent immersion into the social movement milieu in Barcelona was narrated as catalysts for 'action' but also as a crucial 'crossroads' (Bagnoli and Ketokivi, 2009) for motivational journeys towards a life in eco-communities. Immersion, similar to the 'blur of experiences', was the consequence of a semi-deliberate movement between a 'potential to be immersed', and 'inter-affective and relational context' to 'unleash' this potential (Mühlhoff and Schütz, 2019: 231). Umberto, who came to study to Barcelona epitomised this, noting that activism '*appeared in my life, simply. Or like, it appeared, but I also searched it in some way.*'

What is notable here is the relative absence of 'affective witnessing' (Haraway, 2008; Richardson and Schankweiler, 2019) as *direct catalysts* for action, at least in Sebastián's narration, like Iris' love of nature or Michelle's epiphanous visit to a Shanghai sweatshop. Rather than requiring a direct exposure to a significant event or site in order to 'learn to be affected', immersion in social movements as intensive milieus appeared as a harbinger for 'caring at a distance' (Greenhough and Roe, 2010: 44; Bond, Thomas and Diprose, 2020: 759), enabling *ethical action* through a multiplicity of attachment and detachment possibilities within a particular spatio-temporal setting.

4.3.1 b) Antonio: Alienation from work and long-standing struggles to 'attach'

Antonio had ostensibly always struggled to 'attach' to a conventional workplace and its rhythms. After completing his studies in engineering and a two-year stint in the '*classical environment*' of a company, he ended up following his '*already [existing] desire to work in a bit of an alternative [environment]*', that is, a small company with just '*two or three*' employees in a highly specialised subfield related to archaeology. He worked there for 10 years, also writing a PhD thesis in this

context. Especially during a month-long '*countryside retreat'* – though he thought of this process as '*more of less progressive'* – gave him the time to '*question lots of subjects',* including *'the mode of living, the mode of working.*' He reflected especially on '*a rhythm of enterprise where you move from one thing to the next super quickly, that was something that I didn't like. The fact [...] of being hyper specialised [...] and not to have the time to develop other facets.'* These deliberations fit closely the Marxist diagnosis of alienation whereby 'workers sell their labour power and produce commodities for others and subsequently become separated from the outcome of their endeavours' (Chatterton and Pusey, 2020: 32), creating a 'relation of relationlessness' (Jaeggi, 2014: 25). Particularly pertinent to Antonio was his struggle with a 'highly specialised division of labour' (Burkitt, 2019: 215).

Antonio was not alone in finding it difficult to attach to regular work rhythms: Casandra in Can Masdeu, also a trained engineer, noted that she had '*a hard time finding my place in companies. I had jobs with responsibility, and very good salaries, but still, I was not at all happy, [....] I felt a loss of purpose',* echoing Jaeggi's (2014: 3) assessment of alienation as experiencing the world as 'insignificant and meaningless, rigidified or impoverished', 'that is not one's own'. Laura, a former long-term visitor in Can Decreix who ended up settling in a different intentional community, noted that '*being an assistant manager, I didn't see a future'*, with her work having led to an unhealthy lifestyle, unhappiness, and even injuries. While these two women were explicit about their unhappiness, a frequent consequence (Shantz, Alfes and Truss, 2014: 2356), Antonio mentioned that he had undergone '*therapy*', given that he would '*close up, do nothing, staring at a screen 7 days [a week], without wanting to speak to anyone*', another frequent facet of alienation (Jaeggi, 2014).

Antonio emphasised the *mismatch* between his hopes when he was younger and his current situation: '*It was therefore a question of becoming aware of the references that I had as an adolescent [...] did not correspond to the reality that I managed to build, that I needed to do a radical change on that level, to move myself closer to the essence of what was important for me.'* In Antonio's narrative, affective discontent

and particular detachments compelled him to formulate and subsequently live according to different ethics, with affects determining moral codes (Bennett, 2001: 131), further suggesting the generativity of refusals to attach to particular practices. Relatedly, Sargisson (2007) in her examination of intentional communities as utopian projects has highlighted the centrality of 'estrangement' to future residents' life trajectories. Importantly, detachments at this stage were seemingly unconnected to obvious political projects or clearly articulated political values.

These insights emerged rather slowly for Antonio and for a long time, he had had no space to 'actualise' such dispositions (Mühlhoff, 2019). He was subsequently looking for *'a way to use this energy, that I felt that I had for a long time and that I didn't manage to develop with the culture [...] and education that I had [...] to arrive at a place where I could put my energy in.'* The 'absence' of such places further demonstrates the efficaciousness of particular spatio-temporal configurations, most pertinently social movements, which veritably 'fast-tracked' the process of not only getting detached from more mainstream modes of living, but also of getting attached to (post-capitalist) alternatives.

4.3.2 Moving to the eco-community: The quest for a good life

4.3.2 a) Sebastián: From intensive milieu to a coherent life

How did an immersion in social movements facilitate moving to an eco-community? While some moved relatively quickly to Can Masdeu after an initial immersion into the milieu, I want to argue that for many residents, moving to an eco-community constituted a re-orientation towards a good and coherent life. Living in an eco-community allowed them to try and reconcile activism with other life goals and values. In this context, attachments and detachments evolved

and changed over time, and required some form of reconciliation, which was usually found in eco-community living.

This shift was usually made sense of in two ways that constructed continuity across their life course: First, Sebastián, like many others, understood moving to an eco-community as an evolution in the *types* of activism they were involved in - a move away from 'direct action' and the 'behind the scene mundane and repetitive day-today acts which produce and sustain' those actions (Lee, 2013: 27-28) and towards prefigurative practices (Maeckelbergh, 2011; Yates, 2015; Swain, 2019; Jeffrey and Dyson, 2020), which can be broadly defined as pursuing political change to build up alternative structures 'to build the world anew' (Maeckelbergh, 2011: 2). Sebastián explained that '*squatting seemed to me like a superior form of emancipation for me in those years. It was like a step I wanted to take, I was a bit tired of always, well, of being in meetings or assemblies, Mondays, Tuesdays, or Wednesdays. I wanted this to be my life.*' Over several years of involvement, Sebastián grew weary of the repetitiveness in particular of meetings to prepare for bigger actions (Polletta, 2002). Squatting as a form of prefigurative action enabled a different temporal orientation of activism: rather than 'doing' activism as one-off or regular acts, Sebastián sought to 'continuously enact [activism] in a whole lifestyle' (Lee, 2013: 27).

Others explicitly linked such a move to fatigue that emerged over time: Alba, joining Can Masdeu in 2014, after passionate involvement in direct action in a Northern European country, noted that she '*ran out of energy*', a frequently discussed dynamic (Brown and Pickerill, 2009; Jasper, 2011; Lee, 2013). Instead of abandoning activism, she therefore wanted to do something '*more positive and more like living [...] who I was, rather than like this occasional big, like, set-piece action.*' Can Masdeu, for her, gave '*people an example of how things can be different, a visible, tangible, visitable example.*' Direct action therefore lacked opportunities to prefigure a positive change for the

future, or put differently, did not provide enough room for 'attachments', which Can Masdeu, by contrast, was perceived to do.

In a similar dynamic, Ana Maria, one of several former squatters who had settled in Calafou, noted her increasing exhaustion with squatting, echoing Sebastián's concerns along with the difficulties associated with squatting[17] (see also Owens, 2009; Polanska, 2016): '*When they evict a house, you have to get out and demonstrate and every time there's people who are arrested – so later you have to do a judicial process and you have to support the arrested quite a lot [...]one of the reasons I am here [in Calafou] is because it is a stable home. [...]If everything goes well, we are going to stay here creating alternatives for a long time.'* As argued by Driscoll (2018: 700; see also Maynard, 2018), this switching between different types of activism constituted a form of dynamism, a continued interest to affect change in society, rather than an inconsistency or purely an exhaustion of energy.

Secondly, many brought up the notion of '*coherencia*' (coherence), that is, their desire to *live* according to their values. Yates (2015: 7) emphasises fittingly that this is often viewed as a form of 'political self-actualisation', a process that is 'intensely sociable' and stands in contrast with 'indulgent or escapist form of living', as residents try to influence those outside the community. In this vein, Sebastián noted that he was seeking '*a major politicisation of my life, no? [...] And squatting gave me an opportunity to do this more.*' This meant '*to live in a coherent manner with one's ideas, to be consistent with a way to see and understand life.'* Otherwise, he explained, he would not '*feel good*', and that he did not '*have a lot of capacity to support situations that I don't like [...]I have always tried to have links [vínculos] that were good for me.'* Umberto, echoed this, explaining that '*it makes you happier, if one is coherent, when you live a life closer to [...] your values in the day-to-day. [...] It makes me happier.*'

[17] Given the longevity of Can Masdeu, far surpassing that of most other squats in Barcelona, Sebastián (thus far) had not been confronted to the difficulties surrounding eviction. Ana Maria, like many others in Calafou, but also in Can Masdeu had been living in more short-lived squats and had been experienced evictions several times.

For Sebastián, the *'major politization'* he went through thanks to his involvement with social movements changed his affective dispositions to such an extent that he required a life coherent with his moral codes to *'feel good'*. This points to *coherencia* not simply as an ethical strategy, but also as a pathway to personal wellbeing and 'the good life'. Contrary to the emphasis on the value-action gap and cognitive dissonance that is often highlighted specifically with environmental issues (Kollmuss and Agyeman, 2002), here, in strict contradistinction, personal happiness could *only* be achieved by living in accordance to one's values. This arguably further underlines the affective potence of social movements in reshuffling attachments and detachments, with Ana Maria for instance highlighting that paying rent had previously '*created a dissatisfaction.'*

Nonetheless, this shift in political strategy implied that affective desires other than the wish to live ethically were at stake, pointing to a multiplicity of attachments crisscrossing through residents' lives. For instance, after graduating from university, Sebastián spent two years with rural communities and Zapatista activists in Latin America and subsequently one year doing climate activism in Northern Europe. After this, in 2005, aged 25 or 26, he '*decided to return to Spain, but I didn't want to return to my city [in the South of Spain], I wanted to be closer to Europe [...] and I wanted to return to Barcelona that was a city that seemed interesting to me and I knew Can Masdeu and I liked and was interested in the experience, no? In Can Masdeu.*' This signals a shift in focus, that is not only the result of 'ethical' decision-making but also more conventional life choices, such as the desire to 'settle down' after a period of travel and self-discovery. Thus, Sebastián attempted to reconciliate ethical decisions and broader life course decisions differently than he had done previously. This can also be read as a different spatio-temporal strategy of activism (Lee, 2013), which suited participants' *affective* dispositions better as they evolved over time.

Related to this desire for settling down, Sebastián also developed a preference for a more suburban lifestyle, with Sebastián remembering Can Masdeu's summer work camps as especially positive in comparison to his then home in the working-class neighbourhood of Sants in Barcelona that was '*completely surrounded by city*', '*with all the heat, and a sensation of oppression. And that summer I went to Can Masdeu to the work camps, and that was a really [...] lovely sensation, a very powerful sensation, of nature*.' Can Masdeu thus constituted a compromise between a more rural and/or alternative lifestyle while still allowing, through its proximity to the city, close contact to social movements, especially through the '*social part of the project, with the community gardens, the neighbours [of the quarter], with the social centre, with the visits for environmental education*.' He explained that he was not '*interested in living locked up in Can Masdeu, or not only, like maybe with other friends [compañeros], that are more interested in a life that is exclusively alterna-[tive], there, no? [...] I am interested in both worlds. That's why I like Can Masdeu because it allows me to live in the city and to live in a different way. The countryside, nature*.' Differently than some eco-communities studied in the literature that were more interested in living at a 'remove' from mainstream society (Vannini and Taggart, 2013b; J. Anderson, 2017), moving to Can Masdeu was seen as the convergence of multiple factors that were deemed important to a 'good life', that is, the right positioning between the vibrancy of Barcelona and the perceived rurality of Can Masdeu.

4.3.2 b) Antonio: A quest for alienation's other

Antonio subsequently addressed the 'incoherences' in his life in what I consider ultimately to be a quest for a *good life*: '*From the moment onwards that there was this conscience, I started doing little training courses, that have helped me to diversify, as much on an artistic level, as on the level of personal development, and rather than spending eight hours of my time at work, well, now it was four hours, and the rest was something else*.' He diversified his skills by focusing on glass and ceramics crafts, storytelling, programming, playing the accordion, therapy and a neighbourhood association, thereby dis-

alienating work and life (Firth, 2012; Kociatkiewicz, Kostera and Parker, 2020). After a long period of detachment and alienation from many aspects in his life, he was working towards a good life by experimenting with a plethora of practices to potentially attach to.

In particular, Antonio's quest for the good life seemed to map onto Rosa's (2017) conception of 'resonance', which he considers key to leading a 'good life'. Concretely, resonance signifies the 'dual movement of affection (something touches us from the outside) and emotion (we answer by giving a response and thus by establishing a connection)' that has a 'transformative quality' (ibid., 2017: 47). Interestingly, resonance is explicitly conceived as alienation's other (ibid.). While Rosa considers resonance 'elusive' and 'moment'-like, it is nonetheless usually found across a social axis of resonance through connections with other human beings, a material axis of resonance that 'we establish with certain objects' through skilled practice, and an existential one through religion, art, history, or nature (ibid.). These resonances arguably also worked to produce the flourishing and self-fulfilment that is often highlighted as key to 'eudaimonic happiness' (see Waterman, 1993), and that is in its contemporary versions conceptualised through for instance self-acceptance, positive relations with others, personal growth, purpose in life and autonomy (Ryff and Singer, 2008), all of which were important to Antonio's narration.

While Antonio went out of his way to 'diversify' and thereby making more diverse sources of resonance possible, resonant experiences that enabled his well-being and self-fulfilment also occurred more circumstantially, perhaps true to its somewhat 'elusive' character that Rosa highlights. As such, Antonio fondly remembered that '*every time I would go to an [archaeological site] for a month, when there was a group experience, it was an experience where I was hyper fulfilled [épanoui] every time.'* This arguably constituted a case of social and perhaps material 'resonance' (Rosa, 2017:

48). He therefore had a *'curiosity to experience this as a mode of life.'* In this sense, Antonio also assembled new values based on previous experiences which contributed to his wellbeing.

Furthermore, he found himself at the edge of the intensive milieu of social movements, which further erupted in 2011 with the 15M movement [18] (Díaz-Parra and Mena, 2015; Del Romero Renau and Lozano, 2016). This allowed for additional opportunities for attachments, in ways that ended up aligning with those who had more politicised understandings of the 'good life'. One experience in particular, when Antonio chanced upon an event with polyamorous, feminist, LGBT activist Brigitte Vasallo at a nearby squatted social centre (in 2015/2016), led him to a neighbourhood association (*ateneu*). The fact '*that I would be able to have access to this kind of debate merely by going down from my flat, that gave me goose bumps, that made me want to cry, I was super touched, super affected [ému], quite unsettled [bouleversé], [...] I felt in that moment a frontier.'* This epiphanous experience apparently constituted a form of enchantment, as understood by Bennett (2001: 159) as 'energising and unsettling attachment to life', or a particularly strong form of 'resonance'. As a result, he also started frequenting another social centre, though '*it was a lot more neutral, they paid rent, [...] there was not such a radical hard-hitting activism.'*

In this context, he found himself particularly enchanted by consensus decision-making processes in the *ateneu,* arguing '*what I liked best [...] was to see how, we started with very strong opinions, and progressively through the assembly [...] there was like a collective sensation of something we built together, a consensus, where there was a point at which to find each other. And this sensation [...] always fascinates me.'* Here, the process of being mutually affected and transformed by others (Rosa, 2017) resembles 'resonance', contributing to both personal wellbeing and stronger attachment to diverse ways of organising. Thus, as an antidote to being a 'stranger in a world that he himself [sic] has made'

[18] The 15-M or Indignados movement is an anti-austerity movement in Spain that started on May 15, 2011, following the financial crises of 2008-2014.

(Macintyre, 1953: 23), Antonio '*saw that I had found a place right away, [...] where to funnel my energy, that I had for a very long time, or that I did not know where to put or how to put.'* In this context, the quest for the good life took a particular spatial contour, a 'place of belonging,' facilitating moments of 'resonance' and longer-term attachments.

This process occurred in less than two years and culminated in Antonio moving to Calafou. This was partly a response to a pragmatic situation – his flat share split, and he therefore wanted to, after much reflection, leave Barcelona but stay in Catalonia. But Antonio also actively searched for alternative sites, with a friend alerting him to Calafou as a potentially '*good fit*', given that apart from consensus decision-making, there were '*programmers and [...] workshops*.' [19] The decision to move to Calafou was extremely rapid, with Antonio arriving *'without any advance visit. I came with my suitcases.'*

4.3.2 c) Which values? Which politics?

As has become apparent, Antonio's motivational drivers and conception of the 'good life' were rather different from and apparently less 'political' than Sebastián's. Antonio explicitly recognised these differences, noting that '*my personal background makes that I am not someone who is an activist, I am not someone who is politicised [...] I arrived directly here, [...] where there are people who have been rather radical for a rather long time*.' This made him initially worried that Calafou might be a place '*where the ideological or discursive part was more important than the practical part'*, given that he felt that '*discourses that are theoretical, I am not necessarily receptive to that*'. He found these worries to be unfounded, and instead deemed Calafou '*not at all dogmatic'* and '*very flexible'*.

[19] Unsurprisingly, the particularities of the sites also mattered, and in the case of Calafou, this usually was related to the more technology-oriented and workshop-based profile of the site, often linked to an explicit creation of alternative economic structures. While the agricultural gardens were particularly attractive to many who joined Can Masdeu, many of those who joined Calafou found it all the more suitable given its lack of agricultural projects. While very interesting, I unfortunately do not have space to elaborate on this further.

Instead of more '*ideological*' values, such as post-capitalism, he claimed '*self-organisation [auto-gestion], assembly-ism*[20] *and free culture*' for himself. This assessment is crucial for the understanding of his 'values' (as co-drivers of motivation) in two ways: First, while these values or at least their phrasing can be assumed to be the direct result of his engagement with the social centres in Barcelona, it also demonstrates the ways in which his desire to attach to different modes of living remarkably aligned with anarchist practice and values (as well as for instance Lefebvre's (1996) ideas on the right to the city), a point that allowed him to integrate well into Calafou's fabric. Anarchist and autonomous values are understood here as promoting the 'collective, egalitarian, and democratic self-management of everyday life' (Springer *et al.*, 2012: 1594). These values arguably appeared as a kind of unarticulated yearning or predisposition in Antonio's life, and found more potential for actualisation within the social centres he got involved in. As Springer *et al.* (2012) argue, anarchist thought and action is ubiquitous, yet subtle in contemporary society, and as such harbours the potential for 'autonomous affects' and desires to emerge. Indeed, Rhiannon Firth (2012: 90) closely links 'active desire', that is 'a desire for transformation, including self-transformation' (Karatzogianni and Robinson, 2009: 16), with 'autonomous praxis' along the lines of those found in eco-communities.

Secondly, underlying all the above tendencies is a quest for a 'good life' (e.g., Rosa and Henning, 2017; Fischetti, 2018; Steckermeier, 2021) and personal wellbeing. To some extent, the difference in explicitly articulated values can also be considered a question of narrative prioritisation (Gubrium and Holstein, 1998) with Antonio linking 'coherence' with personal wellbeing, while the other three seemed more (or more vocally) concerned with what Jaeggi (2016) calls the functional and moral critiques of capitalism in their narratives. For Jaeggi (2016:

[20] I translate asembléarisme here awkwardly as assembly-ism. Assemblearisme is a Catalan word to designate forms of organising in 'assemblies', usually governed by consensus decision making. Antonio adapted this in French to 'assembléarisme', an expression that is not in common usage.

47), a functional critique highlights the intrinsically dysfunctional and crisis-prone character of capitalism, whereas a moral critique highlights its exploitative and unjust features. Antonio, by contrast, emphasised a third criticism of capitalism, the 'ethical' argument, that is that 'a life shaped by capitalism is a bad (e.g., an alienated) life' (ibid.). Thus, rather than presenting a completely different value set as motivational factors, Antonio's engagement can perhaps best be seen as a more subtle form of resistance to capitalist values, or a 'gentle, everyday' form of activism (Horton and Kraftl, 2009).

While certainly converging with other anti-capitalist values, the prolonged process of his motivational journey from alienation to (the possibility of) 'the good life' in Calafou also raises questions about the efficaciousness of such values in co-producing motivation. Without 'difference' to attach to, it took Antonio many years to resolve the 'mismatch' between his affective disposition towards work and the values that he had hoped to embody as a teenager.

4.4 CONCLUSION

This chapter has examined four motivational journeys, based on an understanding of motivation as amalgamation of affective impulses and moral codes (after Bennett, 2001) in particular spatio-temporal contexts. As such, it has attempted to understand the 'how' of motivation by considering affective experiences and values and especially how these develop into enduring attachments to post-capitalist modes of living and detachments from more conventional, 'capitalist' ones, through processes of repetition and intensification.

In so doing, it has mapped out motivational journeys of affective intensification that pierce through life courses (Barad, 2003) and that eventually led to a life in an eco-community. Key to these processes of intensification of motivation was repetition – repeated exposures and/or

cultivations of affective relations – with other humans, non-human 'nature', sources of knowledge or audio-visual materials. These seemed to always contain an affective component – enchantment with or hope about 'different' ways of doing, or alienation from, indignation about, or horror regarding common ways of doing – as well as an ethical-political element, usually working in tandem but sometimes standing in tension with the affective component.

I have developed a vocabulary to describe the experiences that shaped residents or put differently, a set of affective categories that have (for the most part) generated *heightened* intensities (Bissell, 2009) and materialised motivation in action. These have included epiphanies as singular events that leave a lasting impression; relatively unspecific structures of feeling induced by specific experiences; immersion into a milieu that allows for the bundling-up of many individuals' attachment to 'difference' in a specific spatial setting; and an enduring sense of alienation that progressively builds up over time. Motivational trajectories were full of little motivating instances, so many in fact that my interviewees often struggled to remember them, amounting to a blur of everyday experiences.

I have highlighted the importance of attending to the spatio-temporal patterning of motivational experiences, where particular times – early adulthood (but as Antonio's story makes clear, not only) – and particular places – universities, squatted social centres – are of utmost importance. The same seemed to be case for the spatio-temporal patterns of motivation, with a high frequency of affective-ethical impulses producing an intensifying effect. This also goes to show how motivation is only partly the result of deliberate and rational decision-making by a sovereign subject that seeks to put values into practice, but rather a peculiar mix of cultivation of and exposure to particular experiences, and hence an overall 'distributed, relational process' (McCormack and Schwanen, 2011: 2801), that often defies a clear distinction between activity and passivity.

Importantly, motivational experiences can only be considered as such if they subsequently produce an effect, however loosely defined: Motivation must materialize in decisions, and 'cut' into life courses (Barad, 2003), a process of 'cutting off and foregoing possible futures through processes of actualization' (McCormack and Schwanen, 2011: 2909). It is here that the non-linearity and complexity of motivational trajectories emerged most clearly – motivational trajectories required 'booster shots', implying that for motivation to materialize in decisions, many affective impulses may have to accumulate. Motivational journeys also led to 'compromised' attachments, where particular experiences may lead a person to attach to a set of values whilst holding onto other sets of squarely contradictory values, and/or where values and affects do not coalesce. Michelle in this case valued both efficiency and deceleration – and on an affective level, struggled to feel comfortable while performing 'decelerated' practices. Motivation was therefore also enmeshed in other life course decisions, that cannot be readily identified as 'ethical', for instance Sebastián's desire to settle down after travelling extensively or Antonio's wish to remain in Catalonia. Motivational journeys were sometimes also stagnant, containing periods of detachment without attachment to difference along with latent dispositions, and without the adequate space-times to actualise or materialise such motivation, as became apparent in Antonio's story.

Relatedly, participants generally sought coherence in their life choices, since incoherence often felt highly uncomfortable to them and was perceived to lead to unhappiness. Both Sebastián and Antonio articulated a strong desire for coherence between their values and their everyday lived reality, to enable personal well-being, e.g., a set of positive affective relations with the people, practices, and places around them. Ethical action and a desire to live a 'good life' therefore coalesced together, with the former impossible without the latter, although these were continuously renegotiated and realized differently over time. In my view, this is a highly

significant insight, given that many in society at large live 'incoherently' – that is their professed values and actions do not necessarily align (see Kollmuss and Agyeman, 2002) – and generally do not take drastic action like the interviewees in this thesis. This chapter therefore provides useful counter examples of how motivation is generated that go beyond the often-cited knowledge-action gap (ibid.). One key difference between the eco-community residents and the wider public is arguably the affective intensity with which incoherence and coherence as well as attachments and detachments to particular modes of living are felt, but also the particular spatio-temporal settings in which individuals find themselves and which gives them an opportunity to attach to difference (see Antonio's story).

Incoherence and coherence were also important in understanding the motivational journeys as *narrated*. As narrators, the interviewees attempted to construct a (reasonably) coherent account of how they ended up in eco-communities, possibly including elements that were expected in this context, for instance, a love of nature, and perhaps leaving out more disconcerting elements, such as intrusive thoughts about oil. Narrating a motivational story implied a significant amount of narrative editing (Gubrium and Holstein, 1998) on their part, in which I as interviewer participated, as an attempt to make sense of a wealth of experiences that constituted each person's life course. Nonetheless, the four participants were sometimes unsure of how one thing led to another, which events, materials, or people were pivotal, and which values they felt they adhered to. Writing this chapter, I, too, have engaged in a substantive amount of 'piecing together', of assembling a somewhat coherent story. This also has important methodological implications, to which I will come back in this thesis' conclusion. But with John Law (2004a), I hope that the dazzlingly diverse and frequently incoherent, circumstantial, and contingent components that make up motivation shine through.

5. COMPOSING POST-CAPITALIST WORLDS: REPAIRING PRECARIOUS INFRASTRUCTURES AS MORE-THAN-HUMAN COMMONING

5.1 INTRODUCTION

This chapter considers what composing post-capitalist practices might look like in practice. It is the first of three chapters that focuses explicitly on the eco-communities themselves as spatio-temporal settings for post-capitalist transformation. To this end, it examines dynamics of (more-than-human) commoning, which has been hailed as a key strategy of transformation towards post-capitalism (Chatterton and Pusey, 2020; Chatterton, 2016; Gibson-Graham, Cameron and Healy, 2013; 2016; Grear and Bollier, 2020), and which has been only sparingly examined in the context of eco-communities (excepting Pickerill 2016a; Esteves, 2017). Furthermore, I read commoning practices – through the lens of Latour's Compositionist Manifesto (2010) – as a particular way of composing post-capitalist futures. I have chosen infrastructural repair and maintenance work as its empirical focus (see also De Angelis, 2014; Udall, 2019), as this emerged as one of the most ubiquitous and time-consuming activities in all three sites.

Studying infrastructural commoning processes is significant given the increasingly prominent decay of infrastructure (in the Global North), accompanied by an ever-greater risk of infrastructural disruption and relatedly, a necessity for more sustainable and resilient infrastructures. These issues have ignited a stronger academic interest in infrastructures (e.g., Graham, 2010; McFarlane and Silver, 2017; Schwanen and Nixon, 2019; Wakefield, 2018), with many authors conceptualising infrastructures as processual, socio-ecological configurations

(Schwanen and Nixon, 2019: 148; Star, 1999), taking into account the liveliness of materials that constitute them. The shortcomings of 'modernist' infrastructures in particular reveal flawed ideas about hubristic human mastery over nature (Wakefield, 2018: 4). Similarly, whilst maintenance and repair have been crucial and to some extent 'integrated into market economies' (Schmid, 2019b: 246), they have largely been taken for granted (Graham and Thrift, 2007: 17; Udall, 2019: 276). However, the possibility of repair has largely been discouraged or made impossible, for example through planned and perceived obsolescence, with significant environmental consequences. This emphasis on infrastructural repair also sits well with a general concern with infrastructure in the long history of squatting movements (Debelle *et al.*, 2018), and housing struggles in Catalonia (Morell, 2012; García-Lamarca, 2017).

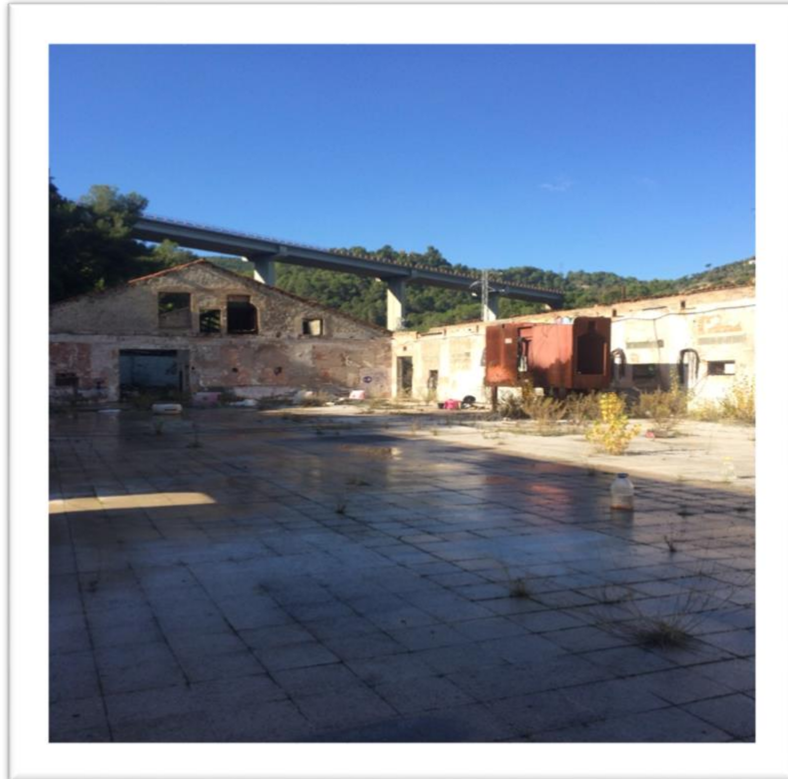
This chapter aims to contribute to a nascent body of literature that considers the more-than-human dimensions of commoning practices (Bresnihan, 2016; Singh, 2017; Nightingale, 2019; Gibson-Graham, Cameron and Healy, 2013; 2016 – see Chapter 2.2.3) and emphasises the importance of affective relations and skilled practices to these processes. Thanks to this attention, I am able to sketch potentialities and difficulties that arose around commoning as a particular form of post-capitalist composing. I also highlight alternatives to more-than-human commoning that emerged on site. In so doing, this chapter also adds to more-than-human and non-representational geographies more broadly by stressing the importance of a range of affective relations, including indifference and boredom, that can threaten the commons along with or instead of outside pressures of enclosure as is often highlighted. More generally speaking, this chapter enriches literatures on eco-communities by examining in depth material everyday practices and their more-than-human constituents that have thus far received only limited attention (see Chapter 2.2.1).

In the following, I will emphasise the importance of practices of 'making do' as the dominant commoning style in the three sites. This involved making do *with ruins* as a form of commoning in a world already shared with other beings (Bresnihan, 2016) (5.2), as well as *with one's surroundings* (5.3). Relatedly, this also implied making do *with limited skillsets*, using techniques of 'learning to be affected' (Latour, 2004a; Greenhough, 2014) by non-human liveliness (5.4). However, these processes of more-than-human commoning were often fraught with ambivalences and tensions. In this context, some practices arguably constituted forms of 'uncommoning', demonstrating qualitatively different modes of composing post-capitalist worlds (5.5). Finally, I consider the ways in which commoning processes may not only be co-constituted by non-humans but may actively be beneficial to non-humans on site, even when detrimental to humans. (5.6) I conclude by examining the potential of commoning as a mode of post-capitalist composing (5.7).

5.2 MAKING DO (1): BUILDING COMMONS IN RUINS

In contrast to many eco-homes or communities that have been built from scratch (see Pickerill, 2017), residents in all three communities chose to make derelict or abandoned buildings habitable and usable: Can Decreix was a former farmhouse, Calafou a former textile colony, and Can Masdeu functioned as a leper colony until the 1950s. Rehabilitating and living in those precarious sites required enacting a fruitful 'afterlife' of industrial ruins (Tsing, 2015: 18). Calafou reflected the now frequently alluded to idea of 'generativity in ruins' best, given its partially structurally unsafe infrastructure (see Fig 5.1) and its immediate proximity to one of the most polluted rivers in Europe, the Anoia, rendering agriculture quasi-impossible and bathing unadvisable. Whilst making for 'messed up' and 'hard' (Berlant, 2016: 395) living, this post-apocalyptic element was largely embraced by inhabitants, with Beatriz, one of Calafou's residents explaining that '*this idea that we are a laboratory for ways of living in the ruins of capitalism – for*

me, this is the driving idea,' even as the site's contamination made her doubt her decision to move there.



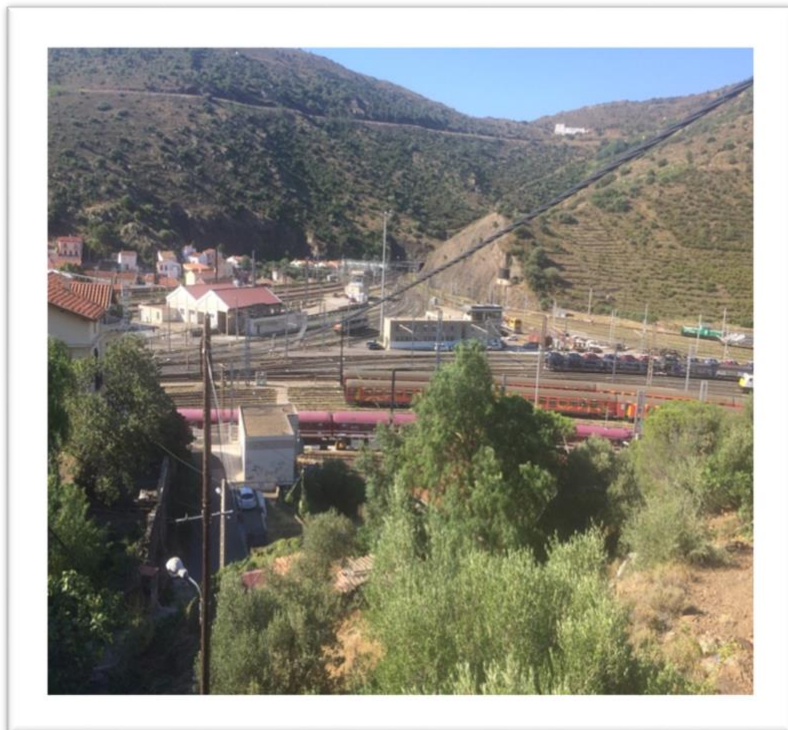


Figure 5.1: Structurally unsafe building in Calafou, with motorway behind. Source: Author
Figure 5.2: View onto the train station from Can Decreix. Source: Author

To a lesser extent, the other two sites also implied infrastructural abandonment in the face of modern progress (Wakefield, 2018), that is, away from an agricultural economy (Can Decreix), and towards improvements in medicine (Can Masdeu). Here, the economic exchange value of the places had ostensibly faded, whilst other uses and values were being reclaimed (DeSilvey and Edensor, 2013: 475). In all three sites, further negative or ambiguous externalities of modern capitalist progress were deliberately chosen to *make do* with, and served as omnipresent, negative affective reminders of the system they were working against. This was the case for the polluted and frequently audible river, the contaminated soil and water, and a noisy motorway bridge in Calafou; the steep, difficult terrain, and the gigantic, noisy border train station (see Figure 5.2 above) below Can Decreix, chosen over possible seaside views in Cerbère's touristic, though declining village centre, and finally, the initial (and still vaguely present) threat of eviction and the strong light pollution emanating from the city of Barcelona, lighting Can Masdeu up in an eerie orange at night.

These processes of more-than-human commoning occurred despite different property relations – Can Masdeu was squatted, Calafou was building up a housing cooperative after following a let-to-buy scheme and Can Decreix was the private property of the main inhabitant Luc and his brother, commoning not necessarily relying on a particular type of property (see Gibson-Graham, Cameron and Healy, 2016: 195). Rather, they emerged *through* the rehabilitation of derelict buildings, which was also initially the most time- and labour-intensive activity. Adrián, one of the original squatters, explained that in Can Masdeu: '*All the windows were broken, there was no plumbing […] there was no water. So, we had to carry water up from the city, uh, we had to – charge down stuff [electronics] down in town, […] we had to saw wood by hand […]. Most of the house was covered in [...] unbelievable amounts of dust, because it's been empty for 50 years.*' As a result, he did '*just about everything*' around the house, '*whether it was painting […] putting in wood stoves, putting in chimneys. Eventually we*

did get electric, and lighting; a lot of our work was just in trying to figure out a water system.' Here, the squatters seemed to have followed a 'modest ontology of mending and repair', which Vasudevan (2015: 325) has described in his context of his research on squats in Berlin.

This kind of intensive repair required residents to put in *'long work weeks'* consisting of *'12-14-hour days, sometimes 7 days a week. But it was also […] that we enjoyed working on, at least most of us. [...] So, it was […] kind of workaholic environment, but also really fun to just be doing what you wanted to do'* (Adrián). This labour occurred despite the eviction risk in Can Masdeu, highlighting how a 'radical [...] commons' (Vasudevan, 2015: 325) was literally brought about through repair and active labour – the importance of which was emphasised on Can Masdeu's website: '*The active custodianship of this suburban territory is exercised by the collectives'* which remain *'viscerally convinced that the land belongs to those that work it'* (Canmasdeu.net, no date b). The importance of repair was similarly stressed in Calafou, with Joaquín, a Brazilian who moved into Calafou at the start, '*I saw clearly that Calafou would not exist if we didn't work hard.'*

Moreover, those unwilling or unable to commit to the repair work necessary for making the place inhabitable were filtered out. In this sense, the capability to 'learn how to be affected' (Latour, 2004a; Greenhough, 2014) was a crucial condition to participate in the commoning experiment. Adrián clarified that in Can Masdeu, '*there had been 200 people living in the house, so there was a big turnover of people, it was kinda intense life […] we had artisty people sort of show up, who weren't workers, and they didn't last long, you know. We kinda like, tried to get rid of them, because there's a lot of work.'* Fernando, an early inhabitant of Calafou, similarly suggested that the *ongoing* capability to put up with decaying infrastructures and conceiving of them as potentialities was key to living in Calafou: '*the people […] who can continue to bear living [aguantar] in Calafou for a long time, I believe they have a positivist [sic] vision of the space, […] who don't see the difficulties but [rather] the potentialities.*'

These instances of repair drawing in humans motivated to build a post-capitalist space can be understood as a form of 'being in common' (Nancy, 1991), thanks to the 'exposure to an unassimilated exteriority' (Clark, 2011: 159), in this case, ruinous buildings, and a 'recombinant ecology' (Barker, 2000; Hinchliffe and Whatmore, 2006) of numerous agents, such as 'moisture, bacteria, chemicals, rodents, birds, wind' (DeSilvey and Edensor, 2013: 477). The community that therefore emerged was less centred on a common identity (artists with a similar political background were filtered out) but emerged through the active engagement with materials during infrastructural repair. As has been argued, the role of community formation in this way is indispensable to commoning whilst co-constitutively developing through commoning processes (Gudeman, 2001: 27, see also Huron, 2015).

Finally, even short-term visitors were regularly bound up in repair and rehabilitation practices (see Figure 5.3), that were still ongoing after many years. They were thereby temporarily included in the commoning-community, through the sharing of collective responsibilities, for

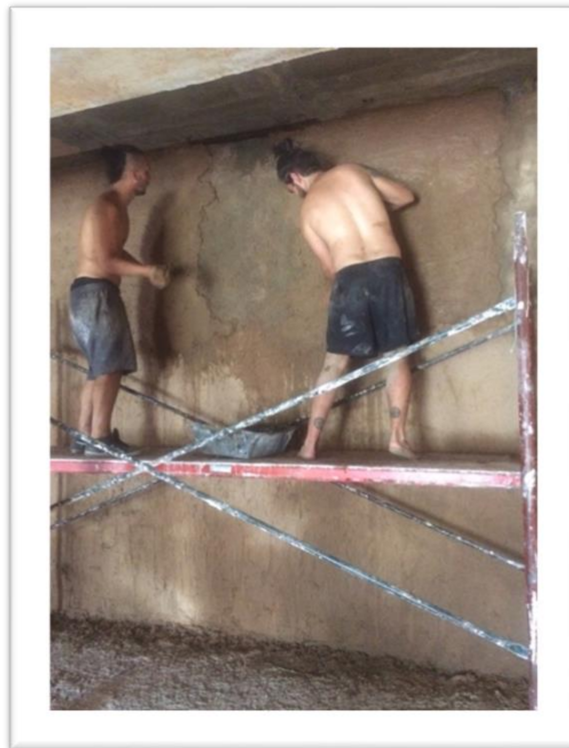


Figure 5.3: Visitors applying clay to a wall in Calafou's guest house. Source: Author

instance through practices of bioconstruction. This was also explicitly understood by visitors as *'working towards a new way of interacting with each other and with the planet'* (Hugo, a visitor).

5.3 MAKING DO (2): WITH SURROUNDINGS

'Making do' also implied relying on materials within or immediately surrounding the localities. If much of capitalist production has focused on producing homogenised products that are new and quickly disposable and discarded when they fail to correspond to human expectations, 'making do' repair practices emphasised improvisation and tentativeness, along with a commitment to limiting oneself to what was immediately located around a human settlement. This corresponded to an orientation towards the already-existing, though that did not mean an uncritical return to whatever was before (see Graziano and Trogal, 2019). Instead, it typically involved alteration, which in turn invited 'a reflection around what kinds of actions and what kind of generative co-operations can be imagined for political change, without relying upon the myth of ex-nihilo creation' (ibid.: 214). This was most obvious with ecological masonry or

Figure 5.4: Scene of indoor bioconstruction. Source: Author

bioconstruction, which meant mixing sand, water, and clay and sometimes straw, lime and stones of various sizes (see Figure 5.4). Ecological masonry avoided the significant CO_2 emissions that come with constructing with conventional materials, most prominently cement, which is responsible for 8% of global CO_2 emissions (Chatham House, 2018). As Alba explained to a group of visiting children in Can Masdeu, bioconstruction generally involved '*resources that you can obtain from nature, from your surroundings, for instance, there is a forest, so wood.*' In its renunciation of far-away or resource-intensive materials, making do can be understood as a way of planetary commoning (Gibson-Graham, Cameron and Healy, 2016; Metzger, 2016), holding together both the needs of far-away humans and non-humans and the specific sites' requirements.

This was a form of commoning that operated by 'noticing' (Tsing, 2015) which non-humans in one's surroundings might be suited for composing commons on site: Michelle in Can Decreix told me that the stones she used for bioconstruction were '*left and right of the path […] we just picked them, [...] first [we] looked if they fit together, and then the filling material [paste] and then put them together nicely, and that was a very meditative work, where you just sit there, on your knees.'* By noticing the shapes, size, and properties of stones 'lying around' and subsequently assembling them, making do practices implied a highly improvisatory mode of composing with and actively adapting to non-humans on site.

Making do went hand in hand with scripting, the deliberate investment of materials (and practices) with moral and political capacities (Marres, 2013: 423) as apparent in the prefixes 'bio' or 'ecological'. Iris explained why this type of masonry should be considered ecological: '*And ecological one [masonry], it means you have to use lime, sand and we […] added some clay, and we would just take that from the ground.*' Through this, particular materials were 'purposefully equipped' with 'normative capacities', a process which Noortje Marres (2013: 423) calls experimental political

ontology, contributing to a distinctly material engagement, which at the same time is normatively variable (ibid.: 435).

Making do therefore also implied a tendency to accept the 'flaws' in the materials, perceived here as lacking 'smooth and opaque surface[s]' (Carr and Gibson, 2016: 304), although the notion that this was undesirable was challenged. Adrián in Can Masdeu underlined the differences with how 'professionals' go about repair work, highlighting the extent to which making do reconfigured standards of repair work: '*Professionals are using new materials because it's easier to work with, so there's a lot of stuff […] that is actually more difficult than what a professional would do. Which is taking something that is used, like this piece of wood, and rebuilding this table, that is not the original piece of wood. And I really like that because even if you can see the screw holes […] there's a good aspect which is that you are not doing as much damage to the planet, because you're not throwing away old materials and you're using old materials to make something new*.' These practices were scripted as '*not doing so much damage to the planet*', which in turn impacted the affective relation with the material itself ('*I really like that*'). The inscription of specific materials with moral and political capacities as well as making do with second-hand wood created the possibility for a reconfiguration of what infrastructural repair entailed, and a mode of commoning with the already existing.

To facilitate making do repair practices, residents resorted to hoarding and collecting various items (see also Carr and Gibson, 2016: 304). In the case of stairs, walls and paths, stones or clay were found in areas surrounding the sites; however, other types of repair work were only possible when previously 'stuff of yet-unclear purpose' was stored somewhere. All three sites had spaces crammed with various materials for future use or experimentation (see Figure 5.5). On a first tour of Can Masdeu, Diego complained, as we walked past semi-derelict sheds crammed with materials, that there was '*so much stuff, too much stuff*' (Field Notes 24/06/2018).

Figure 5.5: a) Storage space for unused wood in Calafou (left); b) tarpaulins and other coverings in Can Masdeu (right). Source: Author

Collecting and enabling the re-use, repair, and reconfiguration of objects was explicitly sought after in Can Decreix, rather than just emerging as a by-product of material deterioration: Eva noted that: '*In the first year, almost every Sunday [we were] going to […] a big flea market, over there in Perpignan […] coming back with a bicycle with a carrito [little wagon], and sometimes like, full-full, especially tools, and some point, […] in our desire to be tool-sufficient, I think we overdid it a bit. Or some things were really useful, but on the other hand, we were just like accumulating things that could be useful one day.*' Precisely this kind of accumulation allowed Isabel, a recent addition to Calafou, to repair her flat by

simply '*recycling everything there is. Calafou has a lot of material and a lot of things. So, everything that I see, it seems lovely to me to do something else [with it].'*

Collecting also enabled more 're-configurative' repair practices, where both form and function of objects were altered (Sennett, 2012). As a flamboyant example, Raúl built himself a 'fanjo', a banjo made out of a fan (see Figure 5.6), that he found behind '*a space with some, --free wood, when you climb over all the wood, there's a room with broken electrical appliances as well, that's where I got the fan.'*

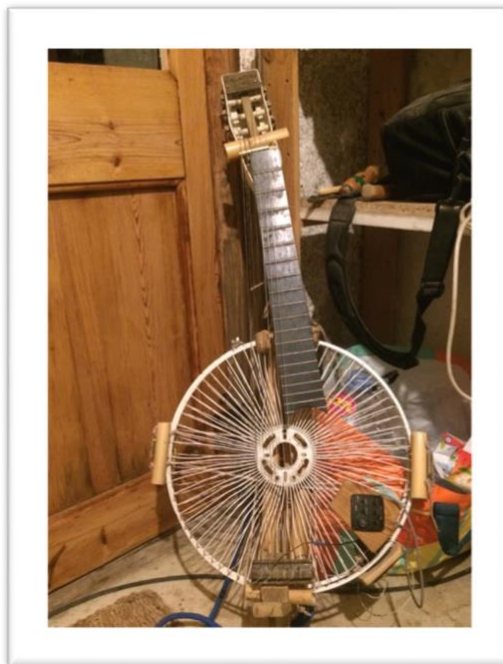


Figure 5.6: Raúl's fanjo. Source: Author

Furthermore, much time was spent ordering and sorting 'stuff' of potential use for future collaborations. For instance, in Calafou, when Antonio and I started rehabilitating a space to be used as a future ceramics workshop, we first spent a week sifting through left-over, decaying materials, including '*all sorts of plastic, damp carton, bits of equipment, a bit of clothing, ashes, rests of electronics, cups, a spoon, an oxidised knife, etc. A lot of is putrefied and mouldy,* [...] *some clothes, a big green coat, an inflatable mattress, fishing gear*.' We cleaned an old, rusty locker, that was immediately put to use next to the bathroom. We carefully recycled plastics at a plastic recycling station,

differentiating between different kinds. We also washed the coat and mattress and put it in the 'free shop', an institution that existed in all three communities (Field Notes 6/11/2018).

This commitment to 'making do' revealed a different understanding of infrastructural relations – as more iterative and repetitive, requiring frequent intervention, as life cycles that demanded intervention and reconfiguration. Repair in this vein can therefore be considered one temporal instant in which the life cycles of humans and walls, staircases, buildings, things intersected and 'clashed', demanding a response. It involved working-with rhythms of deterioration, rather than unthinkingly discarding any parts that no longer fulfil their purpose or indeed discarding potential non-human collaborators despite the lack of any obvious signs of breakdown. Incorporating different stages of material life cycles, that is, spaces for production and/or collection and accumulation, use, re-use, recycling, repair, decay, and deterioration, in one place, also transformed the order of infrastructural commoning practices.

In short, commoning as making do with a variety of local infrastructures and materials implied an attention to 'multiple temporalities at work, including those of the more-than-human world' (Gibson-Graham, Cameron and Healy, 2016: 209). It meant a mode of composing (and perhaps over-composing!) that took into account *potential* future needs as well as those of the planetary commons.

5.4 MAKING DO WITH SKILLSETS (3): AS APPRENTICESHIP

'Making do' can thirdly be understood as making do with particular skillsets, with skills understood as 'social and material practice, distributed across bodies and contexts' (Price and Hawkins, 2018: 9). Making do with skillsets is therefore closely linked to ideas of DIY (Do-it-yourself) or DIW (Do-It-With) (Vannini and Taggart, 2015: 123). This also implied that repair

and maintenance practices were distributed widely, rather than being the 'exclusive domain of dedicated occupations that are in charge of the supervision and repair of things', with a clear 'boundary between occupational communities and users' (Denis and Pontille, 2017: 13) as is arguably typical in modern capitalist societies. Here, 'fragility and vulnerability' of precarious materials that are made do with were generally 'a shared concern' (ibid.: 14; see also De Laet and Mol, 2000), with everyone expected to contribute to their repair and maintenance. Functionality was the main goal, rather than 'performing stabilised, clearly identifiable objects for users' (Denis and Pontille, 2017: 15), with a corresponding focus on standardisation, flawlessness, and smoothness.

Making do with skillsets meant slow, tentative work and was characterised by open-endedness, uncertainty, and flexibility with regards to process and methods. It was a way of 'learning to be affected' (Latour, 2004a; Greenhough, 2014) by non-humans, with which humans build common spaces with. In this sense, it can be considered an apprenticeship in more-than-human commoning, a process that is both affective and deeply embodied (Singh, 2017; Nightingale, 2019). Making do with limited skillsets was also often a communal undertaking (see also Vannini and Taggert, 2015: 128), especially with unexperienced repairers and volunteers, with more experienced humans demonstrating ways of attuning oneself to the materials. Repair work thus functioned as a way of 'connecting things together (materials, ideas, or both) to make something new' (ibid.: 129) as well as with other people (Gauntlett, 2012: 2).

My own experience with repairing walls epitomised this slow, uncertain work. I, generally awkwardly, attempted to apply bio-paste mass to walls and fitting stones and paste into holes in walls and staircases, using a 'mosaic' technique. By making do with my own (as of yet, limited) capabilities, I let myself be schooled by non-human collaborators in the process, attuning myself to bio-paste and the walls, as well as more experienced humans. Tentatively, albeit not very

successfully, I began to learn about 'the realm of possibilities that are afforded by its [sic] particular properties' (Carr and Gibson, 2016: 303). With repetition, I managed to slightly improve my capability to 'flexibly respond to the material's contingent qualities and to improvise in making adjustments' (Edensor, 2020: 260), particularly through touch. This also meant gaining an embodied understanding of the recalcitrance and resistances of materials when co-composing common infrastructure together, which oftentimes worked against my design intentions and created 'uneven' outcomes:

'*The trick is to really hit it onto the wall, to then spread it, it's necessary to use a tool to even the wall out, but it is a bit hard for me. Alejandro shows me how to do it, explaining that the side of the tool shouldn't be parallel to the wall, but slightly tilted. Quite a few people are doing this.*' (Field Notes 02/08/2018)

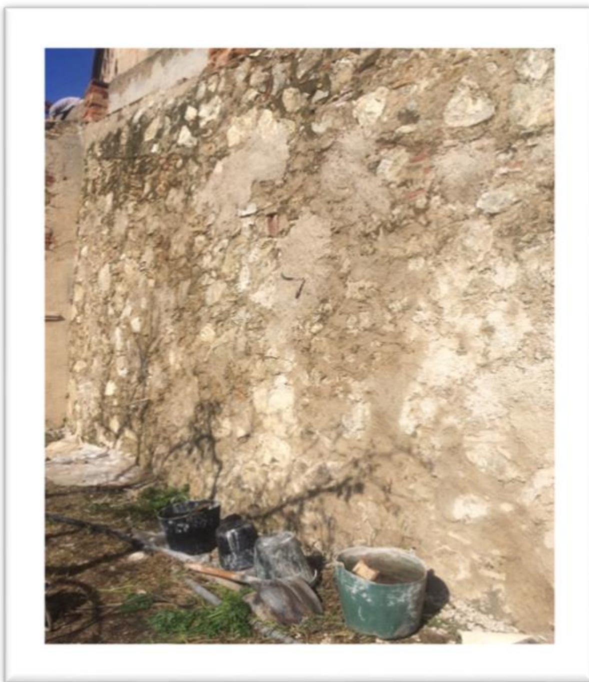


Figure 5.7: Uneven repair in Can Masdeu. Source: Author

'*I am never quite sure how much mass exactly to put on the wall, but over time, I start to get a little bit of a feel for it, hitting the paste hard against the wall. Still, I feel like my paste looks not quite as good as those of others. Overall, it looks quite uneven.*' (Field Notes 25/10/2018, see Figure 5.7).

Unsurprisingly, these processes of familiarisation were fraught with errors and moments of 'failure', with non-human would-be collaborators pushing back and 'resisting the way [they are] being handled' (Carr and Gibson, 2016: 303). To me, those moments felt somewhat

embarrassing; generally, they were greeted with laughter: '*Often, a lot of paste falls down to the ground, and sometimes whole bits just fall off. Sometimes this is accompanied by laughter*' (Field Notes 25/10/2018).

However, those who conceived of moments of 'failure', given their own limited skillsets, in positive terms seemed to be able to improve their ability to common with materials. Pauline, a volunteer at Can Decreix, explained to me that she had learnt that *'it doesn't have to be perfect. And you can experiment a lot and just dare to do it. When you haven't done so much construction, you don't really know how to do it, and it seems harder than it really is. […] I don't enjoy doing things if I have to do a very specific way of doing it, [...] because then, I'm just like, nervous about that it's not gonna be right, instead of like, if […] it's ok that it's not perfect, then you're gonna enjoy the process.'* Pauline had gained a greater sense of enjoyment from the fact that non-humans might surprise her, taking on board a 'more productive view of the concepts of failure, error, and adjustment, where these are considered vital to the process of making, rather than obstacles to be overcome' (Carr and Gibson, 2016: 303). This also encouraged her 'creative autonomy', including enjoying the 'imperfections' (Edensor, 2020: 270) of her work. These insights can also be seen as an alignment of embodied affective dispositions with presumably previously existing socio-political convictions – of the importance of re-use, limited resource consumption, independence from capitalist modes of production, maintenance, and repair.

Importantly, this signified a relation in which non-humans were controlled less. Infrastructural repair therefore consisted of a co-composition of humans and non-humans, rather than a design imposition from the former onto the latter, with materials appearing more flexible and changeable with increasing levels of familiarity (Paton, 2013: 1077). As Russell Hitchings (2006: 378) has concluded in the case of gardeners, newcomers such as myself seemed 'more habituated into trying to efficiently orchestrate categories of material culture', whereas for those

(in this case, only slightly) more experienced, materials 'were allowed to persuade people into a more enjoyable experience of non-human agencies' (ibid.).

Those who increasingly 'succeeded' at being affected by – or learning to common with – non-humans unsurprisingly seemed to rely less on other humans to repair common spaces. Instead, they noticed a sense empowerment and confidence in their capability to co-shape their commons with non-humans. David in Calafou noted that after a period of asking others to do things for or with him, he noticed that his attitude had changed towards:

> D: '*More than knowing how to do things, it was, like, I already saw myself being able to do a thing, you know?*
>
> *E: Before knowing how to do it?*
>
> *D: [...] Before knowing how to do it. My predisposition was very different […] more than anything, when you are insecure about doing something, you are going more slowly. […] The probability of error is much higher […] when you grab the power, well, then, [...] you can get [still] things wrong, obviously, exactly the same thing can happen as before, but the attitude behind it is very different, no?'*

This notion of *empowerment* resonates with original Spinozist proposition of affect as 'power to affect and be affected' (Singh, 2017: 758-9), when 'striving for associations that enhance our capacity to act and give us joy' (ibid.: 759). Becoming part of new, frequent collaborations with precarious materials was thus perceived as an enhanced 'power of acting', beneficial not only to the wider commons but also to the formation of autonomous eco-communities, reliant less on capitalist modes of infrastructure and repair.

While relatively 'unskilled' newcomers were learning to be affected by non-humans with which they make do, visiting craftspeople were also confronted with a different 'regime of maintenance' (Denis and Pontille, 2017). Axel, a Scandinavian restoration carpenter who temporarily stayed with his lover in Can Masdeu, appeared to be used to a regime of maintenance in which repair and maintenance work was the domain of specialised workers such

as himself, efficiently and flawlessly working with virgin materials. When Axel helped Enzo repair a rotting wooden porch behind his little house, with repair and skillsets 'commoned', Axel expressed rather ambivalent feelings about collaborating with an almond tree, that was just '*lying up behind the social centre*', with lots of '*ruddy parts'*, that he '*doesn't like'.* Consequently, '*we're not working very efficiently, we're working slow [sic]- I'm smoking a lot of cigarettes, and talking and drinking a lot of tea, and – I like it. […] But there's not the right tools [sic], there's not the right wood, – it's always second-hand, reused wood, and that just makes the whole process half as fast.'*

He further noted, when telling me about a brick porch that he experimented with, that this reparation style, *'leaves me a big freedom, because then I can do – less good work [...] and then people will [still] come and say, wow, this is very beautiful […] Here I got the chance [...]to just try it out. And if it goes wrong, then I re-do it.'* This professed sense of freedom stood in contrast to his regular work, where both getting paid for his work and him being '*too proud*' would stand in the way of possibilities of failure and the freedom that comes with it. His previous work as a carpenter, necessarily customer-oriented within a capitalist economy, was presumably uninterested in challenging specific infrastructural relations or in exploring ways of commoning with non-humans. Making do with limited skillsets was therefore often a joyful and affirmative experience of commoning with other-than-human materials, creating new and more 'equal' relations between humans and non-humans, and improving interhuman dynamics through common work.

5.5 A WIDER SPECTRUM OF MODES OF COMPOSING BEYOND COMMONING

However, this was not the case for everyone. Differential skillsets, interests, and experiences made these processes of learning more-than-human commoning sometimes unequal and

conflictual, especially when considering different levels of previous experience that made making do with their own skillsets easier for some than others. This seemed to reveal the uneven and partial character of processes of more-than-human commoning. In the following section, I will highlight three ways in which commoning as making do repair practices were partially undone and contested, demonstrating its limitations and ambivalences. I will use the categories for 'negotiations' in the commons used by Gibson-Graham, Cameron and Healy (2016: 195), that is access, use, benefit, care, and responsibility (see Chapter 2.2.2 for more detail), to point out how partial 'un-commonings' occurred on site. Instead, a wider range of modes of composing infrastructural relations emerged, demonstrating a wider array of ways of composing infrastructural relations

5.5.1 Interhuman power-dynamics

First, the sense of empowerment described above by David is perhaps best understood in ambivalent terms, with power and by extension empowerment both a 'productive force that produces the power to act or to relate' and 'power over' (Nightingale, 2019: 18) other humans, who did not necessarily share this sense of empowerment, nor the same levels of capability, dexterity, and experience around infrastructural repair. If (more-than-human) commoning as 'learning to be affected' was a skillset to be acquired, then some were clearly more talented, experienced, and interested in this than others. This led to some interesting and potentially conflictual interhuman dynamics: Whilst usually inhabitants in Can Masdeu rotated yearly between different commissions, Enzo's expertise in infrastructural repair was valued to the point of him becoming a permanent (non-rotating) member of the infrastructural commission. In this capacity, he ended up initiating and contributing disproportionately to various infrastructural projects on site, including a small brewery (see Chapter 6), an additional compost toilet and his own, Hobbit-style one-bedroom house. Commoning as infrastructural repair was

thus not equally distributed amongst the community and instead had led to a specialisation of tasks, along with apparently, informal hierarchies (Pusey, 2010: 187).

Those who had learnt to be affected by non-humans therefore seemed more able or willing to imagine additional infrastructures and projects. Their capability to collaborate with non-humans seemed to fuel their desire for further post-capitalist transformations on an infrastructural level. Raúl, the fanjo builder, for instance, imagined that a structurally unsafe tunnel should be torn down and replaced with a staircase leading to the upper levels of the space, where the housing block was located. He noted that the tunnel '*demands being torn down. To some degree. Some of the – can be saved but will deteriorate if it doesn't get attention now.*'

By contrast, many other inhabitants were significantly less involved in infrastructural projects on site, and in that sense, composed less with non-humans. Particularly in Can Masdeu, which after many years had rehabilitated most spaces, interest in infrastructural repair had apparently faded and was often relegated to volunteers, commission members or those with specialist backgrounds, like carpenters. This is not to suggest that those less interested or skilled in infrastructural repair had no capacity to (co-)shape the spaces they lived in, and some did so by focusing on interhuman relations and activism. But it nonetheless demonstrates fundamental inequalities and problematic interhuman power dynamics, whereby 'care' and 'responsibility' were unequally distributed, with potential ramifications for who and what got to benefit from these commoning processes.

These inequalities in people's ability and willingness to common with non-humans had often created tensions and frustrations: Enzo in Can Masdeu had also spearheaded, along with Josefa, an architect and member of the infrastructure commission, building a ramp (see Figure 5.8) to enable disabled access for the social centre. When I asked Enzo about their progress in January 2019, he noted that *'it's been difficult […] The house is not being very helpful.'* This points to *indifference* that some apparently feel towards infrastructural improvements.

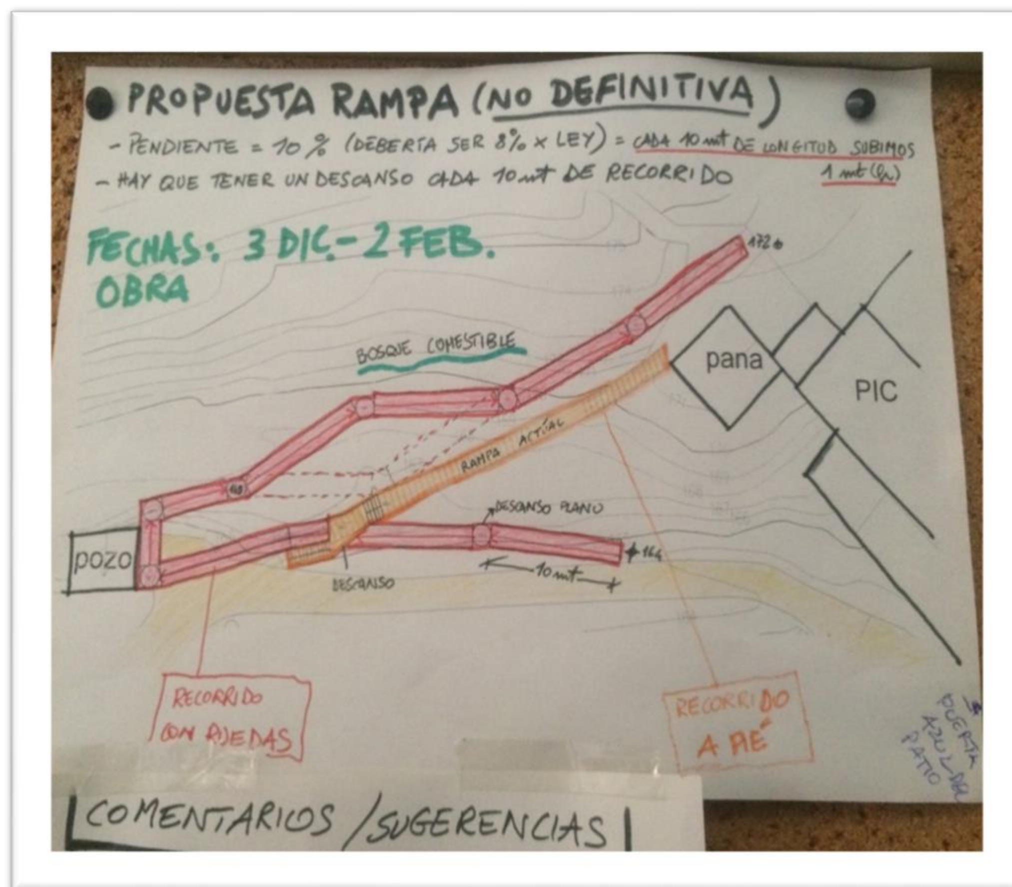


Figure 5.8: A non-definitive proposal for the ramp. Source: Author

This dynamic towards disinterest differs quite starkly from descriptions of repair work in Can Masdeu at the beginning, that revealed a rather intense 'being in common' (Nancy, 1991), further highlighting more-than-human commoning as 'partial, transitory becoming, one which needs to be (re)performed to remain stable over time and space' (Nightingale, 2019: 16). This also stands in contrast with the often 'enchanted' descriptions of manual labour in geographies

of practice (see Paton, 2013; Brook, 2012). Specifically, neither the labour of maintaining and improving the infrastructural commons was kept up as a collective activity, nor was there a widespread interest in enabling the widest access possible. These unequal capabilities and levels of interest to compose with non-humans in repair and maintenance work subsequently translated into inequalities and tensions within interhuman groups. These tendencies can be understood as partial 'un-commonings' (ibid.), following Gibson-Graham, Cameron and Healy's (2016: 195) criteria, with considerations to share 'access' and 'benefits' more widely to Can Masdeu as a site de-prioritised, while 'care' and 'responsibility' were allocated unevenly.

Such inequalities also led to conflict. Fernando in Calafou pointed out that those '*who did not have these capacities, or this know-how need much more time, it takes much more out of them, and in some way also, this has created differences, between us, and has also created a lot of polemics and a lot of conflict.'* To some extent these tensions and inequalities cemented familiar inequalities, including gender inequalities: Most of the more skilled members, though not all, were men, which at least in Can Decreix had led to one example of a particularly exclusionary infrastructure in the shape of a pee toilet, that could only be used standing up, which proved difficult to use for women (see also Pickerill, 2015a). Only when a greater number of female volunteers arrived in Can Decreix, the design was made more inclusive.

5.5.2 Towards increased stabilization of relations

This increased disinterest in maintaining infrastructural commons also led to the increased uptake of practices that sought to counter-act these features, somewhat resembling a more 'capitalist' regime of maintenance (Denis and Pontille, 2017), characterised by an increased interest in infrastructural obduracy and more unequally distributed practices of care, responsibility, and benefits (Gibson-Graham, Cameron and Healy, 2016: 195).

This manifested through the hiring or inviting professionals to stabilise infrastructural relations more durably. In Can Masdeu, *'the last […] 3 or 4 years, we've been hiring people to work with us. And even then, we'd never hire them to work for us, we hire them to work with us' (Adrián).* Similarly, Can Decreix inquired on their website after people with specific skillsets, for instance, engineers or those with experience in building irrigation systems or compost toilets to come and help (see degrowth.net; Field Notes 10/07/2018). Increasingly, tasks involving the maintenance and improvement of common infrastructural spaces were relegated to outside experts, rather than collectively commoning and 'learning to get affected' by non-humans, although as Adrián's comments highlighted, it continued to be important to 'work-with' these professionals.

Furthermore, in some situations, *making do* did not seem like a practical choice, for instance because of safety concerns and the (lacking) durability of sustainable infrastructures, in which case less sustainable materials with different affordances (Edensor, 2020; Paton, 2013) were introduced. On one occasion, a small stone house in Can Decreix was retrofitted into a small bedroom (see Figure 5.9).

Figure 5.9: Working with cement in Can Decreix. Source: Author

However, '*the walls were uneven and full of holes. Luc, Alfonso, a Catalan visitor, and I therefore set out to collect stones in close proximity to the little house […] We prepared a bio-mixture to fix the stones together –it was then that Luc suggested that a little bit of cement should be added to this paste. Alfonso immediately expressed his opposition to adding cement. Luc insisted – it was 'only a little bit' of cement that would be added and furthermore, it was more important that the stones were stable and did not crush anyone (in their sleep!). After some discussion, Luc ended up adding some cement to the mixture*' (Field Notes 10/07/2018).

Here, adding cement to the composition of a common world proved a contentious point, where the normative variability (Marres, 2013) of the material strongly came to the fore. This further highlights the ways in which commoning was not a straightforward decision, with the cement harming (rather than benefiting) the planetary commons, but directly improving Can Decreix's infrastructural stock. Luc's decision can be seen to be more in line with a 'precautionary pragmatism' (see Callon, Lascoumes and Barthe, 2009) – rather than making do commoning – prioritising the endurance of infrastructural relations and human safety over sustainability. While breakdown has often been highlighted as the instigator of new solutions (Barry, 2020; Graham and Thrift, 2007: 6), the anticipation of breakdown can similarly be viewed as a different means of engaging with the vitality of non-humans involved. This anticipatory logic of 'precaution' meant that the intervention occurred 'after the identification of a threat, before the irreversibility of the threatened damage' in a 'named possible future' (Anderson, 2010: 792).

Interestingly, Luc was able to seamlessly align different repair styles, sometimes more in line with making do commoning, and sometimes more indicative of a precautionary pragmatism. This ability to (thoughtfully) move along the spectrum from interventions more or less benefitting the planetary commons speaks to an enhanced and situational understanding of how the propensities of different materials might work together and the effects they might engender (breakdown, decay, etc.). Here, Luc felt able to discern whether infrastructural repair that would

respect at each turn the planetary commons was indeed the most appropriate response (see also Nightingale, 2014).

At the same time, his response still implied a limited willingness to co-compose with the non-humans around him. With this instant of 'precautionary pragmatism' a particular power relation was imposed onto non-humans, that points to questions of who or what actively composes the commons. If modern infrastructure has been conceived of as 'projects of mastery and order' (Wakefield, 2018: 4) over the passive playing field of nature, it is worth attending to the extent to which these patterns of imposition are being replicated. Compared to making do practices, the precautionary pragmatism here undoubtedly entailed a greater 'imposition' of order and stability during practices of infrastructural commoning, with humans determining the collaborative process more strongly. However, the hesitations, debates, and use of several repair techniques at the same time speak to a flexibility and reflexivity regarding potential styles of composing with non-humans.

Through the introduction of both professionals and more durable – albeit less sustainable – materials, infrastructure was made a (more) durable and stable background to everyday doings. This involved a different understanding of the temporalities and futures of infrastructural repair, which sought to reduce the amount of labour put into them over time whilst prioritising human safety. As such, there was a tendency to accord lower priority to the planetary commons (Gibson-Graham, Cameron and Healy, 2016: 195) along with qualitative change in the way future infrastructural repair practices were imagined, that is, with a view towards decreasing the frequency of these practices. This may seem common-sensical but in fact coexisted in the communities with tendencies that were almost diametrically opposed to this more imposing mode of composing.

5.5.3 *Towards (resigned) acceptance of unstable infrastructural relations*

Indeed, disinterest and impatience because of unequal capabilities and desires to repair motivated rather different modes of composing with slowly decaying infrastructure. In the first instant, this ostensibly led to many 'quick fixes', particularly in Can Masdeu, where Enzo complained that others wanted to '*do things as quickly as possible, and that it doesn't matter how it looks or where the products come from – they have been having these same debates about how much time to invest in such tasks for 16 years and they don't get to get resolved. He says, 'we often do things many times badly'* (Field Notes 3/10/2018). He made these comments while replacing '*a shade on a little platform, that was previously covered in a blue plastic shade. He says, it is ugly, and plastic and doesn't work well and isn't very ecological. Instead, he is placing a shade out of local canyas [Catalan for reeds – see Figure 5.9], tied together tightly, on it, which he says, looks much more beautiful. The canya is also locally produced.'*

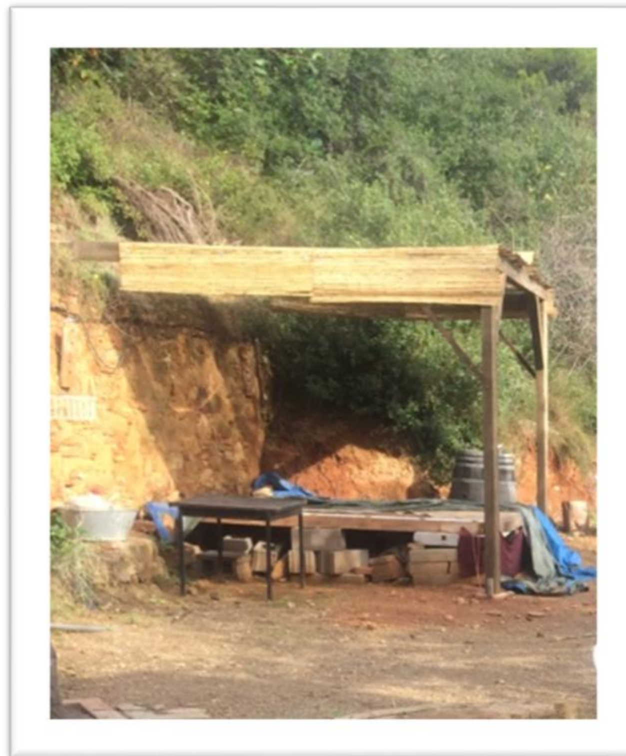


Figure 5.10: The improved platform with blue plastic shade on the ground. Source: Author

Contrary to what has been described in some of the literature, many inhabitants in Can Masdeu did not always take the opportunity to 're-integrate [themselves] into the material fabric of the world' (Brook, 2012: 109) nor did they gain 'ethical-environmental knowledge' from these encounters (Coeckelbergh, 2015: 201).

Following this description, 'quick fixes' as a repair style cannot be strictly understood as (more-than-human) commoning, given the relative lack of 'embodied caring labour' (Singh, 2017: 753) towards the infrastructure on site as well as the planetary commons. Following Gibson-Graham, Cameron and Healy (2016: 195), the 'care' and 'responsibility' for the commons was here only executed in limited ways, with only partial 'benefits' to the community itself.

Axel, the restoration carpenter, similarly complained that '*people in Can Masdeu want me to look at the windows […] I said, we need 2 people for 1 month to fit these holes in the windows, every day, and then they looked at me, but […] we just want a fast fix […] and I wanted to fix it so it lasts the next 30 years, but it's always just fix it - so it's good for next spring.*' This conduct can perhaps be understood as a form of 'commoning fatigue', that emerged through frequent, undesirable, and repetitive 'making do' practices. As the opposite of Luc's decision to ensure stability by adding cement, here resignation and indifference towards materials seemed to motivate quick fixes with limited consideration for longer-term stability. Thus, affective responses towards non-humans ceased to match the putative moral-political beliefs of inhabitants (see also Chapter 7).

The types of infrastructural relations implicit in these 'quick fixes' constitute a form of impassive reactivity towards infrastructural decay and breakdown, anticipating and resignedly accepting a somewhat repetitive future (see Anderson, 2010), requiring frequent and uninteresting interventions that are no longer conceived of as politically scripted (Marres, 2013). In this sense, the processual, iterative character of repair was taken for granted, but worked-with in only

limited ways. Infrastructural futures were therefore neither anticipated as potential threats nor treated as a ground of possibility for more-than-human commoning in creative ways, but conceived of as repetitive, disinterested engagements.

Perhaps most interestingly in this context, both the experience of making do practices and the quick fixes above ended up subverting norms of reparability. During my interview with Adrián, the following insight emerged:

> *E: because when you say, DIY, that means constant repair, sort of, or?*
> *A: well, I mean, constant. A lot of times we just accept the fact that things are somewhat broken, like this stool over here, it's just broken – doesn't really matter to me.'*

Here, Adrián introduced the concept of reparability, that is, questioning whether and in which ways repair was necessary. This stands in contrast with many cases outlined above, where the object of repair was usually uncontested, with the 'content or direction of repair activities […] taken for granted and made in response to straightforward breakdowns' (Henke, 2019: 258). As Henke argues, repair work 'emerges from a negotiated order of materiality and human activity' (ibid.: 259), that in this case questioned the 'perception of a *need* for repair' (ibid.: 258). Axel's frustration about the lack of interest in durably repairing windows, as well as Enzo's annoyance at the plastic cover can therefore be read as contesting visions of what is deemed worthy of repair or improvement and of how 'stable', long-lasting, or sustainable, and how intensely and frequently reworked infrastructural commons around the house should be. Ultimately, the tensions and contradictions that emerged from different affective encounters with materials formed the basis of negotiations about how repair practices can be composed in more post-capitalist ways.

Repair practices were therefore fraught with multiple tensions, including the iterative character of DIY repair (and the moral and political inscription of particular materials and techniques),

the frequency and speed of it, along with the different affective relations this engendered, including enchantment, empowerment, frustration, and indifference. Paying attention to these inequalities and 'uncommoning' tendencies can be instructive in thinking about 'where' and 'when' (Nightingale, 2014) more-than-human commoning makes sense, how commoning practices may slowly unravel over time (see more on this in Chapter 7), and when they might or should be replaced with other ways of doing. Understanding commoning on a spectrum avoids clear-cut dichotomisations between commoning and enclosing (knowledge, spaces, materials) and allows to foreground the ways in which commoning practices are always fraught with tensions and inequalities that may sometimes warrant different modes of composing.

5.6 MAKING DO (4): COMMONING THAT BENEFITS NON-HUMAN 'INTRUDERS' ON SITE?

While the previous sections have focused on how more-than-human relations have *co-constituted* processes of commoning, this section will examine the extent to which such processes may actively *benefit* non-humans, even if they are in the way of human design intentions. Making do despite non-human 'intruders' can be considered a fourth type of these practices, a way of commoning that weighs up the potential benefits of different configurations for both human and non-human constituents. In this context, making do required inhabitants to be attentive to the 'multiple temporal rhythms' of infrastructures as well as plants and animals. As perhaps the best example of this form of making do, Iris (see Chapter 4), explained in the context of ecological masonry:

> I: '*when you see this little corner there, it was very unstable, because a lot of rocks were underneath, close to the tree, so we fixed this whole corner.*
> *E: so, you had to do it here because of the tree, what happened below and upstairs?*

I: its roots, because it's ecological, these plants grow, and they just break it over time, the stones aren't stable, because it's made of sand and lime. Also, it's normal, corrosion, also when people walk on it, also the wind and the rain [see Figure 5.11].'

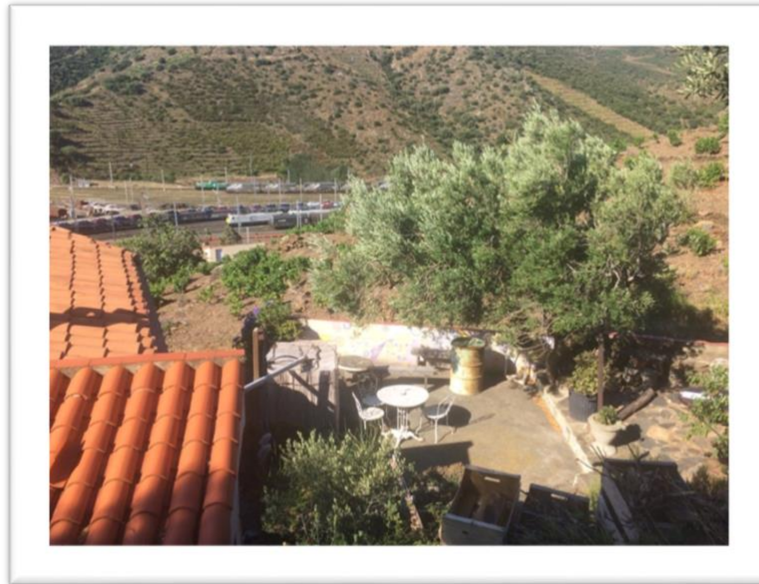


Figure 5.11. The olive tree in question, from above. Source: Author

Iris' explanation seems to suggest a non-instrumental ethics of living with plants (Hall, 2011), implying a form of 'commoning' that weighs up the benefits to humans and to other species when these stand in a tension. This is a type of commoning that does not straightforwardly exclude disruptive non-humans or indeed violently eradicate nonhuman collaborators when they get in the way of human design intentions. In this context, Iris avoided seeing 'nature as a passive field for human endeavour' that is 'available for its owners remaking as they see fit' (Plumwood, 2002: 26). Instead, she acknowledged that humans reside in a world that is already shared and may be beneficial to non-humans whilst being in the way of human design intentions. Arguably, Iris' approach to making do commoning makes for a particularly 'respectful' (Hall, 2011: 160) way of commoning and can be considered a case of 'radical inclusion and care' which might work against the reductionisms and objectifications present in modern capitalist systems (Grear, 2020: 354). This also stands in contrast with Bresnihan's (2016) conceptualisation and empirical example of more-than-human commoning, which has

focused on *mutually* beneficial relations between humans and non-humans, and more specifically, on fishermen who have ensured lobster life cycles and population levels only to kill them afterwards.

This style of commoning was, however, far from being all-pervasive. In Can Masdeu, for instance, the starting point for repairing the outside wall was not making do with unruly weeds and overgrowth, but rather removing them all as a precautionary measure or a kind of precautionary pragmatism (see above). The necessity of this intervention did not seem to be up to debate, at least I did not make any mention of it (Field Notes 1/11/2018). Here, weeds appeared only as a nuisance to human plans, as antagonistic disruptors to be taken care of. Joaquín in Calafou similarly told me about the initial repair and cleaning work: '*We had to weed everywhere, getting rid of all the fleas […], of dirt of all types that you can imagine.'* Next to weeds, fleas were unsurprisingly not co-composed with. While it is unclear how exactly they got rid of them or if there was any discussion over how to do so, it points to the exclusionary character of composing with some 'pesky non-humans' (Beisel, 2010) unsuited to certain commoning configurations, and to the 'ambiguities of everyday living with particular awkward creatures' (Ginn, Beisel and Barua, 2016: 114). In both contexts, it seems rather foreseeable that these critters were not composed with. Many instances of infrastructural repair have indeed been understood as deeply antagonistic, endeavouring to rid ruinous spaces of a 'recombinant ecology' (Barker, 2000), that has long become the 'host to a range of colonising species, both animal and vegetal' (DeSilvey and Edensor, 2012: 477), as well as working against a variety of agencies, such as the weather that 'assail[s]' buildings (Edensor, 2020: 141). These compositions of common worlds create (violent) exclusions to some degree (Ostrom, 1990), based on, in this case, unresolvable antagonistic relations with disruptive non-humans.

This was, however, not solely a question of humans getting along with some species, but not with others, nor is it the case that such exclusions occurred without discussion. The gardens in Can Masdeu had increasingly become fenced, thereby literally engaging in acts of enclosure, to protect them from wild boars that would regularly intrude the gardens, dig up, or eat vegetables or look for worms below ground. Daniel, a gardener, argued that this was '*an intervention that is minimal. I am not contaminating by not letting the wild boars enter, I'm only putting up a limit.'* And Sebastián, another long-term resident, noted that it was important '*that the wild boars, that their life, does not clash with our life, no? Basically, with our gardens, no*?' This highlights a different ethics that is based less on sharing and commoning space, but rather on separating and respecting boundaries. Despite the decision not to common with many wild boars in this context (and share for instance vegetable produce), and to enclose space, the exclusion of wild boars, a species 'big like us' (Hird, 2010: 36), generated some unease. Who belonged and who did to the particular commons was in this scenario – differently from fleas and weeds – a point up for political debate. This was arguably a form of 'staying with the trouble' (Haraway, 2016), of attending to the difficulties of composing in a world replete with contradictory needs of a motley crew of beings, including humans and boars. The different mode of composing that was adopted here was founded on a relatively respectful separation of human and wild boar lives, a separation that was for instance much less invasive than the slug killings that took place to enable the vegetal flourishing in the gardens described by Franklin Ginn (2014). Non-human disruptors were here treated in highly contextual ways, which draws attention to the 'normative choices about which humans, non-humans and socio-natural relations to attend to' (Nightingale, 2019: 31). This critical examination of practices that do not common to the benefit of 'disruptive' non-humans is not meant to discredit them. Importantly, such exclusions tended not to occur unthinkingly, but emerged as situated responses, in which humans reflected further on the ways in which to compose worlds.

5.7 CONCLUSION

This chapter has critically explored commoning processes around infrastructural repair and maintenance as one key and often championed mode of composing post-capitalist worlds. It has paid particular attention to the role of more-than-human affective relations in enabling or hindering efforts to common. In this context, it has highlighted the centrality of making do practices to post-capitalist attempts at composing infrastructural repair, that is, as making do with ruins, with one's immediate surroundings or recycled materials and limited skillsets, and finally, as a way of sharing spaces with disruptive non-humans if necessary. Making do practices can broadly be understood as a key commoning technique around infrastructural repair, given that it is characterised by a high level of consideration for the planetary commons, shared and widely distributed regimes care and responsibility as well as access to and benefits from infrastructures on sites. These practices enabled a reframing of material vulnerability as 'not something to be avoided or […] dismissed, but as something to think more responsibly' (Callén and Sánchez Criado, 2015: 34). It seems to avoid 'capitalist obsessions with consumption and innovation, on things that are supposed to stay stainless and flawless' (Denis and Pontille 2017: 13), with repair discouraged or made impossible and repair and maintenance skills lost with time. Instead, making do enables a 'modest and empowered position, based on the daily participation in the care of people and things' (ibid.: 16).

Crucial to enabling making do practices are 'positive' affective relations with non-human collaborators, by which humans need to 'learn to be affected' (Latour, 2004a; Greenhough, 2014), accompanied by politically relevant 'scripts' (Marres, 2013), that help shape these commoning encounters. This, however, is a process fraught with ambiguities and difficulties. While much recent work has concentrated on enchantment, flow and empowerment that humans experience through more-than-human collaborations (e.g. Bennett, 2001; Brook, 2012;

Coeckelbergh, 2015), this chapter has highlighted a wider array of affective relations, including boredom, indifference and disinterest. In this sense, this chapter works against what some have criticised as 'feel-good materialisms' (Last, 2017: 73), perhaps pointing instead to variegated geographies of fatigue, boredom, and indifference in post-capitalist world-buildings.

Paying attention to these 'negative' affects is important since they not only led to interhuman power inequalities and tensions, but also impacted the ways in which repair was conducted, including ways that moved beyond commoning. Such modes of more-than-human composing included on the one hand an increased 'stabilisation' of infrastructural relations through introducing external professionals or unsustainable materials, thereby subtracting from the global commons or from a shared and equally distributed responsibility towards the commons. At the same time, attempting to 'stabilise' relations in this way ensured greater durability and implied less frequent interventions. On the other hand, they also consisted of quick fixes that lacked in care and attention towards both the infrastructural commons on site and the planetary commons. These tendencies also emphasise that processes of un-commoning do not only occur as a result of external threats of enclosure, as is often highlighted, but may also be the result of the disinterest and boredom that commoning practices generate.

Whilst the importance of commoning has been highlighted in work interested in post-capitalist transitions, this chapter makes the more nuanced claim that commoning can perhaps best be seen as one specific, although generally promising mode of composing post-capitalist worlds. Crucially, there may be other modes of composing post-capitalist worlds that may be more suitable in specific contexts, as I have shown several times above. In light of the impracticalities of making do commoning, in particular the demands it makes on time and labour as well as the disinterest and boredom it generates in some, commoning with regards to repair may not always be commendable. Viewing these limitations, it is worth asking what emerges, what is lost, and

what may be gained, in various modes of more-than-human modes of composing, including but not limited to commoning.

6. Transformation in and beyond eco-communities: Attaching wider publics to diverse economic practices

6.1 Introduction

This chapter is about (post-capitalist) economic practices and how they were configured in the three field sites and spread more widely beyond them. Moving on from the variegated space-times of motivation in Chapter 4, and the composing practices mainly on site in Chapter 5, this chapter considers how eco-communities attempt to contribute to wider post-capitalist transformative processes beyond the sites themselves. As such, it is concerned with the spatial junction of the eco-communities and more geographically distributed publics that encounter the former.

In this context, I pay particular attention to the ways a broader array of humans was attracted to post-capitalist economic practices, and how in turn, their enrolment shaped more-than-human collaborations during production and consumption processes. I base my understanding of the economic on Gibson-Graham' work (2006; 2008) and their emphasis on 'reading for difference'. More specifically, I build on Callon, Méadel and Rabeharisoa's (2002) 'economy of qualities' and its guiding mechanisms of singularisation and attachment (see 2.3.4) to address how consumers are drawn into participating in *particular* economic practices, or why into some, but not others (McFall, Cochoy and Deville, 2017: 9). Drawing out the specific strategies employed to attach a wider array of humans to economic practices is important because it enables insight into how more people become amenable to some rather than other post-

capitalist ways of doing the economy. In so doing, I am seeking to (modestly) evaluate these practices' transformative strategies, understood here as the potential for 'broad-based paradigm change', including a 'recalibration and re-imagination of economic, political and social institutions beyond accumulation and growth' (Schmid and Smith, 2020: 254). In this context, I consider in particular Chatterton and Pusey's (2020) three terrains of post-capitalist transformation (see Chapter 2.3.2). This also helps sharpen previous work on the wider impact of eco-communities (see Chapter 2.31) by clarifying towards what they are meant to contribute.

Empirically, I have chosen agriculture and beer brewing as examples of economic reconfigurations because agricultural activities featured heavily in Can Masdeu and Can Decreix, whilst individuals in both Can Masdeu and Calafou brewed beer. These activities seemed to me emblematic of activities occurring in diverse economic sites, perhaps because they easily qualify as 'socially useful production' (Chatterton and Pusey, 2020: 32), that is, 'forms of production and reproduction that create non-commodified forms of social goods', 'based on actual material needs.' By closely tracing beer brewing and gardening practices in two sites respectively, this chapter explicates several strategies of attachment, that enable a better understanding of the variegated ways diverse economic actors seek to make themselves more widely relevant.

Relatedly, this chapter aims to understand how the enrolment of consumers or other less-involved humans shaped the ways non-humans were related to during production and consumption processes and argues that consumer attachments were co-constitutive of reconfigured ways of relating to non-humans in economic practices. This matters because, as I have argued in Chapter 1, to survive the ecological crisis, humans will need to 'imagine and work out new ways to live with the earth' (Plumwood, 2007: unpag), that do not rely on understandings of non-humans as predictable, passive, irrelevant to politics (Marres, 2012) and subjugated to human intentions and domination. It is therefore imperative to pay attention to

how such understandings are contested and/or reproduced in diverse economic practices and what this means for wider transformations beyond the site.

In the following, I will turn towards an empirical analysis of beer brewing in Calafou and Can Masdeu (examined together in 6.2 to allow for easy comparability) as well as gardening in Can Masdeu (6.3) and Can Decreix (6.4), which to varying extents reconfigured the more-than-human components of economic relations as well as their interhuman components. I conclude by interrogating in further depth the transformative strategies of the four economic practices.

6.2 BEER-BREWING IN CALAFOU AND CAN MASDEU

In recent years, some individuals in Calafou and Can Masdeu had set up small beer breweries, with beer being sold both on site and, in the case of Calafou, in many collectives around Catalonia. Brewers in both sites used place-based attachments and labels as key sociotechnical devices to facilitate consumer attachment. However, given different singularisations, non-humans were dealt with in divergent ways, which was also linked to different conceptualisations of the means by which wider transformations were to be achieved. In Can Masdeu, a strong emphasis on sustainability was connected to a non-specialist, place-based and 'modest economy', whilst Calafou prioritised the standardisation of human and non-human doings during the production process to enable a smooth expansion within a cooperativist, anti-capitalist network.

In Calafou the brewery was perhaps the best functioning 'productive project' (*proyecto productivo*), that was '*close to our ideals with regards to the development of the social economy, cooperation, ecology, permaculture, and assembly decision making*' (Calafou.org, no date). In contrast to the generally ruinous character of most of Calafou, the brewery seemed clean and orderly, using industrial-

style pots. Beer was brewed three times a week, usually in 8-hour-shifts, one person at a time, with one day of shared work, during which bottles were filled and labelled.

Like other productive projects in Calafou, the brewery was concerned with aiding the establishment of a network of cooperatives across Catalonia, with the goal of ultimately supplanting capitalist relations, following a communitarian anarchist ethos. Concretely, the goal was to '*to produce something and generate synergy between them, to slowly build up autonomy. Everything that we produce, we don't depend on the system for that. To construct autonomy […] is to produce what we need: you need housing? Let's create a housing cooperative. We need beer? Let's build a beer factory […] Do I want that we have to produce all these things? No. We have to engage with each other (relationarnos) that produces these things*' (Joaquín, one of the brewers). To do so, the beer brewery delivered beer exclusively to around 25 collectives and occupied centres around Catalonia. The beer was distributed to those sites for 1€/bottle, who in turn sold a bottle for a maximum price of 1,50€, with the additional 50 cents directly benefitting the collective or occupied centre, thereby strengthening anarchist spaces around Catalonia (Listas.sindominio.net, 2015).

By contrast, in Can Masdeu, Alba and Enzo had been brewing beer since 2016, once a week, with the main purpose of providing a highly energy-efficient and organic beer for the social centre. Unlike in Calafou, the brewery had been constructed with a view towards the greatest energy efficiency and sustainable resource use possible, which involved a lot of experimental design. The brewing process took around 12 hours and was usually done by the couple along with interested helpers. This brewery was arguably part of a 'latent network' (Welch and Yates, 2018) of loosely connected brewers, that was imagined to cause an aggregate effect on the long-run.

6.2.1 Attachment strategies

Within this broader context, in which ways specifically did beer brewers reconfigure economic relations and how did producers attach, that is, build relatively durable and intense affective relations, with consumers? The question of 'what' to produce (Callon, Méadel and Rabeharisoa*,* 2002: 202) was portrayed in both places as a pragmatic choice. Fernando, one of the brewers in Calafou, explained that '*different people from social movements […] met up, with the goal of making an artisanal brand of beer, for our social centres and for our spaces, no? The reflection was – how do the majority of occupied social centres and occupied ateneus* [21] *in Catalonia finance themselves? Well, the majority finance themselves […] by opening a bar to the public, with parties, and the beer that is being sold is always capitalist brands, so, let's do a craft beer, ours'.* A particular socio-political orientation and a particular mode of relating – collaboration between potential consumers and producers – therefore formed the basis for brewing beer in Calafou.

In Can Masdeu, the decision to brew an energy-efficient and organic beer emerged in the context of having to '*throw away hundreds of bottles*' after hosting events, which led to the realisation that '*we can make beer here and refill the bottles and not throw them away […]it was so easy to imagine a closed loop here*' (Enzo), echoing a circular economy logic within place-based economic practices. Furthermore, Enzo considered this a way to '*earn money here in a way that is sustainable and that I like, and with this idea of working 1 or 2, this mythical 1 or 2 days a week'*, alluding to popular post-work imaginaries (Chatterton and Pusey, 2020).

These background decisions formed the basis on which both breweries could 'singularise' their beers, first by linking their products to autonomous or anti-capitalist spaces, and secondly, by using politically charged labels, a trend that has been observed with 'capitalist' brands seeking

[21] A common Catalan term for, oftentimes squatted, social centres.

to align their products with a 'belief, a cause, an issue or an ideology' (Gerlitz, 2017: 73), thereby building and thriving on 'existing social attachments and formations' (ibid.). In Calafou, selling beer in 'their spaces' attracted consumers interested in finding alternatives outside of the capitalist system. Rather than singularising this beer through 'specific metrological work' based on the beer's qualities (Callon, Méadel and Rabeharisoa*,* 2002: 199), brewers were instead able to tap into the 'qualities of relations' around the beer-brewing process, signalling a shift from a focus on product qualities to the qualities of *relation,* here between consumers and the collectives as intermediaries (see Varga, 2019: 63). This was apparently a relatively smooth process, necessitating very little requalification (Callon, Méadel and Rabeharisoa, 2002): Indeed, as quoted in Fionella Bourez' work (2020: 96), Joaquín explained that '*it's funny because it's an anti-capitalist project but it has everything that every capitalist wants: a defined, assured market. When we explain our political criteria and our ways of functioning, the majority of people buy this beer even if it's not the best or the cheapest. But what the people are buying is an idea. That's the biggest dream for a capitalist.'* Thus, the 'idea' or singularisation as an anti-capitalist beer, potentially tapping into a long history linking alcohol production and anti-establishment tendencies (Hoffrogge, 2018) trumped other potential qualities. The success of this strategy was apparent in the steep rise in consumption levels of this beer and a move towards a bigger production space envisaged in 2019 (Bourez, 2020: 94).

The same held true for Can Masdeu, with Enzo noting that they already had a '*more or less captive market of people who want to buy local, who want to buy organic, and who are interested in our beer*', and '*no problem at all'* finding customers, and indeed had doubled their production after just one year. That was the case even as they had allowed another micro-brewery to sell their beer, *la Florestina,* in the social centre, with whom they actively collaborated: *La Florestina* brewers in turn helped set up Can Masdeu's brewery, giving advice on the brewing process.

Secondly, a further singularisation and means of securing attachments was through the labels' political messaging, which differed in orientation, but in both cases served as an additional point of connection between consumers and producers: Calafou's branding relied on red and black as typical anarchist colours, with the name, La Rosa del Foc (Figure 6.1), the Rose of Fire, a nickname for Barcelona, alluding to its history of emancipatory politics (Declós, 2013). This also chimes with other independently owned breweries such as Brewdog, who have similarly branded themselves as 'punk', countercultural, and anti-establishment (R. Smith, 2018), though with a much stronger emphasis on experimenting with flavours.

However, differently than Brewdog (who are also a B-corporation) for instance, the ways in which this artisanal production differed from capitalist modes of production have been highlighted clearly on the label, outlining key principles (see Varga, 2019: 73): '*If you want beer, know that there are other options, like Rosa de Foc, in order not to drink shitty conventional beer that goes against…cooperativism: for a plural, horizontal and just management. [Workers'] self-management: to not give away a single euro to the beer brewing capitalist corporations. Solidarity: to reinforce and support social solidarity movements. Cheers and anarchy!'* The label can here be understood as a socio-technical device (Çalişkan and Callon, 2009), indispensable for ensuring the attachment of consumers, enabling not only traceability of product quality through standard forms of labelling (Cochoy, 2005: S51), but also its political 'qualities'. Furthermore, whilst typically the importance of accounting or mapping as socio-technical devices is emphasised (Callon, Millo and Muniesa, 2007: 330), Le Velly and Dufeu (2016:180) have highlighted the importance of written documents to attaching consumers in the context of alternative food networks selling sustainable fish.

Figure 6.1: Label of Rosa de Foc (Source: Shot (2014)

In Can Masdeu, the label helped singularise the beer as organic and highly energy-efficient, even though it was, ironically, the only non-recyclable material used. The information focused on the production process itself, specifying not only the ingredients – '*organic barley malt, hops, organic sugar*' – but also how the beer was brewed: '*Made by hand in the Valley of Can Masdeu, with a wood stove, without using fossil fuels, with water from the mountain and reusable bottles.*' It also explicitly specified that this was an 'ecological beer', of roughly 5% alcohol volume (Figure 6.2). More interestingly, the sticker placed a demand onto the consumers to '*please wash your bottle*', specified in Catalan, Spanish, and English. Enzo phrased this as '*needing to train the clientele*' (Field Notes 2/10/2018), contradicting the assumption that 'what is sought after is a close relationship between what the consumer wants and expects, on the one hand, and what is offered, on the other' (Callon, Méadel and Rabeharisoa, 2002: 202). He later told me that 'the *vast majority*' complied with this and were '*often happy to do so.*' More than simply offering an opportunity to attach the consumer to the product, the label also challenged consumers to adopt different behaviours around the

practice of beer drinking. The label thus served as the intermediary for reconfigured relations between consumers and beer, encouraging consumers to think more closely about the product's life cycle. It also invited them to slightly modify their role, to become cleaners of bottles as well as consumers, extending their responsibilities and thereby shifting a distribution of competences around the beer.

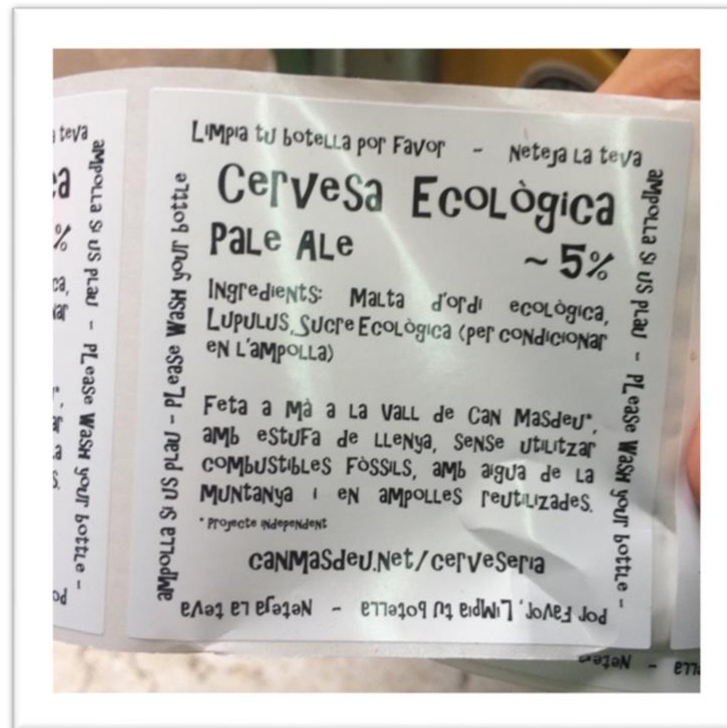


Figure 6.2: Label of Can Masdeu beer. Source: Author

6.2.2 Implications for more-than-human collaborations

6.2.2 a) Calafou

In Calafou, the attempt to *replace* capitalist brands of beer with a craft beer brand led to a replication of some elements typical of factory production. First, the overwhelming commitment to deliver to alternative markets meant that the '*ecological side of things is not so important to them, but rather that they produce a beer of decent quality, and that the social centres and initiatives*

that are politically close to them, drink beer produced by local cooperatives rather than by big corporations' (Field Notes 6/11/2018).

Secondly, whilst many craft beer enterprises have shown a high interest in the beer-brewing process (see Thurnell-Read, 2014), Fernando highlighted that '*since our objective is not to make beer (laughs), our objective is to make money for social movements, we don't experiment as much.*' His commitment to producing a no-nonsense, reliable alternative to both more experimental approaches and the mainstream therefore translated into efforts to brew a recognisable, standardised beer. This resulted in a rather tight control over both microbial and human co-producers. This interest in standardisation was specifically linked to customers, who were presumed to expect a brand, representing a recognizable product of good quality: *'Making a good beer is not difficult; what I believe is difficult is brewing always the* same *beer. If you sell a beer that is called* Rosa del Foc*, and one day it comes out in one way and the next in a different way, the people will say, what is this? No? […] All the steps of the beer brewing need to be very measured and very precise'* (Fernando).

Uniformity and standardisation were therefore presumed to be the basis of consumer attachment, guiding the brewers' attention during the production process. Fernando told me that: '*It's like an operating theatre almost, everything has to be very aseptic, no? It's like a very delicate biological process, everything needs to be very strict […] the whole issue of the temperatures, the time periods, all that. What you really learn is that it's a very delicate biological process.'* Whilst these were presented to me as rather general 'facts', it is worth noting that this take on beer-brewing is somewhat contested, with Sandor Ellix Katz (2003: 28), who practices wild fermentation in his eco-commune in the US, arguing that: 'There is a mystique surrounding fermented foods that many people find intimidating. Since the uniformity of factory fermentation products depends upon chemical sterilisation, exacting temperature controls, and controlled cultures, it is widely assumed that

fermentation processes require these things. The beer- and wine-making literature tends to reinforce this misconception.'

To assure this uniformity, Fernando believed that measurement and quantification were key. He explained that *'from the very beginning, we had sheets where we would write down everything [...]so when something turns out badly, we can compare, 'oh wow, look, here, I was at 24 degrees [...] during this brewing session, there was a problem with the filter.'* Indeed, some forms of measuring have been key to standardising beer-brewing for centuries (see Sumner, 2004). Still, this was also a way of making human-microbial activities legible for future brews. By adding measurement sheets as 'classical' socio-technical devices, a detailed description of human-microbes encounters in the fermentation process became available over time, creating the possibility of serialised, regular beer production. This type of quantification made it easier to verify the 'success' or 'failure' of a particular collaboration, with margins of error clearly, though not completely inflexibly, defined. Rather than being fixed by moral or political 'inscriptions' (Marres, 2013), microbes were meant to behave within a fixed margin of error, as identified by particular measurements.

This particular 'micro-biopolitics', defined by Paxson (2008: 17) as 'the creation of categories of microscopic biological agents; the anthropocentric evaluation of such agents, and the elaboration of appropriate human behaviours vis-à-vis micro-organisms', seemed to reinforce standards of 'factory' brewing. For the most part, this appears to have been a deliberate choice to facilitate 'production', meant to build autonomy from the capitalist system. Similarly, humans themselves engaged in highly repetitive practices like beer bottling, apparently uneasily replicating a factory's working process, particularly in its tendency towards alienation (Holloway, 2010; Chatterton and Pusey, 2020). Bourez (2020: 95) observed during her fieldwork in Calafou: '*It's a factory rhythm, we joke about this. Everyone has their spot, we turn every fifteen minutes: a person bottles,*

another puts the cap on, another brings boxes of full bottles into the fermentation cave and brings back empty boxes, a last person labels the bottles that are already fermenting. It's tiring, repetitive work.'

This seems to suggest that keeping human and microbial activity identical and repeatable over time was imagined as the basis for 'autonomous' economic relations. Such an approach – particularly keeping non-humans stable and in this recognisable, stabilised form repeatable – has been a classic feature of Latour's actor-networks (Latour, 1987) and seemingly the enabling factor of 'smooth expansion' (Tsing, 2015: 39). Indeed, during my stay in Calafou in November 2018, plans for expanding the brewery were discussed, demonstrating a clear orientation towards quantitative growth and along with it, a wider casting of autonomous economic relations.

Despite their relative success in expanding production, it is worth highlighting that these efforts to standardise and regularise flavours, produced a by-product, namely waste: Fernando told me that they '*have thrown out lots of beer that has turned bad'*. This did not (only) seem to mean that beer was of bad quality or dangerous, but (also) beer that did not meet the brand requirements. During my time there, other residents were gifted crates of bottles of beer, which did not meet this standard, but which other inhabitants still found to be very enjoyable. This can be considered a small example of the 'ruins' standardisation and scalability may cause (Tsing, 2019: 161).

6.2.2 b) Can Masdeu

By contrast, the choice to produce an ecological beer of 'roughly' 5% in Can Masdeu influenced the ways in which microbes were encountered during the beer-brewing process. The objective to produce a 'decent beer' was complicated by the making do style in which the brewery had been built. Using mainly materials from the surroundings, Alba and Enzo rehabilitated an abandoned shed, with the kettle positioned outside, above a self-built rocket stove (a particularly fuel-efficient stove, fuelled by recycled wood). Instead of an electric pump to move liquids from one pot to another, they made use of gravity (see Figure 6.3).

Figure 6.3. a) The 'beer factory' with rocket stove (left) and b) the mash tun lifted up (right). Source: Author

These significant changes around technology did not entail a totally laissez-faire approach to the fermentation process, though a greater degree of variability was accepted and indeed welcomed. Alba and Enzo were concerned with roughly following a recipe (a form of standardisation) to brew a beer of decent quality. They, too, took notes on the brewing process, including temperatures, densities, and time, but also noted down unpredictable 'problems' to enable improvements over time. In contrast to the orderly sheets and tables at Calafou, their

notes were less systematic and appeared to be more a tool for learning rather than for comparison (Figure 6.4).

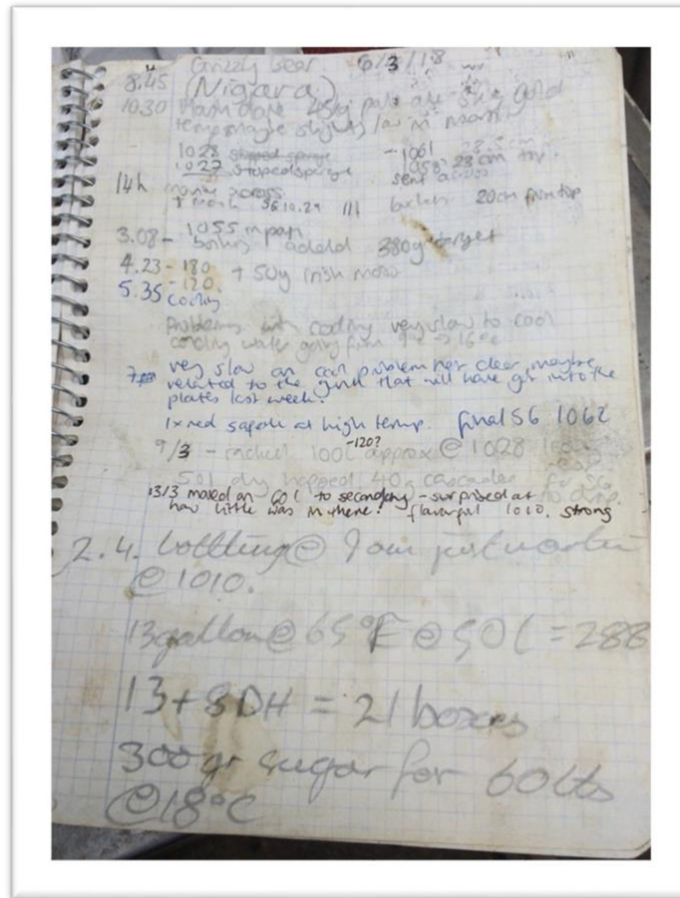


Figure 6.4: Notebook from Can Masdeu. Source: Author

Furthermore, the margins of error were wider than in Calafou. Enzo informed me that customers did not '*really care if the beer is 5.2 or 4.8 %*' strong but that if '*it's 6.5 or 3, they would be complaining. So, to me there is a range, I don't quite know what it is*.' This attitude also extended to several experiments, such as a lighter summer brew or a stronger, spiced Christmas beer, arguably making a virtue out of variability and slight inconsistencies. Enzo indeed explained that '*visitors do expect or are open to some variation in the beer, since they know it is artisanally produced*' (Field Notes 29/10/2018) and that as producers, they were happy to go away '*from this overly standardised model of the product'* whilst still *'within a certain range of drinkability, and a certain alcoholic range.'* Thus, the 'micro-biopolitical' expectations of microbes and the 'evaluation and the

elaboration of appropriate human behaviour vis-à-vis micro-organisms' (Paxson, 2007: 17) appeared to be less 'anthropocentric' than in Calafou.

Nonetheless, efforts to keep microbial activity within these margins caused a lot of tensions. While helping out on the first brew after the summer break, I was informed that '*we knew we are going to have issues'* (Field Notes 12/10/2018). Both Alba and Enzo perceived this to be a very '*stressful day'* and apologised to me (ibid.). 'Incidences' that occurred in Can Masdeu (though mishaps also occurred in Calafou, even after years of practice) seemed often related to the low-carbon technologies in place: At one point the rocket stove, which heated one of the pans started fuming furiously without us being able to figure out why. Similarly, the decision to forego an electric pump and to use gravity instead to move the wort from the mashing tun to the kettle ended up changing the beer-brewing, and thereby the fermentation process. Specifically, '*our process has quite a lot of aeration at that stage, we move things round in buckets, and I think that's what we shouldn't do, and I'm not sure how we can avoid that'* (Alba). 'This, Alba explained, has led to a '*slight cardboard-y taste. […] I notice a taste that I'm not sure should be there.'* A different use of technology therefore changed human-microbial collaborations inadvertently, bringing forth a (slightly different) result. Alba again emphasised that '*we don't need to get stressed about having absolutely no, aeration at all at that stage'*, revealing again an apparently more flexible attitude towards microbial doings.

Thus, the singularisation as energy-efficient and organic enabled a change in human-microbial relations that became apparent not through measurement, but also through flavour, with Alba and Enzo relying on a more embodied, visceral registers of getting affected by the microbes, arguably typical of lay micro-biologies (Greenhough *et al.*, 2018: 5). The particular technological set-up and the ways in which microbes surprised and challenged the brewers therefore impacted the specific qualities of the beer.

6.2.3 What kind of transformative strategy?

Calafou's decision to focus on 'production' as the repeated, recognisable fermentation of beer might appear 'common-sensical' and imminently reasonable as a post-capitalist approach to economic production but seemed to me rather unusual in the context of the three field sites that I studied. Deciding against more experimental approaches that are typical of many other practices in Calafou and keeping microbes stable and their collaboration recognisable to satisfy a wide(r) range of consumers was judged to be a way to allow the success and expansion of their brewery. The explicit decision to produce beer in ways more comparable to the mainstream did not allow for strongly reconfigured relations to microbes or technologies. This apparently enabled its success as a brand and with it, as an autonomous political economic intervention. From the very start, this was a project interested in 'establishing mobilising structures across diverse prefigurative' sites and movements, 'brokering' 'instances of cross-spatial collaboration amongst dispersed communities and organisations' (Schiller-Merkens, 2020: 26), which Schiller-Merkens (2020) considers a promising avenue towards 'scaling up'. At the same time, Anna Tsing (2019) reminds us of the issues that arise in projects seeking standardisation and scalability, namely the necessity to stabilise and limit more-than-human collaborative tendencies, leading to some degree of (human) alienation as well as to 'ruins' in the shape of waste.

By contrast, in Can Masdeu, the attention to the material particularities of the beer-brewing process spelled out and tied into a different understanding of the brewery's role in wider transformative processes. Indeed, the decision not to distribute beer more widely was predicated on the impossibility to wash the bottles immediately after consumption in other sites. For Enzo, this was connected to the '*idea of being modest basically, of just not trying to have endless expansion but thinking about the environmental impact being of primary importance*.' Instead of limitless

expansion, they simply tried to satisfy '*the beer needs for this community in the most environmentally sustainable way as possible. So, it's different criteria to normal business criteria*.'

Enzo argued furthermore that '*if there's more social centres, people will start having more local economies, then it will start happening automatically, people are becoming dramatically more aware of the social and ecological sense in buying locally*.' This is in line with what North (2010: 589) terms intentional (eco)localisation, whereby localisation can lead to more 'human-scale, steady-state, convivial, ecological, and egalitarian society'. Enzo also noted in this context the '*dramatic increase in locally produced […] artisan beer*' was linked to the idea that '*social change often comes from places like us.*' Rather than relying on smooth expansion, transformation was in this context thought to be brought about through a more horizontal '*multiplication* of small endeavours', producing a 'geography of ubiquity' (Cameron and Hicks, 2014: 67-8) that originated in 'niches'. Here, the emphasis lay on many place-based and like-minded initiatives providing not *one* alternative to capitalist markets (autonomous cooperativism), but a multiplicity of similar projects, with collaborative interactions (ibid.).

6.3 Growing organic produce in Can Masdeu: Redistributing responsibility to wider publics

Cultivating organic produce was central to Can Masdeu and perhaps the most visible activity on site. From early on, rehabilitating the gardens was key to community members, thereby giving '*life to the valley*' (Umberto, a resident). Half of the land was cultivated directly by Can Masdeu, providing an important source of fresh produce. The other half had been opened up as community gardens, drawing in mostly elderly neighbours (see Fig 6.5).

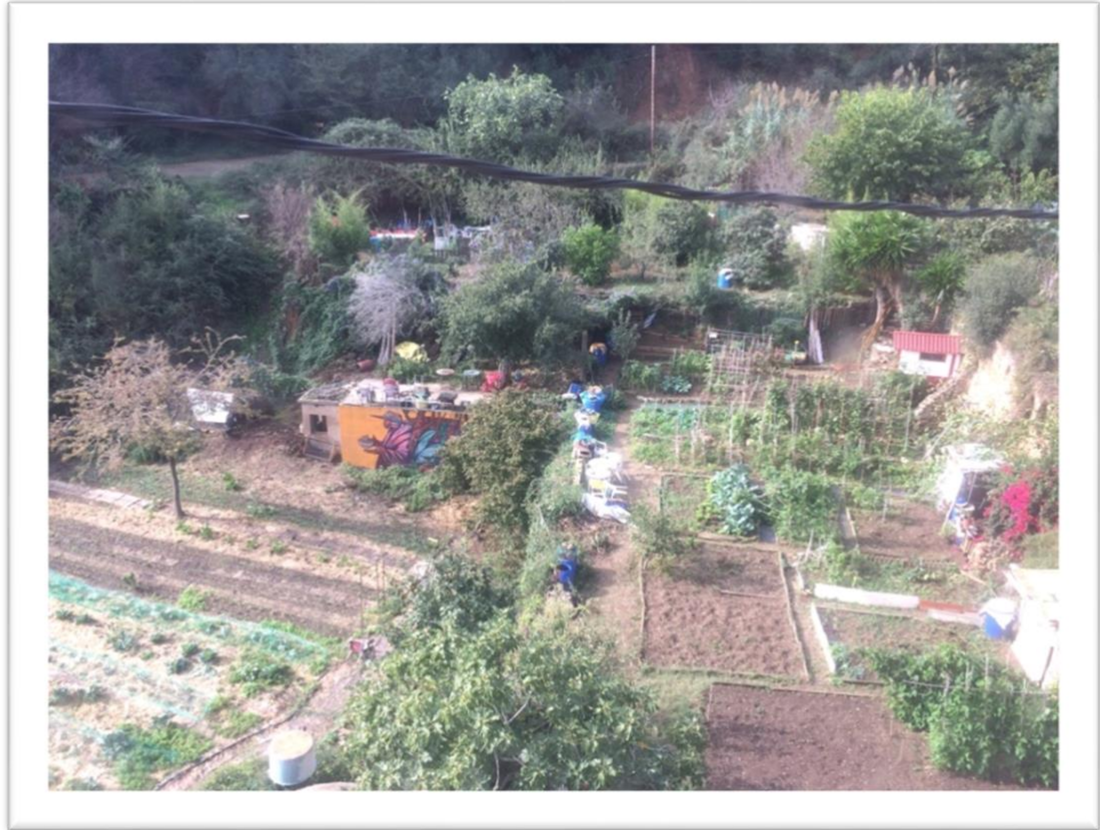


Figure 6.5: Main gardens (left) and individual plots of the community gardens (right). Source: Author

Can Masdeu supplemented their own food production with the agricultural produce from other cooperatives, eschewing both complete self-sufficiency and supermarkets. As Casandra noted '*we don't manage to cover [all our needs] with this terrain. We buy fruits especially. We get 80% or 70% from the garden.'* One of Can Masdeu's many commissions (4 members) was dedicated to gardening, specifically. This commission was supported by volunteers who came by on the workdays (Thursdays) and who received a free meal in exchange for their work.

In the following, I will highlight the principal ways in which Can Masdeu gardeners singularised their produce, both in their own and the community gardens. Thanks to this, they ended up reconfiguring the economic set-up, including importantly, the ways in which non-gardening members related to edible plants. By relying on three different forms of redistributing

responsibility for the flourishing of plants to wider publics, the gardeners attempted to build up 'consumer' attachment to vegetal produce on site and beyond.

6.3.1 Reconfiguring responsibilities 1: Harvesting consumers

Can Masdeu gardeners strove to assure the regular availability of organic produce and specifically, singularising their fruit and vegetables through immediate access, enabling direct harvesting by non-gardening members of Can Masdeu. Making consumers directly responsible for harvesting created a particular form of attachment to the latter, which also allowed a new distribution of roles in this economic reconfiguration.

Thanks to harvesting fresh produce directly before meals, non-gardening members of the community learnt about the particularities of edible plants. For instance, '*I went to the garden with Catherine to pick some vegetables for lunch. We pass by rows and rows of vegetables – she was told to take out some carrots, you never quite know, how ripe they are. You can only see the leaves. She rips a few out, but they all turn out to be a bit too tiny'* (Field Notes 01/10/2018). These embodied encounters at the moment of harvest enabled a closer relationship with edible plants, significantly going beyond encounters between vegetables and humans in the supermarket or kitchen. They allowed for a more intimate understanding of vegetal rhythms, particularly around the seasonality of plants (Opitz *et al.*, 2017), and through the cultivation of a visceral 'feel' for various edible plants.

This singularisation was therefore 'experiential', facilitated by the proximity between the house and gardens. The gardeners apparently worked to singularise a particular *experience* that consumers cultivated with edible plants, that of immediate access to '*fresh, organic vegetables'* (Pedro), a point that often came up as an advantage of living in Can Masdeu (Field Notes 8/10/2018), fostering the consumers' attachment. This can be considered the cultivation of

what Jamie Lorimer (2007: 922) refers to as *jouissance* (see 2.1.3), that seemed to come along with an understanding of the political significance of such practices.

This arrangement also spelled out a reconfiguration with regards to the different responsibilities of consumers and producers, and how goods and people were in circulation in this particular economic practice (Phillips, 2017). The practice of picking edible plants before meals was aided by a poster in the living room highlighting the plants in season, which effectively codified the role of consumers in picking at least some of the vegetables. For instance, during my stay, in the Hort Major chard, leeks, beets, and carrots (M3) cabbage and chard (M2), mint, peppers, aubergine, tomatoes (M1), and in the Hort de Colombia, lettuce, aubergine, pumpkin, peppers were ripe (see Figure 6.6). More than being primarily consumers, non-gardening members of the community became frequent harvesters as well.

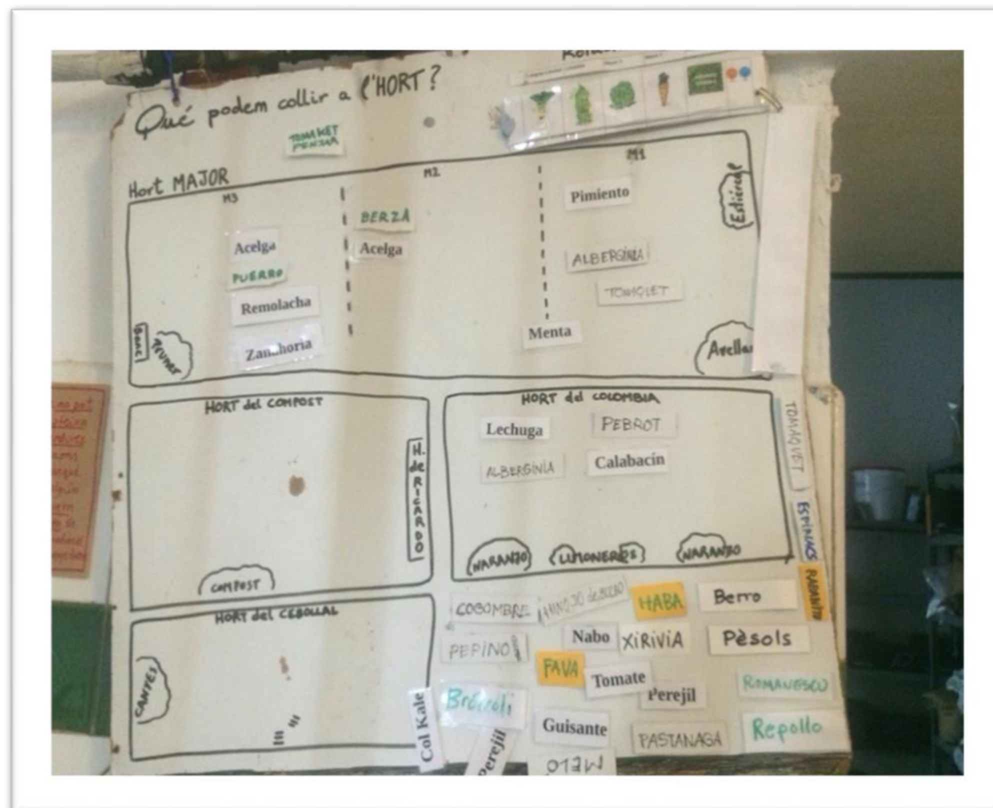


Figure 6.6: 'What can we pick in the garden?'. Source: Author

However, this was predicated on the efforts of members of the gardening commission to achieve the regular availability of plants, planted in an orderly fashion (see Figure 6.7), which significantly impacted human-vegetal relations. Daniel, one of the garden commissioners, described the garden as '*relatively automated […] If the garden isn't functioning, you are doing something wrong, the people aren't eating and there is no lettuce. 'What happened in the garden?' It's the fact of feeling yourself sometimes a bit responsible.*' Rafael, another gardener observed that '*we need more control because otherwise people complain.*' It is arguably in this context that the exclusion of wild boars through fencing (see Chapter 5.6) became all the more necessary.

Figure 6.7: Orderly rows of spring onions, chards, and carrots. Source: Author

As with the beer-brewing in Calafou, the presumed expectations of consumers tempered the sense of possibility to create novel or experimental relations with plants, despite an apparent interest to do so. Daniel remarked that '*we don't play a lot; I would like to play more.*' Contrasting their typical work with 'play', which can been understood as 'not serious', and 'disinterested', 'insomuch as it does not satisfy any immediate practical needs' (Castañeda, 2020: 60), underlines the instrumentality and purposiveness of their relations with plants. It is interesting to note that

Henri Lefebvre (1996) considered play as 'a means to assert use value over exchange value' (ibid.), in the context of the production of the city. Thus, this prioritisation of non-playful relations speaks to some extent to a replication of somewhat alienating, repetitive engagements with non-humans that have shaped capitalist modes of production. This also points at a tension between the two terrains of transformation of 'socially useful production' and 'doing', as outlined by Chatterton and Pusey (2020).

6.3.2 Playful relations at the margins

Nonetheless, some more playful, novel relations with plants did occur, even if only at the margins of the project and in ways that did not directly interfere with productivity levels. This did not appear to be related to consumer attachments and seemed instead motivated by Rafael's and Daniel's personal interest in plants. They therefore sought '*to experiment'* with ways that *'are increasingly more respectful with natural rhythms, more copying the nature [sic].'* This echoes a broader permacultural concern to 'work *with* natural mechanisms' (Puig de la Bellacasa, 2010: 1552), emphasising more strongly 'the interdependency of all forms of life – humans and their technologies, animals, microorganisms, elemental resources such as air and water, as well as the soil' (ibid.).

In this context, experiments with companion-planting and pest-repellent intercropping took place, for instance because '*aromatic plants [herbs], help protect the plants from disease […] some are giving underground phyto-elements that are improving the immunitarian [sic] system of plants' (Rafael).* Here, the gardeners utilised mutual aid mechanisms between different plants. The gardeners' mode of collaboration thereby presumably became less 'directing and controlling' (Hitchings, 2006: 372-3), instead taking advantage of the different plants' 'ability to cancel out other natural processes' (Braun, 2014: 58). Instead of simplifying relations and eradicating diverse relations as typical in

industrial agriculture, they attempted to work with the 'naturalness of nature' (ibid.). These types of experiments did neither significantly interrupt the interhuman economic set-up nor the expectations of consumers.

By contrast, Rafael cultivated his own medicinal garden, set spatially apart, (see Figure 6.8) that was '*more free [sic]*'. Here, he experimented in ways that '*in the big garden, we cannot do'*. As to my question how he decided what to plant, he explained that '*they decide themselves, ---I plant lots of plants and maybe 20% die. So, the ones that survive, it means that they can resist, because I don't water too much.'* Rather than predetermining the particular vegetal allies for composing the world, in this kind of experiment, Rafael was willing to open up this question. Interestingly, this meant allowing and anticipating vegetal failure, implying an acceptance of the non-teleological flourishing of plants (Marder, 2013: 98).

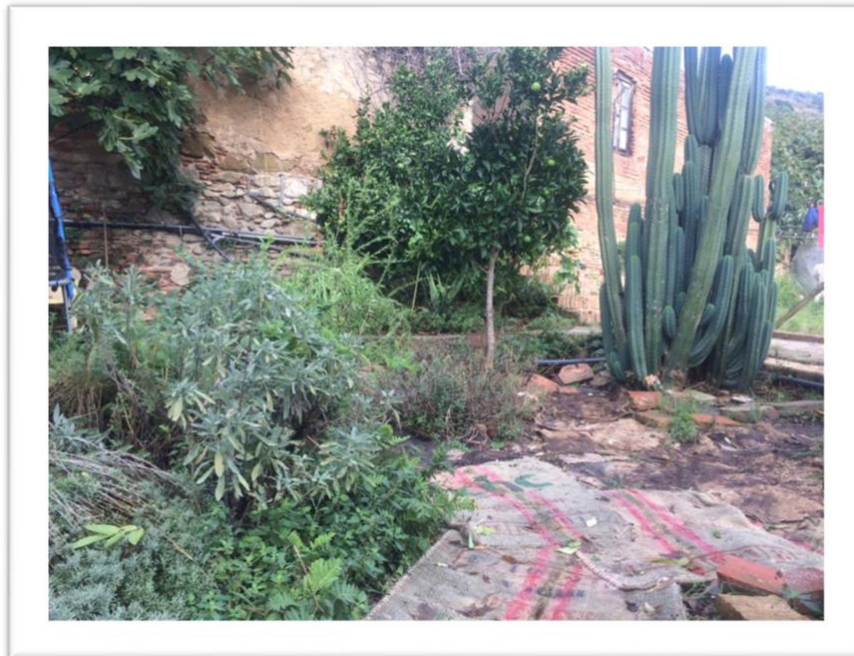


Figure 6.8: Rafael's medicinal garden. Source: Author

Differently than the 'socially useful production' above, here the gardeners were engaged in 'doing' (Holloway, 2010: 84) as an 'activity that is potentially self-determined', enabling 'the

creation of a different society' (ibid.: 85). This seems to suggest that these two 'terrains of transformation' (Chatterton and Pusey, 2020) may often stand in a (potentially productive) tension. Spatially segregated from consumer expectations and the perceived necessity to attach them, more 'radical' changes in human-vegetal relations took place at the margins of the site.

6.3.3 Redistributing responsibility 2: Harmonising human and vegetal rhythms

A second way of attaching consumers to plants occurred through fostering more mutualistic relations between humans and plants *indirectly* through infrastructure and thereby linking and harmonising human and vegetal needs. This harmonisation changed the 'appropriate human behaviour' (Paxson, 2008: 17) regarding edible plants and the soil, arguably developing a 'sense of shared aliveness' with the latter (Puig de la Bellacasa, 2019: 391) and deliberately cultivating less exploitative and more reciprocal relations. It involved embedding humans in systems that were imagined as '*more sustainable, more circular*': '*we use […] human shit, [and] grey water for the trees, […] chickens to fertilize the soil […] they clean this space, then we weed, […] we mulch, because of the mulch, there is more bacterial life […] and because there is more life, there is more plants [sic], and because we have more plants, we have more to put back to the soil*' (Rafael).

‘Harmonising practices’ were particularly apparent around water, the scarcity of which appeared to be the biggest constraint on assuring a regular output of fresh produce. This was because Can Masdeu had decided to make do with rainwater and a water mine further up the mountain instead of relying on the municipal water supply. Given this limitation, consumers used compost toilets and adjusted their use of taps around the house. The latter meant that grey water was channelled onto specific trees, for instance *‘the kitchen sink […] can take 5 trees.’* (Casandra). Signs functioned here as ‘socio-technical devices’ (Callon, Méadel and Rabeharisoa*,* 2002) to remind inhabitants and guests of these interdependencies. Several signs above sinks highlighted ‘*No soap! No oil! Only wash vegetables! We use the water to water the gardens! Thanks*!’ (see Figure 6.9). This attachment strategy was based on the very bodily ways in which consumers connected to the produce. Thus, in response to the question of ‘how’ to produce (Callon, 2015: 326), residents focused on ‘harmonisation’ as well as visceral connection with non-humans.

Figure 6.9: Sign above sink ‘No Soap! No Oil’. Source: Author

6.3.4 Redistributing responsibility 3: extending responsibility in the community gardens

As a key pillar of the project, Can Masdeu had opened up community gardens to the neighbourhood as early as 2002. Adrián explained some of the reasoning behind this: '*We don't want to create this project for our self-sufficiency […] We saw it as a way to get rid of the land, because we didn't want to farm it all. Gaining support from the neighbourhood, because by opening up the biggest community garden in Barcelona, it kind of created a good name for the place[allowing] a bunch of people who didn't live in the house to get involved in it and fight for it. So, it was an ideal way to […] reach out to older people, because almost all the gardeners were older. And they could teach us about farming which we didn't know much about.*' 35 parcels of 25-50 sqm are currently shared between 2-3 people each. Membership cost a nominal 1€/month, which allowed for the purchase of collective tools.

Can Masdeu soon established two basic operational principles: organic farming and building the community together by assuming shared responsibilities (Canmasdeu.net, no date b). By making more people responsible for growing produce, Can Masdeu gardeners allowed for attachments to build up through the practice of gardening for personal consumption. Access to land for agricultural activity therefore allowed gardeners to become more food self-sufficient, enabling different economic relations that relied less on capitalist modes of food provisioning. Whilst the orchards *were 'not enough to supply a family with everything they need [...] they cover a large part of the consumption of seasonal products' (ibid.).*

Whilst redistributing responsibility for plants in gardening practices was the technique that allowed for greater attachment, attempts to singularise Can Masdeu's community gardeners as partial prosumers (a portmanteau of consumer and producer coined by Toffler (1980)) went beyond distributing land. Indeed, a key obligation for the community gardeners was the participation in monthly assemblies and related commissions, for instance on common use

water, manure, and land, and the organisation of social activity and festivities (Canmasdeu.net, no date b). This assembly system was adapted from Can Masdeu's, relying on self-management, consensual decision making, horizonal organisation, and the shared use of resources. This constituted a form of diffusion through the transfer or 'travelling' of a model, incurring inevitable 'hybridisation[s], adaptation[s] and learning' (Heiskanen *et al.*, 2009: 410).

However, tensions and conflicts arose around this kind of horizontal organising, giving some insight about difficulties that may arise when attempting a larger-scale transformation of food provisioning practices as well as the various 're-qualifications' (Callon, Méadel and Rabeharisoa, 2002) necessary to allow for their enduring appeal. This was particularly the case around fencing and shared water use. With regards to the former, Javier, a degrowth scholar and community gardener explained that '*people kept on doing it, more and more [...] they would say it's because of the boars'* (see also Chapter 5.6). This, however, had a '*privatisation effect'*, for instance, after the death of one gardener, '*his son just came in and started growing things*' (Javier), which can also be understood as 'micro-dynamics of enclosure and commoning on site' (Ginn and Ascensão, 2018: 16; see also Figure 6.10). He noted that that for the mostly elderly people, owning '*land is […] very important'*, however, that this was not '*what this project politically is about.'* Can Masdeu's website (no date) mentioned that to address this '*deep-rooted sense of private property'*, a compromise was found in limiting the '*height of fences'* and using natural materials rather than '*metals and plastics.'* These can be seen as 'requalification' attempts (Callon, Méadel and Rabeharisoa, 2002), that differently

than in a market economy between consumers and producers, occurred through communal discussion, permitting a compromise between political objectives and private concerns.

Figure 6.10: Enclosed plots in the community gardens. Source: Author

Similarly, sharing water as a scarce resource caused conflict, meaning that in 2018, community gardeners *'decided in favour of automatic irrigation […] so that's the technical solution, after the human solution, we have decided to rationalise, which means […] to rotate, per week, per terrace, and that everyone has the same quantity of water available'* (Casandra). These re-qualifications were based on '*complaints and suggestions.'* Notable in this solution was the lack of consideration given to the specificities of different plants, standing in contrast to Rafael's approach: While new technologies were brought in to mediate inter-human conflicts, applying a sort of distributive justice logic, the particular rhythms of irrigation did not seem suited to vegetal collaborators. Irrigation was 'timed' so that '*our parcels are 45 minutes – the others that are smaller, get 30 minutes […] Then, there are problems, there are people who get half an hour, and that is not enough, it creates conflicts*' (Miguel, a community gardener).

In line with what I have shown in the previous chapter (see 5.6), this also seems to suggest a rather 'instrumental' and 'unspecific' relation to plants (Hall, 2011) that are primarily viewed as generic resources in this context. Overall, this seemed to highlight some limits in the extent to which qualitatively transformed practices around self-organisation as well as human-vegetal relations were able to extend to a wider array of people.

However, overall, thanks to the inclusion of a greater number of people into the fabric of Can Masdeu by giving them responsibility and open access to the garden, the eco-community effectively buttressed support for their mode of place-based transformation and the project as a whole. Javier, for instance, noted that '*it connects with my need to be in a kind of more politically active environment […] and also my feeling of, you know, if I can support that project somehow, with a bit of time of my life, then I want to do it.*' Elena, who had been gardening since 2002, even argued that '*we [the people in the neighbourhood] did not have our own place, and the truth is that they [Can Masdeu] managed to get that […]. [But] if it hadn't been for the support of all us people, they wouldn't be here either […]. A symbiosis has developed.*' As Adrián put it, in opening the community gardens, they were seeking people from the 'outside' to have a reason '*to fight for*' Can Masdeu. The popularity and the longevity of Can Masdeu seems to suggest their success in attaching many people to the project as a whole and passing on at least some transformative economic practices.

6.4 CULTIVATING WILD PLANTS IN CAN DECREIX: POTENTIAL TRANSFORMATION THROUGH DISRUPTION(?)

Can Decreix had adopted highly unusual agricultural practices, growing on a steep and undulating terrain (see Figure 6.11), and relying on perma-cultural elements, particularly the cultivation and consumption of wild plants and especially cacti, which I will focus on here. Other permacultural elements including mulching, wicking beds, zero tillage, and using particularly water-efficient irrigation techniques (see Smaje, 2014: 2-3) that were based on 'close observation of nature's own systems of stability, resilience, and productivity' (Pickerill, 2013: 183). A variety of more conventional produce was also grown, but less systematically than in Can Masdeu.

Figure 6.11: Map of Can Decreix's sloping terrain (ca. 2012). Source: Author

All of the agricultural production served the consumption of the household and its visitors and was complemented by nearby cooperatives, dumpster diving, local markets, and occasionally the supermarket. Visitors were given free food and accommodation in exchange for labour in the garden and the house (4-6 hours/day), or, otherwise, donating 5€/day.

Can Decreix singularised agricultural production as temporary degrowth experiments, as '*less and different*' (Candecreix.cat, 2019), based on the perceived requirements of the site rather than visitors' expectations. Consuming wild plants in order to be energy and water-efficient also implied that human food consumption was directly integrated into the site's life cycles and requirements, signifying stronger harmonisation efforts than in Can Masdeu. This, however, did not easily create 'attachment' from the consumers' side. Luc, Can Decreix's main inhabitant, rejected straightforwardly appealing to routinised attachments (Callon, Méadel and Rabeharisoa, 2002: 206), insisting instead that coming to Can Decreix was akin to entering a new culture and attempted to disrupt routinised attachments to particular vegetables. This perhaps did not securely 'attach' visitors yet seemed to prove unusually thought-provoking and inspiring.

6.4.1 What to 'grow' and how?

The question of 'what' to grow (Callon, 2015: 326) had been interrogated thoroughly in Can Decreix. The choice to cultivate wild plants, in particular *'Capucina, Lavatera, Sonchus, Wild Cabbage and Cactus Opuntia'* (Degrowth.org, no date, see also Figure 6.12 and 6.13) was presented to me as a pragmatic decision to '*prevent impact*' on the environment (Luc).

Figure 6.12: a) A cactus grove in Can Decreix (top); b) Lavatera growing by the patio (bottom) Source: Author

By prioritising how Can Decreix might fit into *existing* more-than-human collaborations around the site, Luc arguably displaced 'humans from the centre of power […] to let nonhumans express their needs' (Pitt, 2017: 268; see also Puig de la Bellacasa, 2010). This meant that Luc

structured his own diet around the availability of already flourishing plants,[22] which entailed overcoming a sense of 'visceral' reluctance many faced when confronted with the cactus. The visceral can be defined here as 'the sensations, moods, and ways of being that emerge from our sensory engagement with the material and discursive environments in which we live' (Longhurst, Johnston and Ho, 2009: 334 in Goodman, 2016: 259). This visceral discomfort was nevertheless worked against by actively cultivating less spiky cacti, as I was shown during a short 'cactus planting course' during the summer school, 'adjusting' this plant to a more easily harvestable and consumable one.

The focus on wild plants also necessitated different labour relations, decreasing human and technological input: '*If we have a field of lavatera, we can avoid growing salad. It is more efficient, it grows by itself, no need for machines'* (Field Notes 13/07/2018). Instead of increasing levels of productivity and a high yield, low water, labour, and resource requirements were favoured. These practices of semi-foraging and 'semi-spontaneous cultivation' seem somewhat reminiscent of the 'ecological niche construction' that early humans engaged in, signalling an openness to more diverse outcomes and a lesser invasiveness in their designs upon plants (see Scott, 2011).

Similarly, this interest in low input was also visible in irrigation technologies, which resembled Can Masdeu's in some ways, but were built in a more makeshift fashion. Water buckets were often directly carried to specific trees, for instance *'left-over water from cleaning*' was used on the lavatera, with the grey water from the dishes going to the fig tree (Field Notes 15/07/2018). This enabled a particular style of watering, attuned to the particular needs of various trees, rather than being based on *human* water use like in Can Masdeu. Here, by watering trees infrequently but intensively, the so-called hydrotropic response of trees was utilised. In tropic responses,

[22] By all accounts, Luc was not overly concerned with a diverse, healthy, or even tasty diet, apparently viewing nutrition mainly as a means to an end.

plants move 'towards potentially beneficial and away from potentially problematic encounters with light, gravity, structures or water' (Head, Atchison and Phillips, 2015: 404). Root tropism and particularly hydrotropism are thought to contribute directly to drought avoidance (Miyazawa *et al.*, 2011; Dietrich, 2018).

The question of what to cultivate was also dealt with experimentally, with Luc taking Rafael's experiments one step further. On my first visit, we were trying to put a drip irrigation system in place (see Figure 6.13). Luc argued that the plants benefitting from this could be either wild or planted. Victor, an engineer and visitor from the Czech Republic, asked, slightly perplexed, if there would not be competition between the two, to which Luc replied, '*no, it is nice to have them mixed up and we will just see what happens*' (Field Notes 12/04/2018).

Figure 6.13: Open-ended experiment around irrigation in Can Decreix. Source: Author

Here, a form of minoritarian experimentation (Jellis, 2013) upended the expectation that humans would decide what should be grown. 'Possibilities of thinking and doing' were therefore actively reworked (ibid.: 10-11), with questions arising, such as: Which plants make the best allies in terms of drought resilience? Can we quite literally stomach their taste, and do we dare to approach them? Will this kind of food production help us in expanding post-capitalist

alternatives in the world? Thus, these 'minor' interventions helped 'suspend the habitual' (B. Anderson, 2017: 594), allowing instead for 'something that might be emerging' (ibid.: 593), e.g., different ways of eating. Both selecting for drought-resilient plants and experimentally settling on the best-growing allies enacted a deprioritisation of the human palate in vegetal-human relations, and instead foregrounded that human consumption of plants was just one element in a wider set of biophysical processes.

6.4.2 Attachment issues

Can Decreix singularised itself by stressing its alterity, to which unusual human-vegetal relations appeared central. On its website, it stressed that '*living degrowth now means envisioning another reality.'* Can Decreix was described as a space to '*experiment [with] new ways of life'* rather than '*living according to one's habits*' (Candecreix.cat, 2019). Luc further highlighted the playful character of these living experiments: Visitors should *'come here and try a bit. Play the game. It's just a game. In a week, you go home. Try a bit and be surprised'* (ibid.). In contrast to most of Can Masdeu's agricultural practices, agriculture in Can Decreix foregrounded playfulness as key to (temporally limited) engagement with a degrowth lifestyle. This chimes well with Lefebvre's aforementioned point about how playfulness can be a means of asserting 'use value over exchange value' (Castañeda, 2020: 60). A key part of these experiences/experiments were edible plants, with most of Can Decreix' blog posts showcasing unusual practices around plants, including the cactus, the '*semi-spontaneous cultivation'* of lavatera, homemade choucroute, making chestnut soap, cactus coffee and planting vines (Candecreix.cat, 2019).

This did not, however, enable straightforward attachment from visitors, demonstrating that 'detachment' from familiar vegetal goods is not a straightforward consequence of the formation of new attachments (Le Velly, Goulet and Vinck, 2020; Hawkins, 2021). This was presumably

linked to the fact that cultivating and eating cactus subverted the promise of fresh, organic produce, which consumers often expect to be not only healthier and more ecological, but also to taste better, albeit in familiar ways (see Brown, Dury and Holdsworth, 2009; Massey, O'Cass and Otahal, 2018). As has been argued, these consumers, though interested in alternative food networks, still remained attached to particular products, which do not differ much from those found in conventional food systems (Cleveland *et al.*, 2014). Luc appeared frustrated by what he perceived to be the visitors' unwillingness to experiment with new ways of eating, arguing that the tendency to '*really hang [on] to a certain way of doing certain habits*' would be '*a stupid reason'* not to '*manage to create something much better'*, echoing a common reasoning that the presentation of new possibilities of attachments should be sufficient for detachment from other goods (Le Velly, Goulet and Vinck, 2020: 3).

Despite this position, he developed ways through which to disrupt the routine attachments of visitors, including by presenting a 'prominent feature' that would draw attention, in this case, the cactus (see Callon, Méadel and Rabeharisoa, 2002: 206), encouraging visitors to try out

Figure 6.14: a) cactus mousse (left) and b) cactus salad (right). Source: Author

cactus in different recipes, for instance as a mousse, fried or as a salad (see Figure 6.14). This foregrounding of alterity certainly impressed visitors. Nicolas, one of the summer school organisers, for instance, contended that it was '*the strangest thing I have seen*'. Nerea, a volunteer, elaborated that she thought it '*interesting to realize how every fruit was domesticated and that finally, we got to some fruits that are standardized, but that could be distinct*.' Desiree, a summer school participant, reflected on the value in '*allowing the plants to grow more naturally as opposed to us interfering a lot in the pattern that they grow in.'* While the cactus proved disruptive, it did not win visitors and volunteers over easily for consumption: Iris told me three months later that she did not '*miss the cactus, no'*, while Gabriel clarified that '*I didn't find it terrible. Maybe not for every day, but it was alright.'*

Furthermore, creating attachments through known recipes was one way of requalifying the cactus as a suitable alternative to conventional vegetables, making significant 'concessions' to this 'sticky' attachment (Ahmed, 2004: 11; see also Le Velly, Goulet and Vinck, 2020: 12). Apparently, Luc had refined his methods for possible attachments over time, reflecting perhaps an increased understanding of the partial nature of all detachments and attachments (Le Velly, Goulet and Vinck, 2020: 12). A year after my departure, he hosted a three-day cactus party as '*a first convivial and playful encounter with the cactus opuntia*', given that '*the cactus could become a culture of great importance in the world*' (Candecreix.cat, 2019), The menu contained no fewer than 22 food items, including a cactus brioche with cactus butter, olives and walnuts, "cacfé', cactus soup, with onion, garlic, ginger and potato; and buckwheat and cactus flour crêpes with butter, tomatoes, eggs and cheese (ibid.). This method of *demonstrating* a new product bears some resemblance to the demonstrations and the tasting exhibits that the H.J. Heinz Company offered in the early 20th century to convince customers of the high quality of its industrially produced beans and pickles (Petrick, 2011: 53-4). Here a strategy of demonstration can be found to introduce something of a yet-again 'wilder' diet.

That this cactus party was the culmination of a long process of 're-qualifying' the cactus can be gathered from Margot's comments, a volunteer from 2012: She remembered eating cactus as '*pretty nasty, I think by now Luc has a few recipes that are quite okay.'* The recipes prepared during the cactus party in turn seemed significantly more elaborate than those during my stay just one year prior (see Figure 6.15). Indeed, they were frequently replications of familiar recipes, to which consumers were most likely attached, assuring a degree of 'consumption continuity' (Clay *et al.*, 2020: 9), as employed for instance by plant-based milks in recent years. As with the plant milk industry, Luc's recipes can partly be interpreted as a concession to the 'cultural economy of Western food', arguably making this type of disruption more 'palatable' (ibid.).

Moreover, the cactus fest addressed attachment issues heads-on, combining intellectual engagement with a discussion of anxieties around the cactus, by addressing questions such as *'Could the cactus opuntia feed the planet? Can we fend off climate change with the cactus?'* whilst also presenting a '*guide for psychological preparation*', that included points on how to '*lose one's fear towards the cactus'* and '*how to avoid stings'* (Candecreix.cat, 2019). This was apparently meant to forge a 'visceral identification' by creating a resonance between 'knowledge' and 'taste' (Hayes-Conroy and Martin, 2010: 275) as well as lessening fears of the cacti's thorns. These dynamics of iterative re-qualifications (see also Chamberlin, 1946) the 'mutual adaptation between what a [producer] proposes and what consumers want' (Callon, Méadel and Rabeharisoa, 2002: 201). However, 'selling' the cactus and wild plants to potentially interested parties was not operating against a 'background of substitutability' (ibid.), but against the possibility of immediate rejection based on a knee-jerk visceral reaction to the cactus.

Finally, and perhaps most successfully, Luc made agricultural practice a part of the living experience/experiment, enrolling volunteers into a temporary organisational structure. Thus, volunteers for the summer school were 'responsibilised' by contributing to the unusual

gardening efforts, with Michelle working as the 'waterer' and Pauline as a 'wildener', whose task it was to '*make sure that we eat a lot of wild plants, and to pick a lot of wild plants*'. This seemed to have been a rather effective strategy to attach at least those involved, with Pauline stating that wild plants were '*something I want to learn more about'* in her Scandinavian country of origin and Michelle telling me about her plans to attempt some gardening of her own, including growing water cress. The exposure to these unusual agricultural practices sparked an interest in engaging more with plants, even though the practices identified as feasible by Pauline and Michelle were more 'modest' than those practiced on site, pointing to the ways in which detachment processes 'can engender multiple possible [economic] agencements' (Le Velly, Goulet and Vinck, 2020: 12).

Still, in more experienced gardeners, wild plants and drought-resilient agriculture generated mixed feelings. Angela, a regular visitor, and summer school organiser explained that *'I prefer to have a vegetable garden […] and also the energy you put in it.'* Her attachment to more conventional styles of gardening, was likely stronger than that of Pauline and Michelle, and therefore made new attachments, like Luc's more laissez-faire approach, possibly more difficult to achieve. This also seemed to be linked to the embodied, repetitive labour around plants she had experienced, that perhaps allowed for stronger affective relationships with plants. This demonstrates a certain level of contingency with regards to which kind of people might get attached more to some non-humans over others, revealing the uncertain 'arts' of attachment (see McFall, Cochoy and Deville, 2017).

Overall, agricultural production in Can Decreix significantly reworked understandings of the agroeconomic, reneging to a certain extent both care and control over edible plants, and allowing for greater vegetal autonomy. Whilst it might seem difficult at first sight to imagine that such practices hold significant transformative potential, reaching wide segments of society,

there was some unforeseen cross-fertilisation of ideas and practices, as seen with Michelle's and Pauline's increased openness to some agricultural practices.

6.5 Conclusion

This chapter has demonstrated a range of transformative strategies – based on how attachments were facilitated – that diverse economic practices encouraged, as well as how these strategies affected the ways in which non-humans were engaged with during the production process. Whilst this chapter cannot offer any magic bullets to enable widespread transformations towards post-capitalism, I will conclude here by circling back to each of these practices' transformative strategies and consider their advantages and drawbacks before highlighting five general insights.

First, in Calafou, beer brewers focused almost exclusively on the transformation of 'interhuman' relations in their reconfiguration of the economic, with their main priority lying with provisioning social centres around Catalonia with beer and thereby contributing to a wider network of autonomous, anti-capitalist interventions. Singularising their beer as such meant that the more-than-human collaboration was characterised by a desire to achieve (brand) recognisability, which required high levels of control over human and non-human doings, recreating to some extent a factory-like mode of production. Keeping non-humans stable and therefore particular constellations repeatable corresponds rather closely to smooth, potentially scalable economic projects (Tsing, 2019). The beer brewers had the largest reach in quantitative terms, following a clear transformative strategy of supplanting capitalist corporations with autonomous ones. However, in some ways, it risked perhaps most reproducing a 'change of no change' (Marres, 2012: 4). While the degree to which there is an ethical obligation towards microbes during the beer-brewing process may be limited, it still implies a largely instrumental

use of non-humans. Some of the consequences of this may be small 'ruins' (Tsing, 2019) such as waste and some level of alienation during the production process.

In Can Masdeu's beer-brewing attempts, by contrast, the emphasis on sustainability formed the explicit basis for economic reconfigurations, which implied a significant change with regards to the non-humans in the beer-brewing process, where concerns with standardisation were relaxed and variability and experimentation encouraged. Importantly, further expansion, for instance delivering the beer to a wider arrange of collective, was eschewed as this would complicate recycling, marking a significant transformation in comparison to standard capitalist business models. This corresponded to a strategy of 'intentional (eco)localisation' (North, 2010), relying on a more horizontal '*multiplication* of small endeavours' (Cameron and Hicks, 2014: 67-8) that originated in the 'dispersed collective activity' of 'latent networks' (defined by a common activity rather than shared organisation) (Welch and Yates, 2018: 298). Whilst there has been some doubt as to whether this kind of diffusion can be ascertained rather than just assumed, with direct causality often remaining elusive (see Coenen, Benneworth and Truffer, 2012), Welch and Yates (2018: 298) have argued that such dispersed collective activity may 'give rise to aggregate effects', including enhanced shared organisation.

The transformative strategy of Can Masdeu's (organic) agricultural practices lay in 'consumers' 'doing' differently, drawing larger numbers of people into gardening practices. However, whilst enabling those not primarily responsible for the gardens to be affected by vegetal produce through harvesting, gardeners had to work towards ensuring the ongoing availability of vegetal produce, triggering some degree of alienation, but also generative side projects. This also revealed a tension between self-directed and joyful 'doing' and socially useful production (Chatterton and Pusey, 2020). With regards to the community gardens, the extension of responsibility to an additional 100 people implied profoundly transformed relations towards

agriculture for those involved, enabling 'prosumer' activity. However, some tensions around the enclosure of plots and the shared use of resources endured, which impacted the specific ways plants were related to. The biggest transformative achievement of the community gardens was perhaps that they attached a wider array of people not just to the community gardens, but also to the site as a whole, cementing the importance of a strategy of place-based transformation (see Schmid and Smith, 2020), already apparent in Can Masdeu's brewery.

Finally, the transformative potential of Can Decreix's agricultural (and eating) practices was perhaps most 'latent' and uncertain. With its unusual and experimental relations with edible plants, they represented the greatest 'rupture' compared to what visitors and volunteers might be used to. Thus, visitors often struggled to 'attach' themselves to those unusual foods, which required adapting their own habits to the requirements of the place, implying quite different human-vegetal relations than to the typical monocultures but also many alternative food networks. This highlights that difficulties in spreading diverse economic practices may exceed external constraints (see 2.3.1), and also include culturally mediated, visceral reactions. Among several 'attachment strategies', however, redistributing responsibility to wider publics in production processes appeared to be the most effective in fuelling an interest in taking up agricultural practices elsewhere. Whilst less apparent, easily perceptible (Merriman, 2019) or as of yet 'below the radar' (Temenos *et al.*, 2017: 117), the transformative potential of these practices might lie precisely in this disruption of habit, with many passing through Can Decreix experiencing the cultivation of wild plants as thought-provoking and inspiring.

All in all, five central insights emerged: First, all sites arguably cultivated a 'politics of horizontal extent, reach and association rather than a 'politics of scale'' (St. Martin, Roelvink and Gibson-Graham, 2015: 16) refusing the frequent 'spatial hierarchisations' found in sustainability research, where 'not much is of value, until it is 'scaled up'' (Schmid and Smith, 2021: 263, see

also Temenos *et al.,* 2017: 117). Second, some of these drawbacks were linked to 'capitalist' inflections, including a high level of control over non-humans during the production process (Calafou), some level of alienation (Can Masdeu's 'main' gardens and Calafou), and issues around enclosure (Can Masdeu's community gardens). Third, beyond structural constraints and the reproduction of 'capitalist' tendencies, more radical practices experienced greater difficulty in attaching people, which was due also to visceral reluctances, rather than simply external constraints as is often highlighted (see 2.3.1). Fourth, all practices relied on a greater 'consumer' involvement, thereby reconfiguring the specifics of interhuman economic configurations, which also meant that the non-producers had more opportunity to interact with non-humans. This suggests that transformation of the role and functions of 'consumers' (for lack of a better word) may be crucial to post-capitalist transformations as whole, moving from high levels of passivity and an abundance of choice to a more 'hands-on' and needs-focused form of consumption.

Finally, a key tension arose between playful and self-directed 'doing' (Holloway, 2010) and 'socially useful production' (Chatterton and Pusey, 2020). This is relevant because the latter may seem a more sensible strategy for a wider reach, but also encouraged some degree of alienation as well as a more instrumental and controlling relationship with non-humans during the production process. This is of course sometimes inevitable and/or highly useful but might leave 'ruins' behind (Tsing, 2019). This does not mean that more controlling relations with non-humans should be avoided at all cost, but rather that reflecting on strategies of how to relate to non-humans (and the impacts this may have on diffusion) are important to understand and contribute to wider transformations towards post-capitalism. Given that human fantasies of mastery and control 'over nature' have been at the root of many environmental problems, it may be worthwhile to pursue strategies that allow for a 'more open-ended processes of transformation' (Sharpe, 2014: 34).

7. The endurance of practices: Discomforts and inconveniences in eco-communities

7.1 Introduction

This chapter is about how practices endure in eco-communities over time. More specifically, it aims to understand how eco-community residents negotiate practices that are experienced as or become uncomfortable in some way. This is particularly important because sustainable practices are frequently understood as uncomfortable (Shove, 2003; Shove *et al.*, 2008; Pickerill, 2015b) in comparison to putatively highly convenient and comfortable lifestyle in Western capitalist society. This interest in the endurance of practices is also somewhat pragmatic, in that not every sustainable practice can be experienced as pleasurable or enchanting, with some inevitably experienced as less comfortable. Indeed, discomforts and inconveniences have cropped up in various instances in the previous chapters, for instance Michelle's trouble to attach to some of Can Decreix's practices (Chapter 4), commoning fatigue (Chapter 5), and difficulties in convincing others of unusual economic practices (Chapter 6). Considering how discomforts are negotiated on site can also be useful for informing interventions to effect change towards sustainable living in society at large.

I understand the endurance of practices in the eco-communities to be the result of the continuous re-composition of the various elements that constitute them, including variable (human) bodies and their proximate environment (technologies, objects, spatial settings) *as well as* (evolving) moral codes and political values (see Section 2.4.4). Playing a similar role to comfort is convenience which can be loosely defined as the spatio-temporal orderings between body and proximate environment that requires low levels of effort and energy expenditure. While the terms comfort and convenience are technically distinct, they have become

increasingly blurred (Pickerill 2015b: 1068). Crucially, to endure, practices require continuous adaptation, based on an 'intricate mixture of stability and change' (Schwanen, 2016: 152). Therefore, what requires examination is not simply 'if' particular practices endure, but how.

By explicitly emphasising the endurance of practices over time and the role that discomforts and inconveniences played here, I contribute to the literature by emphasising eco-communities' evolving character, an important element that has nonetheless been more alluded to than illustrated in much of the existing literature. Rather than being secondary to ideological positioning or indeed various internal or external influences (see 2.4.1), these issues were at the heart of the kind of worlds the residents in each site composed. I also contribute to non-representational geographies by providing insight into what happens when 'enchantment' and other 'additive' forms of 'learning to be affected' (Latour, 2004a; Greenhough, 2014) by non-humans cease to incite ethical action, and how this is negotiated in situ.

To support this argument, I will draw out four contexts in which the endurance of practices was at stake given discomfort and inconveniences. The first two revolve around practices requiring uptake by new practitioners, e.g., by visitors and new residents, in order to endure. In this context, I examine how practices that appeared uncomfortable to visitors were taken up, and highlight the subtle dispositional changes, aided by particular value sets, that rendered this possible (7.2). Secondly, I highlight more intensely felt discomforts and inconveniences around off-the-grid heating and thermal discomfort in winter, that elicited more varied and somewhat contradictory responses in Calafou and Can Masdeu (7.3). Thirdly, I examine more slowly emerging discomforts and inconveniences as a second 'threat' to the endurance of practices, that emerged either *within* the practices themselves, given a creeping weariness or changes within the body, leading to increased material accumulation and revised sharing arrangements (7.3), or

fourthly, *outside* of the practice, through a dispersion of attachments and motivations beyond the site, rendering many time-intensive commoning practices inconvenient (7.5).

7.2 FIRST IMPRESSIONS: EMBRACING DISCOMFORT UPON ARRIVAL

When residents and volunteers first arrived on site, they were typically confronted with a plethora of new practices that to varying extents caused discomfort or inconvenience, implying that the uptake and therefore the endurance of practices might be in question. In Can Decreix, potentially uncomfortable or inconvenient practices included using ash shampoo and compost

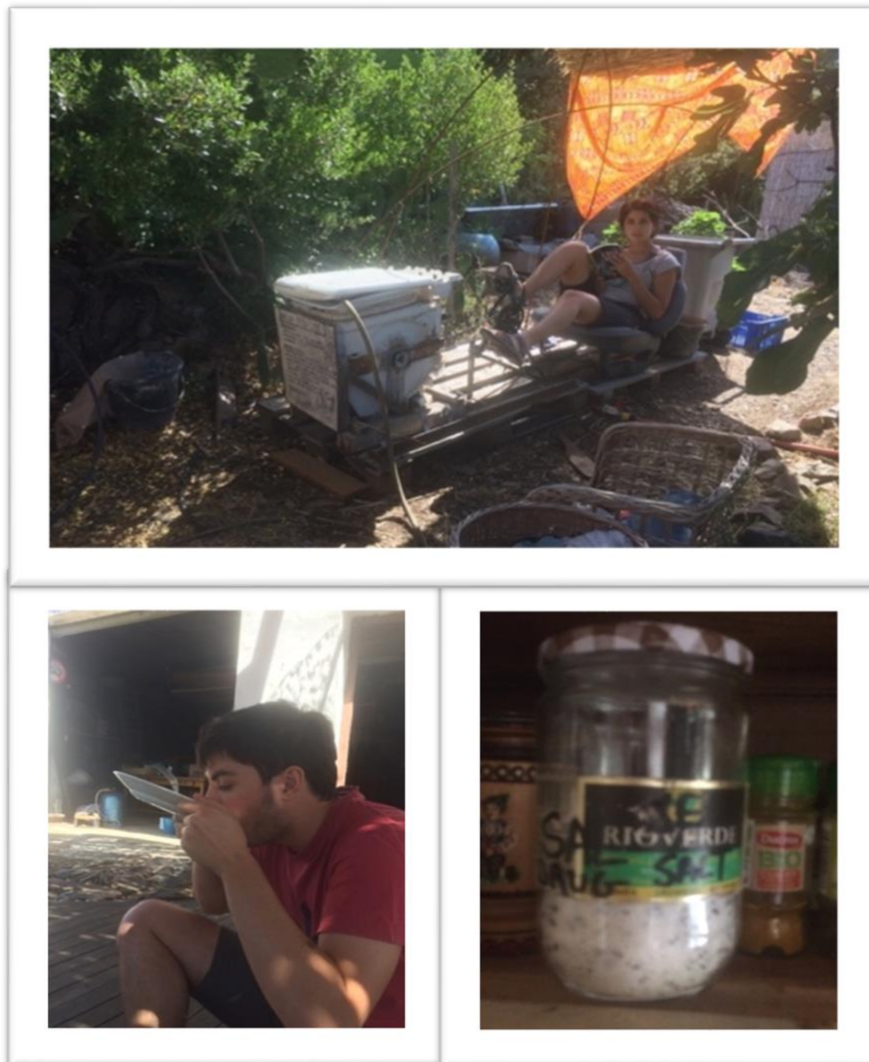


Figure 7.1: a) The pedalling machine in action in Can Decreix (top), b) A visitor doing 'chabrot' in Can Decreix (bottom left), and c) A pot filled with salt labelled 'salt drug' in Can Decreix (bottom right). Source: Author

toilets; the pedalling washing machine; chabrot (see Chapter 1's opening vignette); renouncing salt and coffee; and living without a fridge (see Figures 7.1a-c)).

Meanwhile, in the two other sites, difficulties were associated with the challenges of bearing the cold without central heating, chopping and heating with wood, sharing bathroom and kitchen facilities, using compost toilets (see Figures 7.2a) and b)) as well as using showers and other facilities at a relatively large physical distance from residential buildings in Can Masdeu and Calafou.

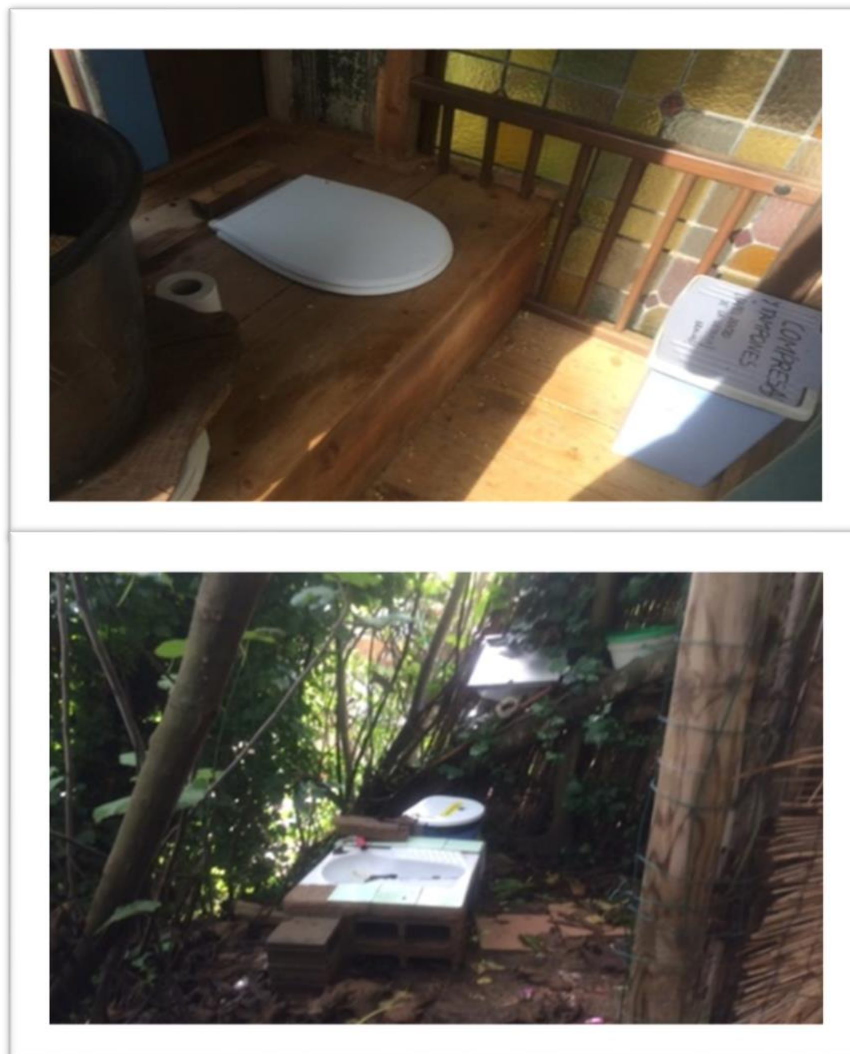


Figure 7.2: a) Inside one of Can Masdeu's compost toilets and b) An outdoor urinary in Can Masdeu. Source: Author

How did new residents and visitors cope with these potentially uncomfortable and inconvenient practices and how did this affect their uptake? If particular affective dispositions along with a moral code are required to put an ethical practice into practice (Bennett, 2001), how did those who initially lacked the right affective disposition – articulating itself as discomfort – overcome this and enable them to take up the practice? Building on Bennett's argument (see Chapter 4), I will highlight four ways through which visitors and residents worked on their affective disposition in subtle ways, which rendered them able to embrace potentially uncomfortable or inconvenient practices and thereby ensured their endurance over time.

First and perhaps most frequently, discomforts around everyday practices were discounted and dismissed as trivial. Antonio in Calafou responded to my question whether they were '*things that weren't very pleasant or difficult for you at the beginning*', '*hm, at the beginning no. Maybe the cold (laughs)'*, with laughter arguably signalling some level of embarrassment. When asked whether '*the pedalling washing machine, the dry toilet'* had been bothersome to him in his early squatting days, Sebastián similarly explained that they were in fact '*interesting to me. I adapted. [...] It seemed more interesting than to live in a flat [...] in the city.'* His priority lay here with '*the experience, the adventure*' rather than comfort. Ana Maria similarly emphasised that she had not been *'bothered by [...] the dry toilet or living in community or catching wood'* which she never '*lived badly'*, also evoking '*adventure.*' Here, a rationalisation of discomforts as adventurous functioned to deprioritise any potential discomforts, not through appeal to direct political or moral codes, but through radical acceptance of the experience itself. This also implicitly casts comfort as somewhat 'conservative' (Bissell, 2008: 1697) and 'socially and culturally unadventurous' (Prazeres, 2021). Thus, in this instant a discursive framing of particular practices as 'adventurous' helped in the first instant for residents to take up potentially uncomfortable practices.

At the same time, this seemed to have been accompanied with subtle changes in (affective) disposition. Gabriel, a volunteer in Can Decreix, for instance explained that practices like renouncing salt or using ash shampoo were '*not a problem*', because '*for me it was somehow obvious, that we will go along with [auf etwas einlassen] the rules of the place, that we trust, that somebody has thought about this, that therefore it makes sense. I understood this as an opportunity to learn, to experience something new – I went into this with a kind of curiosity.'* He subsequently corrected himself, emphasising that '[*alt*]*hough [...] this implies a really active... I just took it as it was, whichever way it came'*. Gabriel seemed to have found himself in a situation of 'shock from the outside' (Bissell, 2011: 2653), whereby the new habits in Can Decreix 'forces us to think' (Deleuze, 2004: 176). But he conceptualised this as a possibility for learning, demonstrating a certain readiness to be affected (Bissell, 2011) by new ways of doing and suspending 'critical judgement'. Particularly interesting here is his self-described *passivity*, whereby he was open to new habits to form, even if they appeared at first uncomfortable. Writing on habits, Félix Ravaisson, (2008 [1838]) has here highlighted 'passive' habits, such as 'getting used' to noise, that Gabriel seemed to implicitly trust to work 'on' him. Thus, a comfortable body became relatively less important than a *receptive* body open to transformation. These slightly different versions of how discomfort was reconceived chime with contemporary notions of 'getting out of the comfort zone' (see Brown, 2008), that lead not only to 'self-discovery' and 'growth' (Prazeres, 2017: 908), but also in different contexts, wider societal change (Riley and Solic, 2017).

Secondly and relatedly, some people highlighted how political and ideological positioning had actively *altered* their sense of comfort, therefore rendering what could have been a potentially uncomfortable practice an enjoyable one. Enzo in Can Masdeu used this reasoning several times, noting for instance, '*what's hard for me is then going to people's houses and having to shit into drinking water [...]. Seeing compost [turn] into fruit trees gives me massive pleasure*', with Casandra similarly highlighting that using the compost toilet made her '*happy*', whereas flush toilets '*provoked anger'*

in her. Here, the water inefficiency of flushing toilets caused significant corporeal discomfort, demonstrating to some extent the embodiment of moral and ethical codes manifesting themselves in sensations of comfort. This seems to suggest that values and moral codes had significantly altered the embodied experiences of discomfort and inconvenience, thereby enabling the take-up and continuation of what might otherwise be perceived as uncomfortable practices.

Others articulated this through a logic of *comparison:* Sebastián called the precarity that came with living in Can Masdeu '*a lesser evil*' compared to a more conventional life in Barcelona, while Mateo, a newcomer to Calafou, explained that '*other things seem more difficult, [such as] having to work on the side as a waiter and paying 500 Euros for a flat in Barcelona [...] what I'd earn would go towards rent, and then I'd pick up my son, eating while watching the telly. [...] [There is] an order of priorities [...] and of comfort as well*.' Getting to know diverse forms of living allowed for a variety of practices that were previously matters of fact, such as watching TV and fulltime employment to become matters of concern (Latour, 2004b). This in turn enabled comparison and trade-offs, whereby ensembles of practices rather than individual practices were compared with each other. Like with Casandra and Enzo above, both affective dispositions and political-moral codes had aligned to such an extent that they were in effect indistinguishable and worked together to make the uptake of a whole range of potentially uncomfortable practices on sites more likely.

Thirdly, Angela, a frequent visitor in Can Decreix, articulated a similar logic of compensation with regards to the particular ways in which a potentially uncomfortable practice was taken up, with social contacts and community making up for any potential material discomforts. She explained that '*people can realise that they prefer to live in this different way, and it's not that hard to leave their comforts because they are going to have other things. Like that other societies don't provide*.' She noted that '*comforts are [...] not so important you know, because there are other things that are more important, like*

spending more time with each other.' Angela did not explicitly articulate political values that influenced sensations of comfort, but rather highlighted that within a wider web of socio-technical relations, certain 'uncomfortable' relations were worth bearing because they were compensated by other factors adding to 'comfort', such as community. Put differently, 'interhuman' comfort was weighed up against and took priority over comfort between human bodies and various objects and technologies (see Crowley, 2001). By drawing attention to discomforts in mainstream society that perhaps often go 'unidentified' (Hall, 2010: 61), Angela reconceptualised the smaller discomforts less as 'sacrifices' and more as concessions.

Linked to this latter point was a fourth strategy: That is, potentially uncomfortable practices became more fun by virtue of being a collective activity. Monica, a Western European visitor during Calafou's open days, explained: '*Yesterday, we did a [human] chain, to move down lots of tiles from above [...]that, for example, is typically a thing [...] if you were alone, right away it gets heavy, it's not jovial, it's boring, but whatever you do, when you're with people, you motivate each other, so it's much more fun.*' Angela also noted that emptying the dry toilet always required '*two people*', meaning that '*if you are together, you always laugh – and you forget that it's heavy work [...]and then it's finished in 5 minutes, and it wasn't so bad in the end*.' Here, discomfort is perhaps less embraced but rather transformed into a comparatively comfortable experience by *adding* more human 'components' to a particular practice.

This does not mean that everyone found ways to embrace uncomfortable practices on site. Indeed, a significant number of visitors almost immediately rejected certain practices, threatening the endurance of practices on site, particularly in Can Decreix, where many continued to drink coffee and eat sugar and salt whilst refusing to practice 'chabrot', often linking this to more Marxist-inflected values around the necessity for structural rather than 'individual' change, which seemed too 'myopic' (Marres, 2013) to them. Here, contrary to what

has been described above in Enzo's and Casandra's case, values around the importance of structural change stood in the way of subtle affective dispositional changes that might have allowed for practices being taken up and continued. My account in this section stands in a tension with those who view processes of 'normalisation' of practices as solely a question of adopting 'new social norms', that subsequently form 'new circuits of reproduction' (Roysen and Mertens, 2019: 1).

7.3 OFF-THE-GRID HEATING AND THERMAL DISCOMFORT: ETHICS, BODIES, AND MATERIALS

Building on the above, this section focuses on off-the-grid heating and thermal discomfort in Calafou and Can Masdeu. I consider thermal discomfort to be a particularly thorny source of discomfort because it is arguably more 'intensely' viscerally felt (particularly at night between November and March, see Figure 7.3) than the examples above, therefore constituting a more 'serious' threat to comfort levels. This is not to suggest any essentialised understanding of 'comfortable' temperatures, but simply acknowledges the intensity with which temperatures are often experienced (Bissell, 2009; Vannini and Taggart, 2014c). At the same time, the most

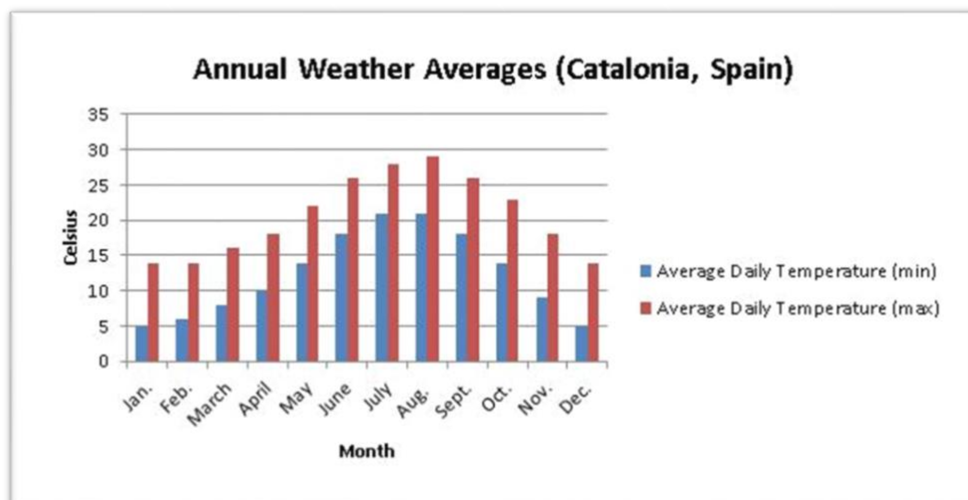


Figure 7.3: Annual weather averages for Catalonia, Spain. Source: Stahn (no date))

common solution, off-the-grid heating, usually also implied much greater corporeal involvement in the process of keeping warm compared to on-grid-heating (see Vannini and Taggart, 2014c; see also 2.4.2), which was often viewed as a rather significant inconvenience.

In the following, I argue that a subtle change in disposition, helped by particular value sets, as described above, was not sufficient to facilitate the endurance of off-the-grid heating practices: Required were more active processes of skilling and cultivation of habits through continual adjustments of bodies, technologies and proximate environment, which I will examine by considering three ways of dealing with thermal discomfort on site, that is, heating with wood (7.3.1), insulation (7.3.2), and attempts to embrace the cold without resort to any methods of heat preservation or generation (7.3.3). I will highlight that purely discursive means of addressing thermal discomfort and off-the-grid heating practices generated in some cases internal contradictions.

7.3.1 Heating with wood

Most residents in both Calafou and Can Masdeu used wood stoves for heating in the winter, which they cast as the most sustainable option, without mentioning the associated frequently highlighted pollution (e.g., Bari *et al.*, 2011). As Joaquín explained for Calafou, '*using wood, that's autonomy, because we generate a resource [...], it's sustainability, in the sense that we prevent fires, we clean the forest, and we use this energy [...] to heat our homes*.'

In this context, heat generation became a form of 'onerous consumption' depending on the residents' 'direct, embodied and permanent involvement' in producing thermal comfort (Vannini and Taggart, 2016: 83). Through this involvement, comfort was co-produced as 'specific affective resonance' (Bissell, 2008: 1702) between body, fire, wood stoves, and the flats'

physical layout. This was achieved, at least by my host Yolanda, through learning embodied skills of lighting and tending a fire, paying close attention to the affordances of material objects, and through strategies of bodily adjustments. After this initial process of learning, wood-heating as a practice was *durably* performed thanks to iterative 'small' adaptations. While these comfort-producing strategies sought to minimise effort around the practice, they did not detract from the residents' self-professed ethical codes.

Compared to the more punctual (if repetitive) repair work described in Chapter 5 and the uncomfortable practices, which tended to involve less skill, introduced in the above section, lighting a fire required a presumably lengthier process of habituation. This implied a process of repeated embodied skilling through which comfort could be increasingly and more satisfactorily 'engineered' (Bissell, 2008: 1701). In this context, Yolanda remembered overcoming an initial sense of nuisance: '*Well, the topic of the wood stove- sometimes, it's like, what a drag, no? [...] At the beginning, I couldn't be bothered.'* Antonio also described lighting a fire as initially uncertain and daunting: '*It was a bit like, will I manage, or will I not manage. With the repetition, […] it's become more natural, [...]so I stopped to be apprehensive about it.*' After a period of apprehension, both had become more attuned to the affordances of fire and wood, enhancing their own bodily capacities. Ensuring the endurance of off-the-the grid heating practices in context meant processes of repeated intervention in a particular assemblage that facilitated heating. These repeated interventions changed the affective disposition towards the practice, which moved from apprehension to normalcy and perhaps relaxation, thereby aligning it with the political and moral content of the practice. Endurance depended here on an active alteration of affective resonances thanks to the repeated enactment of the practice.

Yolanda for her part grew fascinated with the fire's particular affordances early on, explaining that she became '*excited by the fact of lighting a fire*.' My Field Notes (5/11/2018) indicate that '*[s]he*

says that there are different ways of doing it, that she likes to experiment. She loves to watch the flames and is quite absorbed by it.' She became enchanted by the 'particularities' and 'inconsistencies' 'characteristic of localised arrangements of matter-energy' (Clark and Yusoff, 2014: 222) that replaced the relative energetic consistency of fossil-fuelled on-grid energy arrangements. Furthermore, as John Dewey (1922: 72) has highlighted in the process of habit formation, heating with wood became 'a flexible, sensitive habit' that grew 'more adaptable by practice and use', imbued with 'intelligence, grace and soul' and enabling 'creativity and novelty' (Schwanen, Banister and Anable, 2012: 526).

The endurance of wood-heating, however, required frequent small adaptations and 'renegotiations' (Bissell, 2008: 1703) to a changing environment, with comfort and convenience remaining fragile achievements. Soon Yolanda experienced that '*when I concentrated a lot on something [else] for a few hours, the fire extinguished.*' In particular, '*if I think in like January or February, from 6 in the afternoon [...] if every 10 minutes you have to add a little log, I will go crazy*.' Here, inconvenience emerged in the context of the requirement to align different practices and bundles of activities and their rhythms, with off-the-grid heating implying rather different and more demanding rhythms (Royston, 2014; Forde, 2017), which interrupted other practices, including computer-based work (see also Winance, 2006). While the practice was not abandoned altogether, its endurance depended on it being adapted to the altered affective relations Yolanda cultivated with fire over time – from apprehension to fascination to becoming a mild nuisance. This situation ushered in Yolanda getting herself a bigger stove (see Figure 7.4) meaning that she did not '*have to feed it [the fire] for two hours at least*', allowing her to pragmatically circumvent the specific rhythms off-the-grid heating usually implied. Here, she worked with the affordances of particular objects (Bissell, 2008) that co-contributed to comfort and convenience. At the same time, this back and forth also highlights the often-continuous process of getting used to a particular practice, with different attachments and their intensities (to fire

and computer-based work) requiring compromise and re-adjustment over time. This also illustrates that Yolanda and others did not straightforwardly move from experiencing practices as uncomfortable/inconvenient to finding them comfortable and convenient. Instead, the practice was (slightly) recomposed over time, as a result of which it could endure.

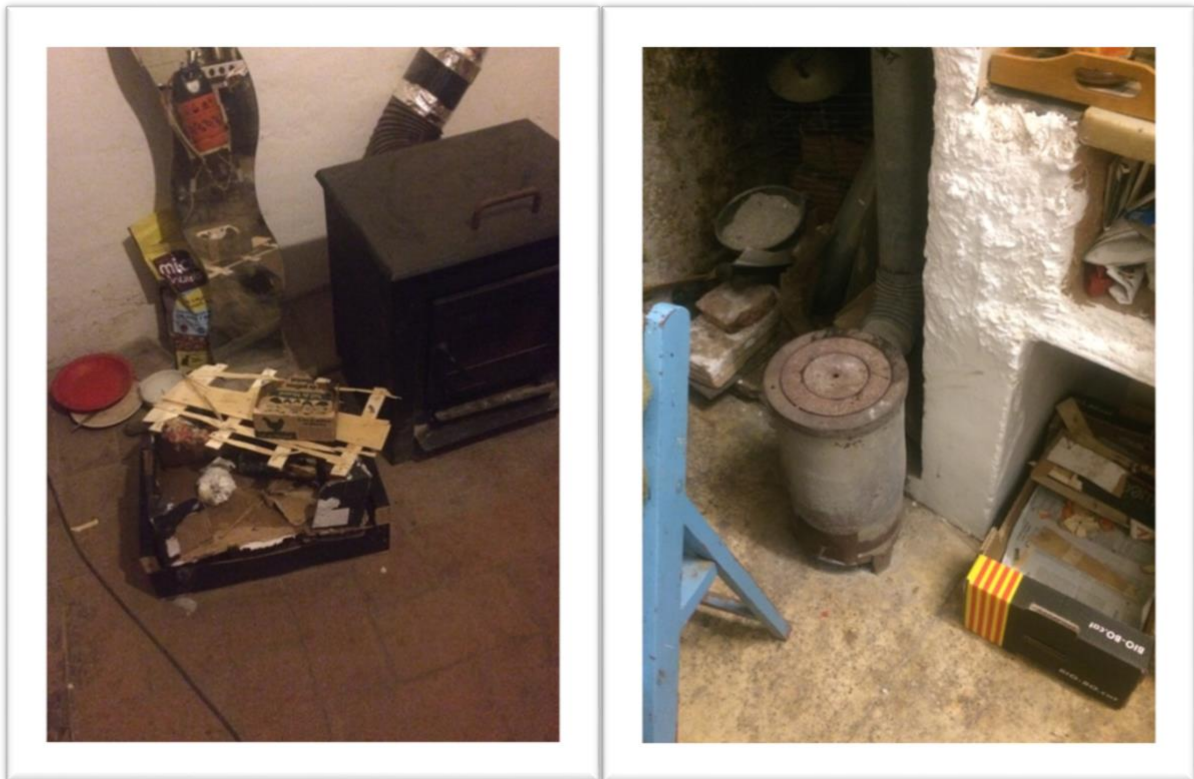


Figure 7.4a) Yolanda's bigger stove compared (left) to b) a small to regular-sized stove (right)

7.3.2 Insulation

Off-the-grid heating with wood was rejected by some, especially in Can Masdeu, who strove to find other ways of ensuring thermal comfort, that involved less involvement of 'hot energies' (Vannini and Taggart, 2014c). In particular, Enzo in Can Masdeu was a lone example of pursuing insulation to achieve thermal comfort: His emphasis lay with minimising effort in heating (i.e., to be less inconvenient) in ways that can be viewed as a partial refusal to be

continuously and repeatedly 'affected' by wood-heating practices, though arguably still corresponding to the professed values of the site.

Instead, he sought to make his '*small hexagonal house*' (see Figure 7.5) as energy efficient as possible, having added a *'solar panel on the roof, for hot water [...]. Then it goes under the floor, so we have underground heating.'* Furthermore, '*when the sun goes down in the winter, we close these curtains which are sort of triple curtains, with insulation in the middle*.' Thanks to these measures, he was able eschew the use of a wood stove, having required '*electric heating for 4 nights'* only in the previous winter. The lengths to which he had gone to build this energy-efficient and well-insulated home demonstrate a different way of getting habituated to one's 'proximate environment' (Bissell, 2009), one that seemed commensurate with Enzo's skillsets (see Chapter 5.5.1). Similarly to Yolanda's adaptation by adding a bigger stove to avoid repeated and disruptive interventions to the wood stove, Enzo pre-empted such inconveniences by insulating his home from the start. Thus, Enzo relied on his extensive skillsets- rather than subtle dispositional changes vis-à-vis the cold – to enable comfort and conveniences in his home, albeit at a different temporal rhythm than

Figure 7.5: Enzo's hexagonal, well insulated one-bedroom house. Source: Author

Yolanda, requiring much less frequent intervention. Thanks to previous experiences of learning to be affected by various infrastructures, Enzo was able to adjust and adapt to his 'proximate environment' (Bissell, 2009) before properly living in his home. This was a much more significant effort than the more subtle dispositional changes highlighted in the previous section.

Interestingly, he did so with a view towards the comfort of visitors more than towards his own, relying on conventional understandings of comfort and convenience: He explained that he had wanted to '*to build something that was both comfortable and beautiful*' to be experienced by possible visitors and therefore explicitly rejected wood-heating, arguing that '*if a model is showing that now it has to be chopping wood and making fire [...] that's not attractive*.' By conceptualising his house not only as a home but also as a demonstration site for sustainable living, he deemed it imperative to render his living situation *attractive* to others. This logic strikingly resembles the attachment processes examined in Chapter 6. Enzo was arguably pre-empting the common assumption that sustainable life is uncomfortable (Pickerill, 2015b) and instead sought to partially align himself with European cultural norms about effortless thermal comfort.

In so doing, he divorced '*your basic need to be warm and comfortable*' from any political mission, thereby possibly depoliticising by which means precisely comfort should be achieved. As such, he championed relatively *effortless* warmth, chiming with common ideas that sustainable life should be made easy (Marres, 2012), and standing in stark contrast with those dedicating much time, energy and intricate attunement of body and environment to assuring domestic warmth off the grid (Vannini and Taggart, 2014c). Thus, given common associations of wood-heating as uncomfortable and effortful, wood-heating was not taken up, and was instead replaced with another practice – insulation – that overall did not seem to detract from the political mission of the project.

7.3.3 Embracing anti-capitalist discomfort?

Enzo's approach stood in sharp contradistinction with another trend that I witnessed mainly in Can Masdeu's main house, which generated contradictions and tensions: '*Some people have been doing a lot of work of insulation, and some people not',* though they had now committed to clean '*all the windows in the house'* so that '*more daylight*' (Rafael) could warm up the house. This reluctance to insulate was according to Enzo also apparent in the nearby squat of Kan Pasqual. He agreed with my suggestion that in both places, discomfort was perhaps embraced as part of an '*out of system lifestyle*'.[23] He brought up another resident, Diego, who considered *'anything done professionally or done well, is capitalist. So [...]to be warm and comfortable is capitalist and consumerist, and then the hard and dark, that's proper squatting [...]it's not political philosophy that you can replicate*.' Thus, 'comfort' and perhaps more specifically energy efficiency were 'deliberated invested' with political and moral capacities (Marres, 2013), in this case aligning energy efficiency with a capitalism they sought to resist, standing in direct contrast to Enzo's approach. There was perhaps also a sense that it was necessary to 'suffer for a cause', possibly constituting a kind of 'environmental politics of sacrifice' (Maniates and Meyer, 2010), which is often centred on notions of comfort (Wapner, 2010). This also fits Pickerill's (2015b: 1073) observations of bathrooms in British ecovillages, with some 'actively seek[ing] discomfort' (see Kraftl, 2007). More specifically, it highlights the role of ethics and/or 'thermal conventions', in maintaining practices that are not conducive to winter warmth (Hitchings and Day, 2011: 2454). Put differently, a particular 'script' or value set stood in the way of some residents habituating themselves to potentially comfort-producing practices.

[23] It is worth keeping in mind that Spanish housing generally has relatively low levels of energy efficiency, with De Ayala, Galarraga and Spadaro (2016) highlighting that in their survey of three Spanish regions that less than 10% of housing were an A, B or C in the Energy Performance Certificate, with 52% of housing surveyed being in the E category.

Thus far, this de-prioritisation of insulation and refusal to heat with wood seems to contradict my argument that the endurance of practices is reliant on embodied processes of continual adaptations between humans, technologies, and their proximate environment, by almost exclusively relying on particular values and 'scripts'. However, this attitude had adverse consequences in that '*sometimes, some people [were] using the electricity*' from the municipal network (Rafael), and furthermore did not '*put clothes on, have the window [open], don't close the door, don't have insulation'*, and thereby '*causing havoc all around*' (Enzo). It is unclear how closely unsustainable electricity consumption and strong moral convictions aligned, especially given that some of the more 'wasteful' residents appeared less politically minded to me. It suggests, however, that previous heating practices – simply turning a heater on when cold – had not been fully abandoned by some residents, who in moments of acute thermal discomfort seemed to resort to old habits (Breadsell *et al.*, 2019). Dewey (1922) has similarly argued that habits that have been acquired can continue to 'endure below the surface of visibility as latent forces' and can be re-activated in the right mind-body-world assemblage, e.g., by purchasing an electric heater. Here, strong existing heating practices, such as effortless heating with electricity or gas, 'robbed' wood-heating (and indeed insulation practices) practices of their endurance (Schwanen, 2016: 154).

It is important not to overstate the prevalence of this phenomenon: There was a clear limit to the extent of electric heating, as Casandra explained: '*If three people start putting on electric heating, that will ruin the electricity supply'*, with many residents apparently sticking to wood heating without getting caught up in these contradictory tendencies around bodily discomfort. Furthermore, there were long-lasting debates about switching to the Catalan renewable energy cooperative Som Energia or investing in more solar panels, that had however not yet materialised in specific actions.

Nonetheless, taken together these inconsistencies highlight that the endurance of off-the-grid heating practices depended to a large extent on a willingness to 'learn to get affected' (again and again) by the variable elements that compose these practices. More than with the perhaps less intensely felt uncomfortable or inconvenient practices outlined in the previous section, thermal comfort and off-the-grid heating required lengthier processes of habituation and adaptation. The fact that some in Can Masdeu refused to do so, meant that Can Masdeu's residents sometimes found themselves in a squarely contradictory situation of some people valorising discomfort as anti-capitalist, refusing insulation practices and wood heating as two (largely) off-the-grid heating practices that sufficiently ensure thermal comfort, whilst at the same time resorting to unsustainable heating habits. This arguably demonstrates some limits to purely 'discursive', value-based dismissals of discomfort as main way to ensure the endurance of practices.

7.4 MATERIAL COMFORT OVER TIME: SLOW CREEP TRANSFORMATIONS

While the previous two sections were concerned with discomforts and inconveniences in the earlier stages of residents' or visitors' life in the eco-communities, I now move to consider how practices emerged as increasingly uncomfortable or inconvenient over longer periods of time. Here, residents had previously undergone processes of habituation and small dispositional changes to render novel practices comfortable. However, through the repetition of practices, with time, more significant changes to the practices and/or their abandonment seemed to become necessary to ensure an embodied sense of comfort. This involved for a wide array of practices a twin dynamic towards more material consumption and less sharing. Nonetheless, these processes were to varying extents contested within the communities and were by no means unilinear and predetermined.

7.4.1 Can Masdeu

In Can Masdeu, various material comforts and conveniences had slowly accumulated over many years, involving primarily food and white goods. As Veronica, a regular Western European visitor since 2013, explained: '*At the beginning, it must have been more on a level of food variety, and, with the time that passes, there are pregnant women, children, and families [...]. Every time I come, there is something new [...] a new kind of nut, or fruit, or fish*.' Furthermore, Rafael explained that they had recently disposed of their pedalling washing because '*we didn't use it, it was like a museum*', and that instead '*it was more comfortable having an electric washing [sic] (laughs)*'. Similarly, initially, '*we had no fridge for years. Now, we have 5 fridges and 2 frozen [freezers], so of course we became more, less radical, no, and more comfortable*.' Rafael qualified these changes towards greater material comfort as '*natural*', and a result of '*ageing*'. There was for him an implicit assumption that particular kinds of bodies – ageing bodies, pregnant women and children – required an adjustment in their proximate environment (Bissell, 2008), and therefore had a greater need for healthy food, furniture and white goods, in ways that significantly threatened the endurance of some practices while leading to significant adaptations in others. The most obvious example for changing bodies altering practices was perhaps the introduction of fish after several women became pregnant, also touching on notions of health (Field Notes 8/10/2018).

Rafael also brought up the widespread feeling that life in Can Masdeu was no longer perceived as '*provisional, it could be permanent*', an unusual development for a squat. Veronica echoed this perspective, arguing that '*in the long run, there is more of a need for more comforts [...] to maintain one's mode of living, [...]to really settle into something that is comfortable for everyone. These are compromises.*' Here, both considered that permanent as opposed to provisional living arrangements required higher levels of comfort and convenience in everyday practices to endure. This also implies that what

is experienced as comfortable or uncomfortable has a particular temporality, whereby uncomfortable practices could be endured only for a limited amount of time.

Bissell (2014) has provided a framework by which such small, continuous additions to material comforts can be understood as 'subtle, slow creep transformations' that build up to 'tipping points' over time (see 2.4.3). These transformations occur through what Deleuze and Parnet (2002: 128) refers to as 'secret, imperceptible' cracks, marking 'the rise of a threshold of exigency; you can no longer stand what you put up with before, even yesterday; the distribution of desires has changed in us'. In this reading, a different composition of bodies (ageing, pregnant, young) as well as repeated exposure to a particular body-environment composition has led to small 'tipping points' or things reaching a 'threshold of bearability' (Bissell, 2014: 199). Adding new white goods or food items can then be understood as such small 'tipping points'. Such threshold-crossings led some residents to resort to previous habits, that arguably resembled more conventional habits of comfort and convenience in mainstream society, with the latter remaining 'latent' throughout their residence in Can Masdeu (Dewey, 1922). These processes also affected residents in differential ways, with different bodies reaching their 'limit' or a 'threshold' (Abrahamsson and Simpson, 2011: 332) at different points in time. This was also linked to moral and political convictions, as Rafael explained: '*Some people are less interested in those things, so they push for more comfort.'* Hence, those whose moral and political convictions lacked in intensity (or put differently, were less motivated), were most likely to question the endurance of particular sustainable or post-capitalist practices on site, and instead demanded the reintroduction of more conventionally comfortable or convenient practices.

While there was certainly an increase in material goods that characterised various practices in the household, this did not mean that political or ethical codes were discarded altogether; they were rather renegotiated and rethought. Thus, Rafael for instance argued that '*in some aspects, we were too much radical [sic], it doesn't change the world that you don't have a fridge, [...] You can have a fridge, but maybe a communitarian fridge.*' These types of reflections around the sustainability of particular objects were fairly common, implying a rather nuanced way of thinking of how to compose the most suitable more-than-human configuration on site (Latour, 2010). Such value-based reflections also give answers as to whether a practice is understood to be abandoned or to endure (whilst being adapted), in situ, depending on how to 'cut' the contours of what counts as part of a practice such as low-carbon cooling or cooling without a fridge (Strathern, 1996).

Figure 7.6: Two of the fridges in Can Masdeu's common areas, with the fridge on the left for 'personal' and the right for 'communal' use. Source: Author

Rafael thus described these reflections as *adaptations* that were '*necessary, but it's necessary also to control it, kind of a balance*', arguing there were also people pushing '*the other way around*', as a kind of '*dialectics*'. For instance, Alba noted that she felt like she was '*pushing against the tide a bit*' while Enzo was particularly vocal that this '*incremental change back to normal*' was '*hard for*' him. These

'*dialectics*' were arguably at play when an additional fridge (see Figure 7.6) was purchased by one of the residents shortly after my stay: As Axel, the Scandinavian carpenter, told me later '*now there's a big debate about taking collective space, from everybody',* linked to different '*visions*' for the site. Here, one resident had apparently reached a 'tipping point' (Bissell, 2014), but this was palpably not the case for everyone. This internal conflict can be understood to be directly the result of differential bodily capacities to endure certain material configurations along with differing levels of intensity with which moral codes were felt. This adds to literatures that have examined internal conflicts as threatening the endurance of eco-communities, without reference to what these conflicts were about (Kirby, 2003; Christian, 2003; Magnusson, 2018; Cunningham and Wearing, 2013).

Related to the push for greater material comforts was a tendency towards carving out a greater proportion of personal space. Initially, Umberto recalled that he did not '*have a personal room and we slept with many in a room with sleeping bags and we were chill about it.*' By the time I arrived, however, it seemed normal for individuals, couples, or families to have their own space. In this context, when Sebastián arrived [in 2005], he '*realised that we needed to decentralise. Because there was too much intensity in the big kitchen.'* He along with three others had therefore taken over a small apartment within the main house, with a '*small kitchen'* of its own (see also Figure 7.7). This allowed him sometimes to '*start and end my day more quietly [...] maybe with [my girlfriend] [...] or when my brother comes.'*

Figure 7.7: An outdoor area in Can Masdeu, designed for smaller get-togethers. Source: Author

This need for personal space had initially been '*a bit taboo*': '*For example, that some friends would come to visit in Can Masdeu, and you do something with them, without the group being there'* was something that '*nobody did at the time [...] we still had [...] certain ideas about, we are a community'* (Sebastián), although '*the group was already tired*.' To '*reclaim other ways*' of living therefore appeared '*very legitimate*' to him. Here, practices of sharing space continuously, without much opportunity for respite, caused fatigue and discomfort. Meanwhile, the construction of smaller spaces arguably constituted another 'tipping point' (Bissell, 2014), that can be viewed as a partial abandonment of practices of sharing.

Yet, in keeping with the conflictual back and forth described above, communitarian values and ideals continued to hold sway over how life together was imagined. Sebastián had recently reinitiated a commission called '*Comunicandonos'* ('Let's communicate with each another') '*to try and recuperate a feeling of community*' and '*find forms to improve our communication and resolve conflicts and*

to create more group cohesion'. By planning a '*dinner together and to talk about our holidays'* and '*screen[ing] photos',* Sebastián not only attempted *to create a good vibe*', but also wanted to achieve '*more honest, more direct [...] communication'*, but '*lovingly*' so. In this sense, Sebastián's plan was effectively a strategy to modulate affective dispositions within the group in order to revive greater cohesion and trust and therefore engender more comfort around various practices related to the sharing of spaces and resources on site.

7.4.2 Calafou

While Can Masdeu was affected by two connected but separate dynamics of (i) increased material comfort and (ii) less sharing in everyday practices, these were directly entwined in Calafou. If Can Masdeu operated through somewhat conflictual '*dialectics*' of deradicalization, Calafou seemed to work through a curious, perhaps sometimes uneasy juxtapositions of differing and evolving ideas of comfort, which had led to a greater diversity in everyday practices, with some initially uncomfortable practices enduring with some but not other residents. This was, as I will show, deeply entwined with the site's physical layout as important elements in the 'proximate environment' (Bissell, 2008), which both contributed to the discomforts and inconveniences that emerged, and simultaneously provided possibilities to remedy them.

Here, part of the discomfort emerged from the large size of Calafou, with almost everyone staying in a housing block at some distance away from the other facilities (toilets, a communal kitchen, showers). A map of the site (Figure 7.8) illustrates that the housing block (1) was at least 200m away from the nearest outhouse (2) (the entry to the flats is at the back of the buildings); and least 250-300m away from the indoor showers (3) and the community kitchen (4), that had to be reached by walking over partially uneven and unlit terrain.

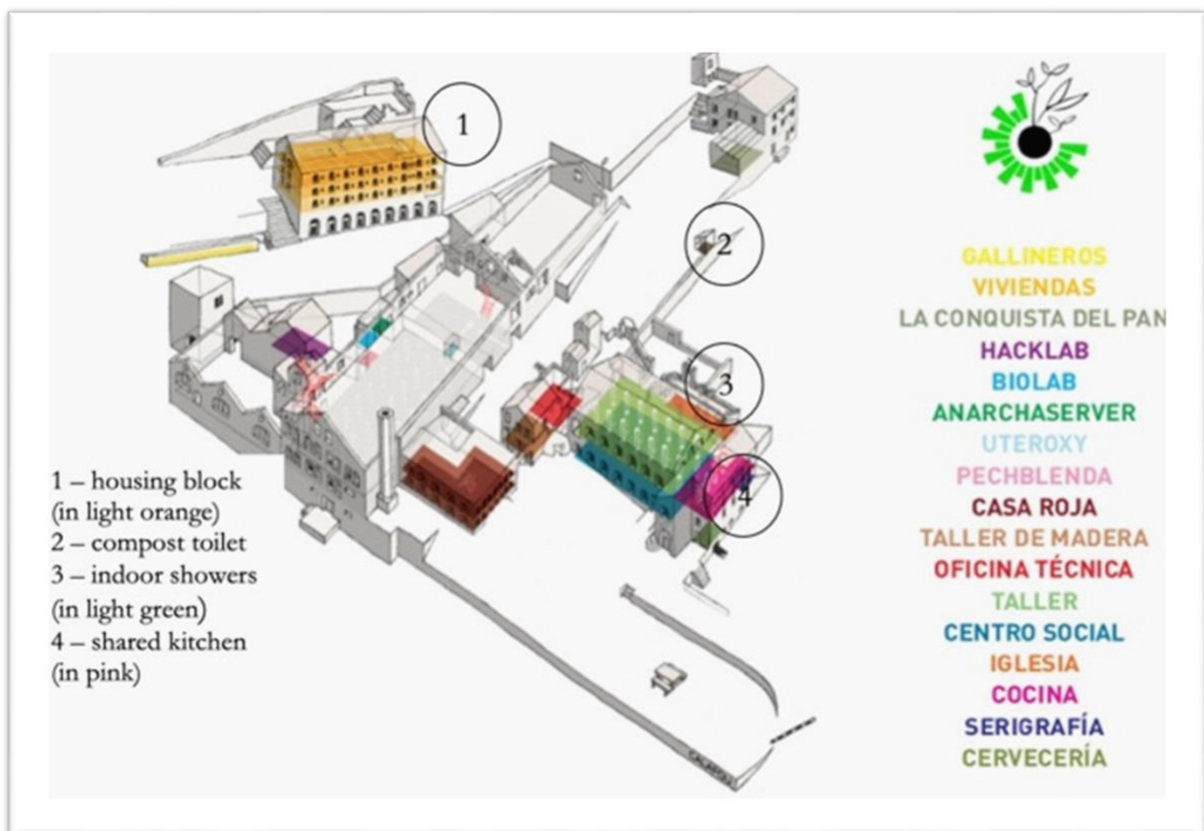


Figure 7.8: Map of Calafou, Source: Cadon (2017)

I argue that these longer distances contributed to 'slow creep transformations' (Bissell, 2014) in everyday practices in Calafou. While such distances maybe seemed inconsequential at first, over the years, they became a significant inconvenience. As a result, many residents chose to build dry toilets and showers in their own flats, which arguably constituted small 'tipping points' (Bissell, 2014). Ana Maria for instance argued that she felt she had '*a lot of ability to adapt, but now there are things that are starting to tire me [...]. It's [only] been a year and a half that we have water inside the*

house [...] [before] we had to go out with water containers.' She then shifted from the first person to an impersonal 'you', perhaps a generalisation through which she sought to justify her changed corporeal disposition as an inevitable development: '*But later, you want a shower, you want hot water – in the house. [...] I want things to be easier. I want good heating and I want a sewer [...] I am beginning not to want to spend my entire day making an effort for my basic necessities, no?*' While she did not refer to this in our interview, Ana Maria was also eight months pregnant at the time, so it seems highly plausible that her changing body contributed further acutely to these experiences of discomfort and inconvenience.

The many small flats, however, simultaneously enabled a relatively straightforward solution – that of a significant duplication of facilities, and a tendency to move away from (some aspects) of the 'onerous consumption' of resources (see Vannini and Taggart, 2016). Thus, given that flats were the responsibility of individuals (or flatmates/couples), all questions of comfort along with the particular ways and the extent to which practices endured were effectively individualised, subject certainly to collective trends but not to the vigorous mutual interrogation that occurred in Can Masdeu. Many residents seemed to equip their flats more elaborately the longer they stayed, and held an expectation of *increasing comfort* over time, perhaps borne out of early and relatively extreme deprivation. As Fernando explained, '*there is no comfort, [...] or like, one day we'll have it, and increasingly we have it a bit more. Right now, in my house, I feel comfortable, but I built the shower only a year ago.*' Both changing (ageing) bodies and a weariness that accrued through repetition of activities over time were used to explain changes in how practices were performed, which uncomfortable practices were being endured and which were not.

In this context, 'spill-overs' between different community members seemed to generate trends in how everyday practices were performed. Early on, Joaquín was apparently an outlier in considering that in his own flat, he could '*do what I want*', and he had been in fact '*the first person*

in Calafou to have a kitchen, to have a stove, to have a bathroom.' When I came to dinner at his house, I noted that '*his house [was] very well furnished [...]. He has a bathroom with a shower, a compost toilet, an elaborate kitchen, [...] lots of technology for his filming devices*' (Field Notes 6/11/2018). He explained that earlier on, because his house was '*very pretty, sometimes they called me individualist*', implying that his approach was not necessarily approved of initially. When I arrived, however, this seemed to be more common – I described Juan and Pedro's flat for instance as '*splendidly arranged [...], with lots of cooking utensils, including a frying machine, to fry fish. A serrano ham is standing on the table. They have just put in wooden floors; a chimney is happily churning away*' (Field Notes 7/11/2018).

While the physical layout of the space certainly helped contribute to the particular ways of comfort-making, in no way did it firmly determine the extent to which individualised comfort was practiced in the flats. My host Yolanda was on the extreme end of embracing discomfort, remaining somewhat immune to these collective trends. She chose '*not to invest too much time in making the house pretty. Some people [...] have spent a lot of time on their houses, [...] they look like city flats – why would I live here, she says, in the ruins of capitalism, if I want a nice flat?*' (Field Notes 5/11/2018). Here, again, ethical values that were embraced with differing levels of intensity seemed to be at play at co-producing different standards of comfort, but also, perhaps unspoken, different bodily abilities to endure certain levels of discomfort (Abrahamson and Simpson, 2011).

7.5 Managing in-group discomfort and dispersing attachments

Finally, Can Masdeu was beset by a dynamic of proliferating and dispersing attachments (see 2.4.3), that led residents to focus more on a variety of life goals, beyond ensuring Can Masdeu's continued endurance. Here, feelings of discomfort and disenchantment with particular practices emerged less from 'within' particular practices, but from elements 'outside' them. This led to

clashes between practices (Dewey, 1922 in Schwanen, Banister and Anable, 2012: 526), fuelling further adaptations to practices on site as well as communal discord and incongruences, adding to an individual's sensation of discomfort. Put differently, the endurance of practices was threatened by varying and for many, decreasing levels of affective intensity towards the project, which led to further discussions. All in all, they point towards significant changes in some residents' *motivation* towards the project as a whole. This also intersected with and intensified some of the dynamics described above, particularly the tendency of some residents to accumulate more material goods to enable greater levels of convenience. In the following, I will briefly sketch out the ways through which practices were experienced as increasingly uncomfortable and inconvenient before highlighting two strategies Can Masdeu undertook to rectify this situation, namely, introducing more flexible working hours and initiating a process of common visioning.

7.5.1 Proliferating attachments

Enzo described the overall trend towards a proliferation of attachments in terms of '*people are working in the city, [...] saving money, doing…degrees, PhDs, etc., so their focus is on their personal development rather than Can Masdeu as a project.'* Umberto similarly highlighted that '*we moved here at 20 years old and now we are close to 40 [...]. Now there are more families, more children, there is more interest in professional development.'* Overall, this meant '*less energy [...] we have changed our interests, our motivation [...] also our way to see life'* (Umberto). This decrease or change in 'energy' can be read as a decrease in affective *intensity* (Bissell, 2009) in commitment or motivation to Can Masdeu as a whole. This in turn shaped the extent to which political and moral codes associated with Can Masdeu were adhered to. Furthermore, this can also be read, with Dewey (1922), as an increasing encroachment of and competition with 'customs', that is, collective habits held by wider social groups (e.g.,

society at large), to impact on life course decisions of many individuals, particularly with regards to professional development.

Here, discomfort around everyday practices emerged in two distinct ways: For those who remained fully committed to Can Masdeu and had not significantly dispersed their attachments, this lack of shared commitment – or shared affective intensity (see Bissell, 2009) – caused discomfort. If comfort is an 'embodied contingency forged between the body and the proximate environment' (Bissell, 2008: 1702), here this not only meant a more-than-human, but also a decidedly interhuman environment. For this group, epitomised by Enzo and Alba, comfort and convenience as experienced in everyday practices continued to rely on (lived) political values and ethics. Enzo accordingly highlighted that '*what's hard for me is this incremental change back to normal [...]. When people don't care about the social or environmental cost of using energy [...] So living with people who don't care, that's hard for me*.' This also led to tensions with others, with Alba arguing that she did not feel like she could *'try and drive new things.'* This applied for instance to the brewery that she and Enzo had started being met with resistance, with others claiming that they were '*taking up too much*' space and were too noisy in the process (Field Notes 8/10/2018).

Secondly, and conversely, for those whose attachments had dispersed significantly, individual responsibilities within the community became significantly harder to reconcile with other obligations, causing discomfort through competing temporal structures and demands. These obligations included: '*You have to, once per trimester, make food or be in the bar of the social centre [...]. You have to cook twice a month. You have to take part in a commission, [...] you have to participate in the assemblies [...] you have to, on Thursdays, work collectively for six hours*' (Casandra). As such, some residents struggled significantly to combine multiple temporal structures (Orlikowski and Yates, 2002: 686) such as one resident who I *never* got to meet, given that he worked full-time for the local council and had two small children. By the accounts of others, it was almost impossible

for him to work on Thursday on site. Similarly, despite being the most important decision-making tool, the monthly assembly [24] that I participated in was attended by no more than seven out of 25 residents.

Given this absence, especially of those with the most dispersed attachments beyond the site, this group has also been hardest to glean insights from directly (see 3.3.2). One exception was Casandra, who during my fieldwork in October 2018 was mostly on site, raising her 1½ year old son, and who was very open about her difficulties in juggling childcare with communal responsibilities. She noted that the birth of her son had '*changed my position here enormously'*, because '*he demands all my energy',* so that her days were exclusively focused on *'my son and then my community*', with the demands of the latter often '*too much for her'*. She suggested that while having a child was a '*personal project'* (as opposed to a communal one), this should still be taken into consideration when distributing communal obligations: '*I'd say a person with a young child, maybe she could, do collective things at 50%*'. Her son made it also difficult to participate in assemblies, given that he '*was not interested*', to which she suggested that a babysitter should be paid so that '*my partner and I can participate'*, again highlighting the difficulties in combining communal obligations with the rhythms of a toddler (see Orlikowski and Yates, 2002), but also how clashes between personal practices and wider collective habits triggered 'reflective deliberation' and potential 'reorganisation' of various organisational practices (see Schwanen, Banister and Anable, 2012: 526).

While material discomforts in the previous section appeared through attrition of a particular practice, here discomfort and inconvenience emerged through elements external to the practice itself, that is, customs as 'wider collective habits' (Dewey, 1922) in society leading to some

[24] This had been reduced from bi-weekly 9 years prior, see Cattaneo and Gavaldà (2010). By contrast Calafou's assemblies were weekly, on Sunday afternoon and were extremely well attended.

degree of 'internal normalisation', as Coppola and Vanolo (2015: 1163) have remarked upon in the context of long-lived squat of Christiania in Copenhagen. While not identical, the proliferation and dispersion of interests coalesced around and intensified the tendency towards increased material comfort. Both tendencies seemed to reinforce each other, constituting important changes in some residents' motivation towards continuing to live on site.

7.5.2 Flexibilising working hours

In response to these proliferating attachments and 'clashing' practices, Can Masdeu had frequently adapted organisational structures to circumstances, which in its most recent iteration meant a tendency towards actively counting and flexibilising working hours. This suggests an increasingly managerial outlook on organising tasks on site and perhaps another example of mainstream 'customs' holding greater sway than previously. Through this managerial innovation, a greater variety of temporalities was 'produced in situated practices' and subsequently 'reproduced through the influence of institutionalised norms' (Orlikowski and Yates, 2002: 685), apparently further bolstering flexible (and somewhat incohesive) temporal structures as 'legitimate and useful' (ibid.).

The above description of communal responsibilities (as given by Casandra) had been roughly in place since at least 2009, when Cattaneo and Gavalda (2010: 586) described a broadly similar division of labour, which stood in sharp contrast with Can Masdeu in its early days, which Claudia, another resident, had described as '*a space that was in ruins and for many years, people in Can Masdeu worked 12 hours a day.'* This dramatic reduction in working hours thanks to continued restoration efforts arguably freed up a lot of time for other ventures and thereby enabled significant changes in the level of commitment towards Can Masdeu.

At the time of my fieldwork, there had been another shift from these clearly defined working hours to a system that obliged everyone to account for working hours dedicated to maintaining the site. Casandra judged this important to '*visualise*' and to allow '*flexibility – we don't all participate in the same way*'. Furthermore, the hours were now '*unified*' instead of coming '*under different headings'*, meaning that there were only '*communal hours'*, implying a further flexibilization around working hours. This innovation occurred as an institutionalisation of a 'slippage between institutional template and the actualities of daily life' (Barley, 1988: 51), arguably a key moment of social innovation for the continued evolution of the site, which occurred through situated improvisations and progressive adjustments (Orlikowski, 1996: 63) that sought to ensure fairness in the context of differentiating goals.

As Umberto explained, the accounting technique of visualising work hours was explicitly aimed to maximise efficiency and convenience in maintenance practices, by establishing a minimum base line: '*How much energy do we need to put? [...] How many hours of work? [...] Do we have to dedicate so that this functions?*' This would allow to '*adjust what we have been doing*' to the '*energy that we have as a group.'* This highly managerial outlook, significantly, implies that Umberto was exclusively concerned with maintaining the site to allow its 'functioning' as it was, and not 'adding' any new social or economic components. In this sense, what were in effect commoning practices on site (beyond infrastructural repair) became subjected to a rather managerial style of composing concerned with maximising efficiency.

This technique was also meant to ensure fairness and equal investment from everyone, though this proved ambiguous for many, with Sebastián stating that he felt that they were '*losing part of our communitarian spirit and our more generous character of work'*, though conceding that it also meant *'recognising the necessities that other people have.*' Rafael similarly viewed it as a '*pity, because – it means that you cannot just trust on people self-organising*', but also argued that '*in fact [we] make our life easier*

because it organizes it. And also, being more fair [sic].' Alba, for her part, noted that '*I personally don't really want to write down all the hours that I put into Can Masdeu, because I don't wanna be accounting for my time all the time.*' Instead, she viewed this system for those that are '*so busy or less motivated [...] to push them to be fair with everyone.*'

7.5.3 Common visioning?

A second related process occurred mainly on a discursive/value-based level and concerned the composition of a common vision, an attempt to solve the increasingly existential divisions between community members. According to Alba, this process of common visioning was about *'our priorities as a group, what are we here for, and what are we most interested in trying to do, and so lots of these different questions are quite open at the moment.'* While experiments around working hours were attempts to pragmatically and fairly ensure flexibility to account for diverse life goals and commitment, the common visioning process sought to (re)impose communal coherence. Put differently, it constituted a second way of recomposing 'harmonious' relations on site (Latour, 2010), that sought to realign mismatches between individuals' motivations through discursive or value-based means. This was still done in what can be considered a fairly managerialist strategy, as featured for instance in strategic niche management literature, that describes 'structured process[es] of visioning' as an essential niche internal processes, that 'guide actor behaviour' (Schot and Geels, 2008: 537), a perspective that remains embedded within mind-body dualisms, largely neglecting embodied sensibilities.

While I was not able to gather any materials directly pertaining to the results of this process, it seemed clear that this was going to be a difficult endeavour, with Enzo arguing that '*the question now is, can we include all the different versions of Can Masdeu within the space and I think that's questionable.'* This seems to suggest that the process of common visioning was a response to a perceived

existential crisis of the project – what indeed was the project there for? Here, Enzo contrasted two broad 'visions' that further spelled out what these divisions meant for Can Masdeu as a whole: '*I think that if you want a quiet, private life with no guests, with little to no social activities, and no noise, [...] and to park your car, [...] that's hard to reconcile with people who want to have guests, who want to have a social life, who think there should be an active social centre. [...] I'm finding it hard to accept that Can Masdeu should just be like everywhere else. [...] It should be experimenting and developing new ways of living, and not just – diluting ourselves.'* The process of common visioning can in this vein be read as a crucial junction point, where the materialisation of divergent life choices threatened the continued performance of everyday (commoning) practices to such an extent that the overall cohesiveness of the sites was perceived to be jeopardised.

While common visioning has been suggested as key to the success of eco-communities elsewhere (see Metcalf, 2012), it remains to be seen how successful this attempt to align those different affective dispositions and moral-political codes within the group primarily by discursive means will ultimately be, especially if these alignment attempts are not *embodied* by residents through the performance of practices. Given the difficulties primarily 'discursive' strategies have had in other contexts around comfort (e.g., heating), it is certainly not a given that such an approach alone will be successful in ensuring the (comfortable) endurance of maintenance practices on site.

At the same time, this active process of re-visioning draws attention to how practices in these sites *require* continuously re-composition and renegotiation, as attachments, life priorities and values, and bodies evolve. It also opens the door to a deeper understanding of what post-capitalist life in Can Masdeu would mean for those who are no longer (as) able-bodied and energetic and those who choose to not exclusively dedicate their life to wider political transformations. This becomes particularly apparent in Casandra's case, who pushed these

reflections further by asking: '*What do we do with someone who is ill, [...] with someone who ages? [...][W]ho has a burnout? [...] What do we do with someone who is not productive*?' These open-ended questions hint at many challenges ahead in reconciling various other attachments and ability of bodies with a commitment to political causes over prolonged periods of time.

7.6 CONCLUSION

In this chapter, I have sought to trace discomforts and inconveniences and the ways in which they have shaped the ways in which practices have endured over time. In so doing, I have highlighted that the comfortable endurance of practices is the outcome of continuous processes of composition and re-composition, the result of dynamic interactions of 'bodies and their proximate environment' (Bissell 2008: 1703), but also of moral values and ethical codes (Bennett, 2001), arguably in ways that impact the composition and indeed longevity of sites as wholes. The ways in which more-than-human configurations in particular practices are assembled and reassembled, and how convenient or comfortable (or not) those practices are, has a significant impact on the ways individual residents spend their time, and raises therefore significant organisational and existential questions for eco-communities.

My work adds to the literature that has considered broadly the longevity and endurance of eco-communities by considering the affective-corporeal experience of practices as well as the historical changes in eco-communities, rather than focusing primarily on (initial) processes of 'normalisation' of 'sustainable' practices. It also adds to the work of those who have investigated the discomforts and inconveniences that are often associated with sustainable practices (Pickerill 2015b, Vannini and Taggart, 2013b; 2016; Shove, 2003), by providing a more diachronic, historical approach to practices, by examining how practices endure (or not) even if they are perceived as uncomfortable and inconvenient.

I have in the first instant examined the take up of practices by newcomers, ensuring the endurance over time through the recruitment of new practitioners. Drawing on two examples, I have shown how subtle changes in affective disposition, often facilitated by intensely felt political codes and values, helped newcomers to reconceive potentially uncomfortable practices in more favourable terms. By contrast, some, partially because of particular political beliefs, refused to cultivate a different disposition, thus limiting the endurance of practices. In the case of a thornier source of discomfort like thermal discomfort and related inconvenient off-the-grid heating practices, this required lengthier processes of bodily habituation and adaptation either throughout the practice (wood-heating) or before (insulation). Notably, these processes were circumvented by those who chose to embrace the cold, and who sometimes ended up in contradictory position of resorting to (latent) habits of electric heating, in contradiction with self-professed values.

Furthermore, I have argued that more slowly emerging discomforts and inconveniences in Can Masdeu and Calafou – a topic thus far not considered by much of the literature – was the result of the continued repetition of practices performed by ever changing bodies. I have demonstrated here how some more radical habits did not endure over time, whilst others significantly evolved in 'slow creep transformations' in affective disposition towards a particular practice or object (Bissell, 2014). These eventually cumulated in 'tipping points', where new material objects were acquired. Nonetheless, this was no straightforward process, but was often vigorously debated, negotiated, and contested, in particular under consideration of their political and ethical significance.

I have also shown how inconveniences and discomforts emerged through many residents' dispersing attachments and commitments beyond Can Masdeu, with many investing more time

in family, children and professional development, that can viewed as the 'outside' influence of 'customs', i.e. collective habits of wider society (Dewey, 1922). In other words, particular levels of affective intensity and motivation did not endure over time for some but diminished as interests dispersed beyond the site. This significantly altered everyday life, with many attempting to reduce working hours on site, the organisation of which was a constant source of contention and frequent interventions in the group (e.g., through the flexibilization of working hours and processes of common visioning).

Throughout this chapter, I have underscored the importance of a close attention to embodiment in the context of the (comfortable) endurance of everyday practices and have shown in several instances how relying on discursive 'scripts' and/or values to get comfortable was usually not sufficient and in some cases actively stood in the way of practices enduring over time. This appears particularly relevant in the context of finding solutions to more slowly emerging discomforts and inconveniences around everyday practices, since these processes have led to enduring conflicts and tensions within the eco-communities, potentially threatening the endurance of the site overall. I have suggested in this context that approaches that consider variable bodies' capacity to endure in ways that are both coherent with their (evolving) political mission may be more effective in enabling the endurance of practices.

8. CONCLUSION

8.1 INTRODUCTION

In this thesis, I have examined three eco-communities that have emerged as vibrant, (hopefully) interesting and inspiring examples of what post-capitalist transformations can look like in practice. I have presented eco-communities as dynamic hotspots of (potentially) post-capitalist doings, with all the potentialities, experimentations, cross-fertilisations, and inspirations as well as the hardship, challenges, conflicts, and ambiguities such sites bring along. In the following, I will summarise and push forward the empirical chapters' key findings and the different contributions that I hope to make to academic knowledge production and beyond. I will begin by showing how this thesis has answered my four research questions (8.2) before fleshing out in further depth how this has contributed to more-than-human and non-representational geographies on the one hand, and diverse economic and post-capitalist geographies on the other (8.3). I will then delve into key methodological contributions I have made to the study of eco-communities as well as to more-than-human geographies and non-representational theories (8.4). I will focus on some of the limitations of my work and provide some ideas about how my work can be pushed further in future academic research (8.5). Finally, I will outline the relevance of my work to wider audiences and focus on some insights that may be interesting for eco-communities as well as for readers in the global North (and perhaps particularly those in Southern Europe), who are broadly interested in post-capitalism and/or combating the current ecological and climate crises (8.6).

8.2 Key findings

8.2.1 RQ1: How does the motivation to visit or join an eco-community emerge in the life courses of individuals?

I addressed this question in my first empirical chapter, Chapter 4, by considering diverse motivational experiences that were narrated to me in an interview setting. This chapter was therefore less concerned with the communities themselves but set out with the recognition that for most people, a commitment to a post-capitalist mode of living begins elsewhere, in many places and over prolonged periods of time.

Compared to most work on this topic, I have staged two key interventions: First, I have emphasised that values and ideologies, which are predominantly emphasised as reasons *why* individuals join eco-communities, are insufficient to explain what drives motivation. Instead, I have drawn on Jane Bennett (2001) primarily to understand *how* motivation has emerged in context, focusing on the role of affective impulses and their interaction with values and moral codes.

Second, on a methodological level, I have contended that motivations tended to be rationalised and narrated in an interview setting and should therefore be conceived of as stories told to convey a trajectory of motivation. Reading Gubrium and Holstein's (1998) account of narrative practice with Latour (2010), I have outlined a compositionist account of narration, whereby interviewees construct coherence in their life stories and engage in substantial 'narrative editing', whilst simultaneously remaining constrained by the many elements, including non-humans, encountered in their lives. This can help provide a more complete picture of motivation as embedded in biographical contexts.

Building on these interventions, I have argued that the kinds of motivational journeys that lead to a life in an eco-community are trajectories of affective intensification that shape a life course in significant ways. Key to this process were repeated encounters or exposures to specific humans, non-humans, sources of knowledge or audio-visual materials. Key to these journeys was that values and ideologies always seemed to be accompanied by particular affective relations. Usually, the two elements of affect and moral codes worked together, but sometimes they stood in tension and clashed, which caused 'incoherences' and related distress and unhappiness for some participants.

Through an in-depth examination of four motivational trajectories, I have developed a vocabulary of frequent affective experiences, including structures of feeling, epiphanies, booster shots, immersion, and alienation. Particular space-times emerged as especially important to motivational trajectories: These included the formative years of early adulthood and particular places, most prominently universities, squatted social centres, and social movement 'hotspots'. Similarly, a high frequency of affective-ethical impulses seemed to correspond to more affectively 'intense' (Bissell, 2009) motivation. This was not only a question of individuals seeking out particular space-times, but equally of semi- or non-deliberate exposure, defying clear delineations of activity and passivity, and thereby an understanding of motivation as a matter of rational and self-contained actors making decisions (McCormack and Schwanen, 2011). What makes those who were motivated to take upon a drastic life change, e.g., moving to an eco-community, stand out is this affective *intensity* with which ethical values were experienced.

Through this examination of the various space-times of motivational journeys, I am also able to move beyond common understandings of knowledge-action or value-action gaps around environmental behaviour more generally (Solnit, 2017; Babutsidze and Chai, 2018; O'Brien, 2013). While the motivational trajectories of eco-community residents are unique, many of their

experiences are presumably shared with much larger segments of society. Motivation for post-capitalist transformation developed in many rather ordinary activities, including outdoor excursions, reading books, watching documentaries, going to university, and discussing politics, but also 'bigger' engagements such as joining activist groups or social movements. In this sense, motivation for post-capitalist living emerges in the interstices of everyday life (Debaise, 2013). Motivational experiences can therefore be understood as transformational in themselves, since they enable a transformation in disposition and values, that on occasion materialises in 'action', such as the taking up of a sustainable or post-capitalist practice. What this chapter further emphasises is that there is much potential for cultivating such (intensifying) affective sensibilities that align many people's values with their practices and thereby incite 'action', both for moving to eco-communities and 'environmental action' more widely.

8.2.2 RQ2: How are more-than-human practices composed in post-capitalist sites? In which ways can they be understood as commoning practices?

I considered these questions in Chapter 5, the first of three chapters that firmly focuses on the eco-communities as sites. While this chapter is mostly concerned with processes occurring directly on site, boundaries with the outside were often porous, with many practices on site informed by a consideration for reciprocal relations beyond those present currently and locally. This porousness also highlights the relational character of the eco-communities as spatio-temporal settings.

I have concentrated on practices of infrastructural repair as a particular ubiquitous practice, in which all sites had been involved. I took infrastructural repair practices as cases of more-than-human composing, taking a cue from Latour's Compositionist Manifesto (2010). I furthermore

interrogated the extent to which these attempts at composing on site corresponded to 'more-than-human *commoning*', emphasising that such practices occur in a world that is already shared with non-humans, with the latter being constituent parts of all commoning processes (see Metzger, 2017; Bresnihan, 2016). This is particularly important because commoning has been hailed as a key strategy to achieve post-capitalism in practice (Chatterton and Pusey, 2020; Gibson-Graham, Cameron and Healy, 2013; Grear and Bollier, 2020). To analyse the extent to which commoning indeed occurred, I used a heuristic as elaborated by Gibson-Graham, Cameron and Healy (2013), to assess commoning processes in terms of their (equal) access, use, benefit, care, and responsibility.

I foregrounded 'making do' as a particular more-than-human commoning technique and a mode of relating to non-humans. 'Making do' implied a way of being affected by and simultaneously limiting oneself to one's immediate surroundings, renewable and locally available materials as well as to one's skillsets. Thus, as a mode of relating to non-humans, 'making do' meant being highly mindful of the non-humans with which one composes, tending to their particular affordances and temporalities. The continued success of 'making do' practices relied at least to some extent on the capacities of residents and visitors to 'learn to be affected' (Latour, 2004a) by non-humans during practices of infrastructural repair. Nonetheless, 'making do' as a commoning technique often provoked disinterest, indifference, and boredom among residents, for instance when particular infrastructures kept breaking down, when materials were reused and therefore of lower quality, or when particular activities were time-consuming and arduous. As a result, different ways of more-than-human composing, that can be considered as partial *un-commonings*, emerged. These led to other modes of composing, such as 'precautionary pragmatism', an increased reliance on external experts, but also quick fixes and changes in notions of reparability. Considering the more-than-human revealed that *unstable* relations – a

direct result of 'making do' with ruins, ecological, recycled materials, and limited skillsets – frequently provoked these partial uncommonings or different modes of composing.

I contribute to existing literatures in more-than-human and non-representational geographies by stressing the importance of a range of affective relations, including indifference and boredom, that often gets lost in accounts that suggest skilful engagement as highly enjoyable, empowering, or enchanting (e.g., Bennett, 2001; Brook, 2012; Coeckelberg, 2015). Through this examination, I have also contributed to post-capitalist and commoning literatures by showing the extent to which affective relations with non-humans can jeopardise commoning processes, an important new insight given that the commoning literature is more likely to emphasise 'external' risks of enclosure to the commons. Rather than arguing that these partial uncommonings are simply failures to common, I consider them different styles of more-than-human composing, which were often characterised by a high degree of pragmatism. These appeared in context as imminently sensible adaptations, that also lead to interesting questions about how to organise post-capitalist sites, in ways that contradict and exceed common understandings of commoning. For instance, how much specialisation and division of labour is appropriate in post-capitalist transformations, considering both practicalities and the inequalities and power dynamics this may provoke? I have therefore argued that more-than-human commoning is best understood as a promising, but not the only way of composing post-capitalist sites. More broadly speaking still, I have demonstrated how attention to material practices, and in particular the specific relations formed with the more-than-human within these, is useful for understanding what everyday post-capitalist life (or some facets of it) may look like, including the challenges and opportunities that may develop in this context.

8.2.3 RQ3: How are economic practices made attractive to wider publics and disseminated beyond the sites themselves?

I answered this question in Chapter 6, illuminating *how* particular post-capitalist practices that emerged in the sites spread beyond them, thereby moving to a third space-time that addressed a common concern for the wider transformational potential of eco-communities most explicitly. Here, I drew on two theoretical interventions to interrogate the 'how' of wider transformations. First, contra those who have for instance highlighted educational means, visits and cooperation with local councils (Dawson, 2013; Greenberg, 2013), I considered practices that were understood as economic, relying on a performative understanding of the economy (Gibson-Graham 2006; 2008). Secondly, I drew on Callon, Méadel and Rabeharisoa's (2002) economy of qualities and its guiding mechanisms of singularisation and attachment, to show how consumers or non-residents became attached to post-capitalist economic practices.

Empirically, I analysed beer brewing practices in Can Masdeu and Calafou and gardening practices in Can Decreix and Can Masdeu, practices that can be read as attempts at 'socially useful production', while simultaneously leaving space for self-directed and experimental 'doing' (see Chatterton and Pusey, 2020). I demonstrated several 'attachment strategies' that various producers employed to attach consumers to different products and that were partially linked to different ways of producing. These included political messaging, e.g., alternative, 'autonomous' credentials in Calafou's and 'energy-efficient' credentials in Can Masdeu's beer, different forms of redistributing responsibility to a wider collective around gardening practices, blurring the boundaries between consumers and producers, and finally demonstration and disruption around unusual practices of drought-resilient agriculture and wild plants in Can Decreix.

These different attachment strategies formed the middle link between two different processes: First, the ways in which non-humans were encountered in the 'production' process and second,

the ways in which the wider transformative potential of these practices was imagined and practiced. In many ways affective consumer attachments were at the heart of the transformative potential of post-capitalist economic practices. For instance, in Calafou, the desire to contribute to wider anti-capitalist networks by producing a beer within a cooperative seemed to spell out the need to achieve (brand) recognisability among (potential) consumers to enable smooth expansion (Tsing, 2019), which in turn meant that non-humans in the production process had to be controlled, measured, and quantified (which led to wasted beer and alienation). By contrast, the desire to produce a sustainable beer in Can Masdeu meant that a less standardised beer was brewed, challenging consumer expectations, but also implying that expansion beyond the site was eschewed because sustainability goals regarding recycling could only be achieved with difficulty. While such detailed attention may appear myopic to wider processes of transformation towards post-capitalism, I argue that they are in fact highly important for understanding how wider transformations beyond the sites are imagined and practiced (or not).

This chapter contributes to the existing literature thanks to a close examination of how these transformative processes play out in *variable and particular* ways in practice. It links *particular* products and ways of producing to wider transformational processes, that are usually described without reference to the specificities of practices, in particular their non-human components, as if it did not matter whether post-capitalist ideas, beer or edible cacti were being spread. This can aid understanding why certain alternative economic practices catch on while others do not. It also draws attention to the ways in which various economic practices, through the interplay of consumers/visitors and the producers on site, have been inflected with 'capitalist' tendencies of alienation, commodification, and enclosure, but equally how such tendencies may intersect and be reinforced by more visceral reluctances, that are nonetheless variable, changeable, and indeterminate. Finally, it allows for reflection on how various transformative strategies affect the non-humans with which humans need to co-compose the world, not simply abstractly, but

in the consumption and production processes in particular times and places. In this context, it may also be worthwhile considering which strategies may allow 'more open-ended processes of transformation' (Sharpe, 2014: 34), during which non-humans can surprise us and more actively co-shape the economic processes of which they form part and when these might be advisable to pursue.

8.2.4 RQ4: How do post-capitalist practices, especially those that are perceived as uncomfortable, endure over time?

I answered this question in Chapter 7 by focusing on the endurance of post-capitalist practices, over extended periods of time. I did so under particular consideration of discomforts and inconveniences, that I viewed as 'intervening' factors threatening the persistence of particular practices. I thereby attempted to flesh out an 'issue' that kept appearing in Chapter 5 and 6 – namely that some practices were not or ceased to be appealing or even bearable for residents. In this context, I zoomed in more strongly on the human bodies that perform various practices.

To make sense of endurance of practices, I built on and blended Bennett's intervention on motivation (2001) with David Bissell's work (2008; 2014) on comfort and stress. I conceptualised the endurance of practices as the continued re-composition of the various elements of which they form part, including (human) bodies, and their proximate environment of technologies, objects, spatial settings, but also (with Jane Bennett) their ethical and political values. Put differently, endurance is motivation (for a particular practice) sieved through the ongoing and repetitive experience of everyday life in eco-communities.

Empirically, I have considered how discomforts and inconveniences as experienced early on threatened the uptake of practice by new practitioners and have foregrounded subtle affective

dispositional changes that facilitated the uptake of new practices despite a sense of discomfort, as well as more deliberate and lengthy processes of skilling and habituation (around off-the-grid heating practices). In this context, I have particularly highlighted the insufficiency of purely 'discursive' attempts to tackle discomfort, which sometimes led some residents to abandon off-the-grid heating practices and resort to (latent) habits of electric heating. This emphasis on the difficulties in taking up practices adds particularly to literatures that have considered initial processes of the normalisation of practices (e.g. Boyer, 2016; Mychajluk, 2017; Roysen and Mertens, 2019), but who have thus far not been concerned with the embodied and visceral difficulties such processes may incur. At the same time, this analysis provides a more ambivalent account of how uncomfortable or inconvenient practices on site are experienced compared to those who have examined this theme through an embodied lens thus far (Vannini and Taggart, 2013b; 2016; Pickerill, 2015b).

Furthermore, I have explained the endurance of practices over longer periods of time, focusing on the slower and more subtle appearance of discomforts over time, which often led to a gradual erosion of, sudden changes to or the abandonment of practices. This was particularly the case around a common though contested tendency towards seeking more material comfort and less sharing in Can Masdeu and Calafou. This tendency emerged through the *repetition* of practices over time, especially under consideration of ageing bodies, accumulating as 'slow creep transformations' (Bissell, 2014) that eventually led to a 'tipping point', with the practice being abandoned or adapted significantly. Relatedly, there was an increase in attachments and commitments beyond the site, which emerged as external to the practices on site themselves but rendered them more burdensome. Both tendencies were unevenly distributed among the community residents, which led not only to tensions and conflicts, but also to attempts to forge new solutions to enable the continued endurance of practices that were necessary to maintain the sites.

My examination provides a historical and embodied consideration of practices in eco-communities, providing analytical tools to examine the adaptations and evolutions that contribute to the endurance of post-capitalist practices. Hence, it is a useful addition to the literature on practices in eco-communities that has thus far focused mostly on the beginnings of eco-communities. Furthermore, given the conflicts that some of these practices caused, the chapter also adds to those who have been concerned with the longevity of sites as a whole (Metcalf, 2012; Christian, 2003; Forster and Wilhelmus, 2005).

8.3 CONTRIBUTION TO THE LITERATURE

In this thesis, I have demonstrated some of the ways in which combining more-than-human and non-representational literatures with literature that is more explicitly committed to post-capitalist transformations can generate valuable insights for scholarship interested in new ways of doing and thinking (Clark, 2011; Povinelli, 2011; Tsing, 2015), ways that are suitable for a more precarious, yet hopefully abundant Anthropocene (Collard, Dempsey and Sundberg, 2015). Key to my account of how post-capitalist transformations are made possible is the conjunction of more-than-human affective relations and moral-political convictions. I have studied these in various space-times – how they emerged as motivations, were cultivated, passed onto others, and endured over time. In the following, I will explicate how my work addresses the five gaps in the literature around eco-communities, diverse economies, and post-capitalist transformations as identified in Chapter 1, before fleshing out how my thesis contributes to more-than-human and non-representational geographies.

8.3.1 5 gaps in the eco-community literature

The first gap that I pointed out in the introductory chapter concerned a lack of attention given to affect and embodiment and an implicit, strong reliance on an ontological separation between body and mind. To address this, I have shown the productiveness of paying attention to affective relations to understand the 'how' of transformation. This concerned in the first instance motivational experiences, which I conceptualised as relationally and processually co-constituted by values and affects. Affective relations and their differential intensities and contradictions were instrumental in helping explain why some individuals joined eco-communities and others did not. Similarly, a focus on affect helped provide a more differentiated and contextual analysis of motivational experiences, which problematised the frequent assumption that joining an eco-community is the result of values being put into practice (see e.g., Kasper, 2008: 14). As elaborated further below, affective relations were also highly pertinent to on-site dynamics, especially considering the wealth of new practices, skills, and organisational techniques residents were confronted with.

As a second gap, I had highlighted the scarcity of ethnographic attention focused on everyday material practices (i.e., those involving non-humans in some way). Addressing this gap allowed me to delve into practices that have barely been examined in the context of eco-communities, adding to Pickerill's (2015a; 2015b) and Vannini and Taggart's (2015 and related publications) contributions. More than pointing out that everyday material practices are locally contingent and experimental (Pickerill and Chatterton, 2010), I have been able to illuminate the ways in which these practices in all their specificity were directly relevant to the workings of eco-communities and post-capitalist transformations. Not only did eco-community residents spend much time on material practices, but the specificities of material practices, e.g., which materials to use, which to renounce, how to perform them and in which rhythms and intensity, were key

to understanding how an abstract idea like post-capitalism (or degrowth) was actively put into practice. As a result, they were frequently the object of negotiations and conflicts that are oftentimes brought up in literatures on eco-communities.

The third gap related to the lack of attention to the more-than-human relations immanent to material practices in eco-communities, which I believe result from continued dependence on modernist ontological separations between nature, society, and technology in much of the literature on eco-communities. I have therefore brought non-humans or more accurately, affective more-than-human relations to the fore of my analysis of material practices. Rather than taking 'technological' and 'natural' entities as separate to 'social' investigations of eco-communities, I have shown that the ways in which residents 'learned to be affected' (Latour, 2004a) by non-humans – in reconfigured ways compared to the capitalist mainstream – is highly significant to how post-capitalist life is made actionable in eco-communities.

The emphasis on more-than-human affect provides significant empirical richness to the study of everyday practices in eco-communities and recognises what may be considered (after Chatterton and Pusey, 2020) a fourth terrain of post-capitalist transformation, namely moving from a strict ontological separation of nature/society relations and related attempts to control the former, to an (at least implicit) ontological monism and a greater recognition of more-than-human interdependencies and of the capacity of various non-humans to surprise and refuse collaboration. This fourth terrain is arguably necessary to address heads-on the problematic ways in which capitalist modes of organising approach non-humans through e.g., standardisation, monoculture, and a general disregard for the web of life on Earth, and which have significantly contributed to the climate and ecological crises. As hinted at in Chapter 5 and 6, it allows to think about 'letting go' of control and considering what 'difference' might emerge, when humans do not control and plan.

Introducing this fourth terrain may be especially fruitful when considering practices related to wider economic expansions beyond the sites, e.g., the beer-brewing in Calafou and the gardening in Can Masdeu. This fourth terrain of transformation is therefore an invitation to critically reflect upon the extent to which these ontological dualisms are reproduced in practice and the reasons why this occurs. I have shown that it is often in the specificities of practice that the ways in which non-humans are engaged with become most noticeable. I therefore consider that this attention to more-than-human affective relations on site is a relevant empirical and theoretical addition to scholarship on post-capitalist transformation and eco-communities.

The fourth gap mentioned in the introduction of this thesis concerned the overall failure in much of the literature to consider the doings of eco-communities as economic, in particular with regards to practices that exceed the sites. Here, I contributed to diverse economy scholarship by excavating economic practices in all three sites, including those that do not readily fit into conventional diverse economic practices, such as eating and planting wild plants. More specifically, I have examined material practices in Chapters 5 and 6 with Chatterton and Pusey's (2020) terrains of transformation in mind. Here, I have expanded on some work which considers the commons in eco-communities (Pickerill, 2016a; Esteves, 2017) while simultaneously relativising the importance of (more-than-human) commoning to post-capitalist transformations: Through an empirical examination of ways of relating to non-humans on site, I have found that commoning is a key strategy used to organise post-capitalist sites that was, however often complemented with or replaced by other strategies of more-than-human composing, that often constituted locally contingent, pragmatic adaptations. While these are strictly speaking instances of partial 'uncommoning', such adaptations might still prove to be useful tools in facilitating post-capitalist transformations.

I have also highlighted productive tensions that might emerge between socially useful production and self-directed, joyful, and experimental 'doing', which mirror to some extent different ways of encountering non-humans during production processes. 'Socially useful production' has been found to still cause a certain level of alienation in humans, based on repetitive relations with non-humans (whilst reaffirming styles of production whereby non-humans are strictly controlled, standardised, and kept stable). This is not to suggest that such modes of production should not occur, especially given that playful doing (e.g., experimenting with plants) did not necessarily provide residents with basic necessities. Rather, such practices merit more attention and scrutiny, whilst 'socially useful production' as an analytical category might benefit from a reconceptualization of what the 'social' in 'socially useful production' means. Here, following Latour (2005), the social could be taken to mean not simply the human but rather the relational and more-than-human. Overall, my research suggests that Chatterton and Pusey's (2020) terrains of transformation should be taken as guides rather than blueprints for action, with particular attention paid to their limits in situ as well as tensions arising between them.

I have also contributed to literatures on eco-communities specifically by highlighting these sites' relevance to *wider* economic transformations. I have done so by highlighting the 'how' of wider transformations by focusing on the various strategies to attach consumers and visitors to particular products and/or ways of producing. Here again, I have highlighted the ways in which the specificity of economic practices matters to wider transformational imaginaries and practices, an important addition to work on the 'spread' of bottom-up post-capitalist economic practices that has highlighted more generically the ways in which such practices spread, e.g., through a 'multiplication of endeavours' (Cameron and Hicks, 2014). The account I have proposed helps understand why some economic practices spread better than others.

The fifth and final gap that I identified was that work on eco-communities thus far has been largely synchronic and has therefore not sufficiently considered historical changes within the communities, which renders any understanding of how practices endure over time and the effect this has on the sites as wholes difficult. In this context, I have foregrounded repetition as a final important component to the value-affect dyad. Repetition congealed motivational experiences into longer-lasting attachments and/or detachments and allowed new arrivals to the eco-communities to cultivate skills around various non-humans and experiment with the latter. Thus, repetition was generative of deeper affective bonds as well as the experimentation with and production of novelty and difference (see Deleuze, 2004). Simultaneously, some practices, such as repair and maintenance led, because of repetition, to stultification, boredom, and exhaustion (see Bissell, 2014; Dewey, 1922), which can be read as an attrition with post-capitalist modes of living as well as the ground for novel ways of doing to combat such negative affective relations. Furthermore, through attempts to draw in wider segments of society into transformative practices, residents attempted to provide ways to *replicate* their own practices and attracting wider publics, such as with beer brewing, gardening, and organising a cactus fest – with these kinds of replications taking into account the values and affective dispositions of wider publics, therefore undergoing further transformations. Crucially, repeated encounters or cultivations of affective relations altered how practices were composed and how humans experienced particular affective relations. These empirical findings resonate strongly with Deleuze's (2004) concepts of 'difference and repetition', whereby each repetition brings with it the possibility for 'difference'.

8.3.2 More-than-human and non-representational geographies

I contribute to more-than-human and non-representational geographies by providing an empirically rich account of how a conceptualisation of, and attention to, more-than-human

affective relations can help enrich our understanding of capital "P" political processes such as transformations towards post-capitalism, in particular by providing insight into 'how' such processes come about.

I have contributed to non-representational theories by showing how affective relations interacted with, and processually constituted, values and moral codes, in ways that take slightly different forms in different space-times. Values and affects powerfully acted together to co-produce motivation, to cultivate novel relations, and to form the backbone of practices continually conducted on site. The co-constitution of values and affects was also found in the singularisation-attachment dynamic (Callon, Méadel and Rabeharisoa, 2002), evident in attempts to further spread practices beyond the site. Here, affects often coalesced around particular values, but conversely, particular affective relations also impacted the kind of values eco-community residents and visitors adhered to. In this context, practices of 'learning to be affected' (Latour, 2004a; Greenhough, 2014) were often crucial to altering values along with affective dispositions. Such a conceptualisation contributes to work that has thus far examined how affective relations are caught up in contemporary capitalism (e.g. Bennett, 2001; Connolly, 2005; Anderson, 2016) and that has more generically emphasised how affective experiences may fuel action, e.g., on climate change (Roelvink and Zolkos, 2011) or in the realm of diverse economic practices (Roelvink, 2020), but has been less clear about how such affective relations concretely work to produce alternative political outcomes.

At the same time, discords and incoherences in motivation, in practices on site or between different residents were often related to mismatches between affective relations and values or moral codes. Exploring in depth the role of values and moral codes as particular forms of meaning-making and representation, and as adhered to by individuals, constitutes an important addition to non-representational geographies in that it provides a clearer sense of how the latter

can concretely help conceptualise how possible transformations beyond capitalism come about. While the analytical separation between values/morals on one hand and affect on the other may sit uneasily with some non-representational scholars, it is the mismatches, discords and incoherences between the two as experienced by participants that convinced me of the usefulness of this distinction. In so doing, I have also demonstrated the usefulness of analysing more-than-human affective relations to improve our understanding of attempts at wider societal transformations.

In this context, I have shed light on a whole spectrum of affective relations, and not simply those that focus on the 'additive, addictive, enchanting' (Philo, 2017: 5). While literature focused on relational ethics with animals and plants (see Lorimer, 2007; Beisel, 2010; Hird, 2010; Ginn, 2014; Pitt, 2017) has taken into consideration more variegated more-than-human relations, those focused on material practices in geographies of making (see Price and Hawkins, 2018) have not considered in much depth how material practices may not only add, but also subtract from one's capacity to act, because of boredom, discomfort, or disinterest. In this context, I have paid particular attention to 'stickier', more durable attachments and detachments as a particular affective mode of relating, e.g., a strong attachment to 'nature', anti-capitalist beer or home-grown vegetables, as well as detachment from hyper-consumerist shopping practices or trouble attaching to cacti mousse. These more durable and stable affective relations can be deemed particularly relevant for understanding how action for post-capitalist transformation is (co-)produced, and how inaction comes to be in context. I have also pointed to a *web* of longer-lasting affective relations of attachments and detachments to specific non-humans, practices, or values, that together may fuel and intensify, but perhaps just as importantly, stifle action (towards post-capitalism), in various contexts. This has become perhaps most apparent in the context of motivation, where heterogeneous motivational experiences coalesced together to produce a move to an eco-community or conversely, where compromised and somewhat

contradictory attachments, e.g., to efficient and more 'relaxed' styles of doing chores simultaneously, stymied motivation.

With regards to more-than-human geographies, I have demonstrated empirically how an attention to the more-than-human as co-constituents and (hopefully) beneficiaries of everyday practice can be used to make sense of political, social, and economic transformations beyond capitalism. This is an important issue that more-than-human and new materialist scholars have not considered in much depth despite its emphasis on the possibility and generativity of doing differently (see e.g., Head and Gibson, 2012: 707). Scholarship in the more-than-human geographies tradition has been charged with being apolitical and unable to 'guarantee a political transformation' (Swyngedouw and Ernstson, 2018: 12), given that conceptualisations of the 'indeterminacy or constant becoming of matter and life [...] misses or downplays the politics of ontology inbuilt [sic] in the neoliberalisation of nature, which builds precisely on these tenets' (Pellizzoni, 2015: 8). For Swyngedouw and Ernston (2018: 13), those bodies of work therefore lend themselves to being used or abused to further capitalist expansion, in ways that promise a 'renewed and ecologically sensitive 'hyper-reflexive' capitalism, that takes seriously both humans' geo-physical force and the material acting of the non-human'.

While I agree with the basic argument that more-than-human and non-representational geographies do not necessarily point to a post-capitalist politics, I have shown how they *might*, given that they can exemplify the 'how' of transformation, that is often brushed over in accounts of political ecology and Marxist-inflected political economic theory. More specifically, as I have argued abundantly in this thesis, no theoretical account, knowledge, or value system can simply 'guarantee a political transformation'. Each needs to be complemented with accounts of how transformations can be realised in practice, whereby knowledge and value claims certainly hold some performative potential, but also require for instance particular affective dispositions that

accompany these changes. With this in mind, I have added to more-than-human geographical work that has merely alluded to, rather than fleshed out in depth, how post-capitalist ways of thinking and doing are necessary or may come about (Clark, 2011: 162; Haraway, 2008; Tsing, 2015; Yusoff, 2015). By weaving more-than-human geographical literature together with literature on eco-communities, diverse economies, and post-capitalist transformation, I have also been more (normatively) explicit about the ways more-than-human relations should in future be (co)-composed with to enable post-capitalist transformation, particularly in everyday life.

All in all, I have shown that eco-communities as hotspots of a wide array of post-capitalist activities, experiments, and modes of organising, offer novel ways of examining how post-capitalist transformations may come about. Much work in both more-than-human and economic geographies has focused on *one* material or economic practice, whereas my examination has considered what happens when an eclectic mix of many transformative practices are cultivated and performed at the same time. In so doing, I have also examined the complexities, challenges, joys, and opportunities that learning to be affected by a plethora of novel practices brings with it, considering in particular the distributed and differential capacities such learning involves. I have also provided an account that takes norms, values, common visions, and ideologies seriously, as necessary but not sufficient components of post-capitalist transformations.

8.4 METHODOLOGICAL INSIGHTS

On a methodological level, I have made three contributions to the existing literature on methodologies for more-than-human and non-representational geographies and one more

general contribution to literatures on eco-communities, which I will draw out below before reflecting on how future research on eco-communities may be conducted.

First, I have critically appraised the role of interviews to register more-than-human affective relations. While it has been argued that there is 'an urgent need to complement talk and text-based methods with other methods that focus more on visceral, embodied and affective dimensions of experience' (Whatmore, 2006: 607), interviews for me were an indispensable tool to examine longer-term evolutions and motivations, that were almost impossible to observe or participate in personally. As such, interviews have been useful to develop deeply historical and/or diachronic accounts of more-than-human relations. If more-than-human geographies are interested in understanding more-than-human affective relations that exceed the particularities of the moment, interviews and other text-based materials seem to be a good place to start doing so. This still comes with the caveats that have been identified in the literature (Whatmore, 2006) such as the inability of some research participants to talk about affective charges and/or more-than-human practices. This is arguably also important for literatures on eco-communities which thus far has not relied heavily on interviews to excavate longer term narratives of evolution of sites and/or of practices and motivations.

Secondly, and related to this appraisal of interviews, I have highlighted the value of multi-lingual research as a tool for registering and articulating difference. This is an element often omitted in geographical research (Watson, 2004), that has not been given much emphasis in more-than-human geographical research (excepting Krzywoskzynska, 2015). Here, by 'registering' and articulating difference I mean the ability of bodies to be affected by 'more and more elements' (Latour, 2004a: 206), with linguistic abilities one of the 'interfaces' that the body offers. In short, multi-lingual research particularly drew my attention to (native) languages' ability to articulate nuance.

Concretely, conducting research as much as possible in participants' native language offered them the possibility to articulate experiences with all the necessary nuance, linguistic finesse, and figurative expressions (Polkinghorne, 2005: 139), which seem particularly important for *articulating* affective experiences. Doing multi-lingual research also allowed me to take note of cultural, political, and linguistic differences between Southern Europe and English-speaking countries, where a vast majority of more-than-human and non-representational geographical work derives from and is conducted. Thus, I am convinced that my ability to converse and interview participants in English, French, German, and Spanish enriched this thesis, both by allowing me to integrate myself more seamlessly into the fabric of the rather international, multi-linguistic sites and by allowing more nuanced accounts of difference to be articulated.

In this context, I argue that it is also worth making explicit how the researcher's particular and differential linguistic abilities to be affected by participants or materials have impacted the work overall (beyond more general worries about whether individuals communicating with each other really understand each other, even if they speak in the same language). It is perhaps less opportune to speak of 'failures' in being affected and registering difference, given one's own linguistic limitations but rather of highlighting the deeply situated and differential nature from which all knowledge claims are derived (Haraway, 1988). In my case, my slightly less certain mastery of Spanish undoubtedly lowered my ability to register difference in specific settings, such as heated group discussions. But I was able to use my linguistic shortcomings as a starting point for private conversations, where I could also ask 'stupid' questions and ask for detailed, non-technical explanations. Conceiving of bodies as 'linguistic' interfaces therefore allows to draw attention to the particular ways linguistic abilities hinder and enable ways of registering difference. This also applied to translation as another important context in which linguistic difference came to the fore, with expressions that were difficult or awkward to translate.

Thirdly, I have advocated for the benefits of what I have called an issue-centred analysis, which I draw from Noortje Marres's (2005; 2007) American pragmatist-inspired work. Marres is not concerned with a methodological approach, but rather argues that 'issues' spark publics as 'affected communities into being' (Marres, 2007: 759), which in my view also works as a good starting point for data analysis. I started my analysis therefore centred on initial vignettes around issues, that had sparked my interest and/or controversy, which included for instance the gardening examples in Chapter 6 and the opening vignette of the introduction on chabrot. By focusing on issues, rather than any specific data analysis technique, I ended up relying on a blend of 'life, research, theory, and methods' (Brinkmann, 2014: 722), foregoing either strictly inductive or deductive approaches. This methodological choice also allowed me to focus on 'difference' in the Deleuzian sense. Here, NVivo proved a useful tool to organise the myriad of 'issues', and similarly helped me discern the typical from novel, different 'minor' ways of doing (e.g., the experiments with irrigation in Can Decreix in Chapter 6).

Moreover, I have added to literatures focusing on eco-communities by refocusing my methodological choices on the study of more-than-human relations in practice. Next to a close ethnographic attention to the specific of material practices (as 'learning to be affected', Latour 2004a; Greenhough, 2014), I have also 'augmented' interviewing techniques to generate more 'talk' about various non-humans, for instance through photo-elicitation (Rose, 2016), a 'showing' method (Pitt, 2015) and connection maps (e.g., Wheeldon and Faubert, 2009). Relatedly, with regards to data analysis, focusing on 'issues' in the analysis of qualitative data, such as frequently used interview and participant observation data, could significantly add to the literature on eco-communities, which has been less able to convey the dynamism, liveliness, and contestations in eco-communities.

Finally, I would recommend for future endeavours to study eco-communities to do 'slower', more spread-out fieldwork than I did. I ended up usually living in the eco-communities for short and intense bouts of fieldwork. Longer periods in the field would have given me insight into less regular, but still highly important activities on site, such as weekly or monthly assemblies. Similarly, I believe especially in Can Masdeu, a longer but less frequent engagement, e.g., by living in Barcelona proper and coming up several times a week, might have helped assuage some of the research fatigue that I witnessed. Indeed, after my residency in Can Masdeu, I had stayed several weeks in Barcelona and found my subsequent engagements with the site particularly fruitful and the residents to be more welcoming. I perhaps slightly overestimated in this context the importance of living full-time in sustainable living experiments.

More broadly speaking, these issues offer an opportunity to think about researchers as an intrusion into residents' intimate daily lives (see also Jaumier *et al.*, 2015), in ways that are arguably more pronounced than in other research settings: Imagine heading down for breakfast in your pyjamas with a *very* curious near-stranger sitting there. I had underestimated the extent to which the productiveness of serendipitous and spontaneous encounters that ethnographic research allows might be better balanced off with allowing residents some time to withdraw from me. This was again particularly an issue in Can Masdeu, while in Calafou, the fact that I stayed as my 'godmother's' guest meant that I was not in fact a continuous presence in most residents' personal space.

I also think slower, more spaced-out research to be appropriate given the very research subject– for most of my research, I struggled under pressure to do as much as possible, certainly a response to the demands, perceived and real, of British academia. Like some of the participants, I found it hard to decelerate, which I believe would have been practically important to adapt myself to the lives of eco-community residents who generally seemed to live less *frenzied* lives

than me. I also view it as a political necessity, given especially how post-capitalism – at least in my conceptualisation – is quite literally about *less* output.

8.5 LIMITATIONS AND FUTURE RESEARCH

While I have been able to shed light on the specificities of everyday practices in their nitty-gritty detail in a more 'baroque' of inquiry (Law, 2004b), I have been less able to attend to 'structural' issues and/or external factors that impact how post-capitalist life on site is made possible. While I have been able to illuminate how capitalist 'mindsets' have impacted the ways material practices are reconfigured on site and made attractive to wider publics, I have focused less on how financial pressures, local governments, hostile neighbours, and legal frameworks have influenced the longevity and wider impact of the sites. I have mainly done so because these more 'romantic' perspectives have tended to neglect the specificities of everyday life in favour of observation and analysis on a larger scale. While it may be impossible to fruitfully integrate all and 'pull together' these different accounts and propositions in a 'whole' (Law, 2004b: 23), I believe there is at least *some* scope for my more baroque analysis to inform more 'romantic' conceptualisations and concerns of post-capitalist transformations.[25]

More specifically, I believe that a more romantic attention to structural or external issues could be well integrated into work that develops the analysis that I have conducted in Chapter 6 on wider transformations and Chapter 7 on longer-lived endurance. I hope that my propositions are, following Stengers and Despret (Latour, 2004a: 220), 'good' in the sense of allowing for further 'connection of new differences' (ibid.), and thereby increasingly articulate accounts of eco-communities and their transformative potential. With regards to examining bottom-up

[25] It is worth keeping in mind here that Law suggests viewing baroque and romantic modes of inquiry as Weberian ideal types, serving to provide a 'limited coherence to the unknowable' (ibid.: 24), rather than as absolutes.

wider transformations for sustainability, there is potential to study the networks of which these sites form part. For instance, I have been unable to interview those who buy beer brewed in Can Masdeu and Calafou. New questions emerge such as the extent to which buying this alternative or sustainable beer impacts other practices or attitudes in their lives, and how exactly the breweries examined in Chapter 6 are connected with others in Catalonia and beyond. There is much potential to empirically trace the impact of such diverse economic practices within geographical research specifically, to see how particular economic practices 'travel' and the difficulties, but also the transformations they go through on the move. In this context, the policy mobilities literature could provide some vocabulary and insight (Temenos and McCann, 2013; Ward, 2018; Lovell, 2019), especially because it considers how policies are changed and adapted when they travel, rather than being simply 'transferred'. Geographical literature on trans-local activism may be similarly useful in analysing spatial and scalar politics of eco-communities, for instance by examining associations, networks, and convergence spaces between eco-communities and other diverse economic sites (see Routledge, 2003; 2008; Cumbers, Routledge and Nativel, 2008; Featherstone *et al.*, 2012).

With regards to Chapter 7, there is similarly much scope for longer periods of ethnographic research, with a closer-up examination of the conflicts, tensions, and negotiations that particular practices cause over time (in contrast to my interview accounts). For instance, it would be interesting to know whether the flexibilization of working hours and the common visioning process in Can Masdeu bore fruit and intergroup tensions caused by differential experiences of discomfort and inconveniences were resolved. It may similarly be of interest to see how these communities deal not with middle age, but old age of some or relatedly, illness, disability and injury, a theme that has been mostly explored in literature on co-housing projects explicitly built for elderly residents (Glass, 2012; 2020).

I have furthermore cautiously argued that discomforts and inconveniences may play a role in not simply the endurance of particular practices, but equally of the endurance of the sites as wholes, which deserves further empirical examination. For instance, to what extent do residents leave the sites because they find their lives inconvenient for relationships and children or because particular practices become unbearable? Where do those residents go afterwards? Similarly, an examination of eco-communities that struggle to attract new residents or whose residents leave (and I would cautiously include Can Decreix in this group) might provide additional insights into the endurance of both practices and sites in their entirety. This proved to be a very difficult topic to broach with the main resident of Can Decreix, even though it certainly invited a lot of speculation from visitors. He has now been joined by another full-time inhabitant, suggesting that not all sites that have lost their initial momentum fizzle out.

8.6 WIDER SIGNIFICANCE

I will now conclude this thesis by briefly examining its potential wider significance. Recall that in Chapter 3, I have emphasised the specificity of the three sites, which, rather than serving to provide generalisable insights for post-capitalist transformation, can resonate and sensitise readers to other times and places in which my work be relevant, and trigger comparisons as well as new questions. I believe this to be of particular relevance for those in the Global North interested in post-capitalism as well as the climate and ecological crises.

For eco-communities, I believe that my work offers two key insights. First, even as many eco-community members are actively participating in what I consider to be bottom-up post-capitalist world-building, I have found that many (though not all) still hold onto rather structuralist understandings of the economy. At its most extreme, one resident claimed that '*capitalism and the patriarchy will fall on the same day*'. By applying Gibson-Graham's (2006; 2008)

diverse economy approach to eco-communities, I hope to have provided a new, and perhaps more productive and appreciative way to think about their efforts in the everyday, which can frame their efforts more suitably and hopefully invigorate them further.

Second, I hope that my work will incite eco-community residents to think more deeply about the role of affect in their own motivations and daily practices, but also how they may attract others to join them in world-making projects. Here there has also been a moderate tendency towards de-emphasising 'feelings' (like in activism, see Jasper, 2011) and to highlight political ideas and values as 'rational' reasons for their endeavours. A greater awareness of the role of affect, particularly with regards to the more-than-human relations built up on site and beyond, might help handle conflicts, tensions, and negotiations more effectively. The importance of affect is also particularly evident in Chapter 7 around the endurance of practices, which can hopefully encourage those living in eco-communities to reflect on how to maintain and continuously cultivate the motivation for various practices in their lives. Next to purely managerial and/or discursive techniques, I have highlighted the importance of (human) bodies as sites where affective intensity (of discomforts and inconveniences) is registered. This could lead to a greater recognition of differential and evolving capacities to be affected but also to bear out certain practices, and therefore ways to think about aging and differentiating life goals.

With regards to wider Global Northern publics, I believe that my work offers a rich account of what post-capitalist transformations might mean for everyday life (especially in Chapter 5 and 6). Here, I have shown that post-capitalist living may be more communal, with more goods and services shared and provided to each other as well as produced locally and – in the case of food – seasonally. I have also shown that such a post-capitalist life involves learning a wider range of practical or manual skills, such as mending, repairing, gardening, but also experimenting with many new practices, which stands in contrast to a common emphasis on specialisation on one

activity or subject area. This in turn has a significant impact on the amount of time dedicated to 'traditional' wage labour as opposed to other kinds of work.

I have also taken seriously that such modes of living might not be directly aspirational or desirable for many. Here, Chapter 4 on motivations and Chapter 7 on endurance are particularly instructive in thinking about how a post-capitalist lifestyle might be practiced even if it does not appear to be appealing in all its facets. In Chapter 4, I do so by providing an account of the myriad motivational experiences residents and visitors encountered, that allowed for their motivation to increase in intensity. As such, this chapter showcases various ways of being affected – through experiences in the outdoors, direct experience of injustices, activism, education, documentaries, books, and friendships – that led to an increase in the affective intensity with which particular value sets (that are often widely shared in society) are felt. This motivation may contribute to a move to an eco-community, but perhaps more importantly, towards many *other* post-capitalist practices. Encouragingly, these affective motivational experiences were firmly embedded in everyday life, and in this sense, offer the possibility of being repeated by many.

Chapter 7 addresses this issue even more explicitly, as I provide some insight into how discomforts and inconveniences have been dealt with and highlight embodied strategies to deal with them. I have emphasised that 'learning to be affected' is an ongoing, continuous process, where humans have to adjust and re-adjust themselves in relation to the environment they find themselves in, as bodies change with age as well as through the repetition of practices and external priorities. This embodied and diachronic understanding of the experience of discomforts and inconveniences encourages a view of comfort as something mutable and changeable. I have in this context particularly highlighted how the intensity with which moral codes are believed in and adhered to can *alter* one's sense of comfort, as can performing

practices with others together, and weighing up inconveniences and discomforts not of individual practices but of entire lifestyles.

While I have in no way attempted to present an idealised version of the sites, I hope that my work is still infused with an appreciative and *inspiring* feeling that many visitors, including myself, experienced during and after our stay. In the aftermath of my fieldwork, I felt unusually energised, involving myself in more projects, within my university and local activist networks. Of course, reading is no substitute for experience, but I do hope that my work provokes a sense of possibility in those who read it and that it inspires readers– you –to register but also to *make a difference* in some way, however small. Here, in line with work done within the diverse economy literature, I hope that I have performatively contributed to post-capitalist world-building, excavating already existing alternatives and – through my work being read – invigorating them further.

9. BIBLIOGRAPHY

Abrahamsson, S. and Simpson, P. (2011) 'The limits of the body: Boundaries, capacities, thresholds', *Social and Cultural Geography*, 12(4), pp. 331–338. doi: 10.1080/14649365.2011.579696.

Acosta, A. (2013) *El Buen Vivir: Sumak Kawsay, una oportunidad para imaginar otro mundo*. Barcelona: Icaria.

Ahmed, S. (2004) *The Cultural Politics of Emotion*. Edinburgh: Edinburgh University Press.

Akbulut, B. (2021) 'Degrowth', *Rethinking Marxism*, 33(1), pp. 98–110. doi: 10.1080/08935696.2020.1847014.

Akrich, M. (1992) 'The De-Scription of Technical Objects', in Bijker, W. and Law, J. (eds) *Shaping Technology, building society: Studies in Socio-technical Change.* Cambridge (Mass.): The MIT Press, pp. 205–222.

Alexander, S. (2020) 'Post-capitalism by design not disaster', *The Ecological Citizen*, 3(Suppl B), pp. 13–23.

Alvaredo, F. *et al.* (2018) *World Inequality Report 2018 - Executive Summary.* Paris. Available at: https://wir2018.wid.world/files/download/wir2018-summary-english.pdf (consulted September 22, 2021).

Alvesson, M. and Kärreman, D. (2011) *Qualitative Research and Theory Development: Mystery as Method.* Los Angeles, London, New Dehli, Singapore, Washington DC: Sage Publications.

American Association of Geographers (2009) *Statement on Professional Ethics*, *aag.org*. Available at: http://www3.aag.org/cs/resolutions/ethics (Accessed: 3 November 2021).

Amouroux, C. (2009) 'Normalizing Christiania: Project Clean Sweep and the Normalization Plan in Copenhagen', *City and Society*, 21(1), pp. 108–132. doi: 10.1111/j.1548-744X.2009.01017.x.

Anderson, B. (2006) 'Becoming and being hopeful: Towards a theory of affect', *Environment and Planning D: Society and Space*, 24(5), pp. 733–752. doi: 10.1068/d393t.

Anderson, B. (2010) 'Preemption, precaution, preparedness: Anticipatory action and future geographies', *Progress in Human Geography*, 34(6), pp. 777–798. doi: 10.1177/0309132510362600.

Anderson, B. (2014) *Encountering affect: Capacities, apparatuses, conditions*. Farnham and Burlington: Ashgate Publishing Limited. doi: 10.4324/9781315579443.

Anderson, B. (2016) 'Neoliberal affects', *Progress in Human Geography*, 40(6), pp. 734–753. doi: 10.1177/0309132515613167.

Anderson, B. (2017) 'Hope and micropolitics', *Environment and Planning D: Society and Space*, 35(4), pp. 593–595. doi: 10.1177/0263775817710088.

Anderson, J. (2017) 'Retreat or re-connect: How effective can ecosophical communities be in transforming the mainstream?', *Geografiska Annaler, Series B: Human Geography*, 99(2), pp. 192–206. doi: 10.1080/04353684.2017.1324653.

Anderson, K., Broderick, J. F. and Stoddard, I. (2020) 'A factor of two: how the mitigation plans of "climate progressive" nations fall far short of Paris-compliant pathways', *Climate Policy*, 20(10), pp. 1290–1304. doi: 10.1080/14693062.2020.1728209.

Andreucci, D. and McDonough, T. (2015) 'Capitalism', in D'Alisa, G., Demaria, F., and Kallis, G. (eds) *Degrowth: A vocabulary for a new era*. Abingdon and New York, pp. 59–63.

De Angelis, M. (2014) 'The commons: A brief life journey', *Community Development Journal*, 49(SUPPL.1), pp. 68–80. doi: 10.1093/cdj/bsu015.

De Angelis, M. (2017) *Omnia Sunt Communia: On the Commons and the Transformation to Postcapitalism*. London: Zed Books.

Angerer, M.-L. (2017) *Ecology of affect*. Lüneburg: Meson Press.

De Ayala, A., Galarraga, I. and Spadaro, J. V. (2016) *The price of energy efficiency in the Spanish housing market*, *International Energy Workshop, 2016 in Cork, Ireland*. doi: 10.1016/j.enpol.2016.03.032.

Babutsidze, Z. and Chai, A. (2018) 'Look at me Saving the Planet! The Imitation of Visible Green Behavior and its Impact on the Climate Value-Action Gap', *Ecological Economics*, 146(October 2017), pp. 290–303. doi: 10.1016/j.ecolecon.2017.10.017.

Bagnoli, A. (2009) 'Beyond the standard interview: The use of graphic elicitation and arts-based methods', *Qualitative Research*, 9(5), pp. 547–570. doi: 10.1177/1468794109343625.

Bagnoli, A. and Ketokivi, K. (2009) 'At a crossroads: Contemporary lives between fate and choice', *European Societies*, 11(3), pp. 315–324. doi: 10.1080/14616690902764658.

Bailey, A. J. (2009) 'Population geography: Lifecourse matters', *Progress in Human Geography*, 33(3), pp. 407–418. doi: 10.1177/0309132508096355.

Baker, T. (2013) 'Ecovillages and Capitalism: Creating Sustainable Communities within an Unsustainable Context', in Lockyer, J. and Veteto, J. (eds) *Environmental Anthropology Engaging Ecotopia: Bioregionalism, Permaculture, and Ecovillages*. New York and Oxford: Berghahn Books, pp. 285–301.

Barad, K. (2003) 'Posthumanist performativity: Toward an understanding of how matter comes to matter', *Women, Science, and Technology: A Reader in Feminist Science Studies*, 28(3), pp. 473–494. doi: 10.4324/9780203427415-41.

Bari, A. *et al.* (2011) 'Air pollution in residential areas from wood-fired heating', *Aerosol and Air*

Quality Research, 11(6), pp. 749–757. doi: 10.4209/aaqr.2010.09.0079.

Barker, G. (2000) *Ecological recombination in urban areas: implications for nature conservation*. Peterborough: English Nature.

Barley, S. R. (1988) 'Technology, Power, and the Social Organisation of Work: Towards a pragmatic theory of skilling and deskilling', in Di Tomaso, N. (ed.) *Research in the Sociology of Organisations*. Greenwich (CT): JAI Press, pp. 33-80.

Barry, A. (2020) 'The Material Politics of Infrastructure', in Maasen, S., Dickel, S., and Schneider, C. (eds) *TechnoScienceSociety: Technoloigcal Reconfigurations of Science and Society*. Cham: Springer International Publishing, pp. 91–109.

Bastani, A. (2019) *Fully Automated Luxury Communism*. London and New York: Verso.

Bauwens, M. and Ramos, J. (2020) 'Awakening to an Ecology of the Commons', in Grear, A. and Bollier, D. (eds) *The Great Awakening: New Modes of Life amidst Capitalist Ruins*. Earth, Milky Way: punctum books, pp. 111-149.

Beisel, U. (2010) 'Jumping hurdles with mosquitoes?', *Environment and Planning D: Society and Space*, 28(1), pp. 46–49. doi: 10.1068/d2706wsf.

Bennett, J. (2001) *The Enchantment of Modern Life: Attachments, Crossings, and Ethics*. Princeton and Oxford: Princeton University Press.

Bennett, J. (2010) *Vibrant Matter: A Political Ecology of Things*, *Perspectives on Politics*. Durham and London: Duke University Press. doi: 10.1017/S1537592710003476.

Bergson, H. (2001) *Time and Free Will: An Essay on the Immediate Idea of Consciousness*. New York: Dover.

Berlant, L. (2011) *Cruel optimism*. Durham and London: Duke University Press.

Berlant, L. (2016) 'The commons: Infrastructures for troubling times*', *Environment and Planning D: Society and Space*, 34(3), pp. 393–419. doi: 10.1177/0263775816645989.

Bhakta, A. and Pickerill, J. (2016) 'Making space for disability in eco-homes and eco-communities', *Geographical Journal*, 182(4), pp. 406–417. doi: 10.1111/geoj.12157.

Billo, E. and Hiemstra, N. (2013) 'Mediating messiness: expanding ideas of flexibility, reflexivity, and embodiment in fieldwork', *Gender, Place and Culture*, 20(3), pp. 313–328. doi: 10.1080/0966369X.2012.674929.

Binay, I., Brace-Govan, J. and Oppewal, H. (2020) 'Collective ideological work for an alternative to consumerism: How an intentional community balances ideals and practice', *Journal of Consumer Behaviour*, 19(2), pp. 99–107. doi: 10.1002/cb.1797.

Bingham, N. (1996) 'Object-ions: From technological determinism towards geographies of relations', *Environment and Planning D: Society and Space*, 14(6), pp. 635–657. doi:

10.1068/d140635.

Bissell, D. (2008) 'Comfortable bodies: Sedentary affects', *Environment and Planning A*, 40(7), pp. 1697–1712. doi: 10.1068/a39380.

Bissell, D. (2009) 'Obdurate pains, transient intensities: Affect and the chronically pained body', *Environment and Planning A*, 41(4), pp. 911–928. doi: 10.1068/a40309.

Bissell, D. (2011) 'Thinking habits for uncertain subjects: Movement, stillness, susceptibility', *Environment and Planning A*, 43, pp. 2649–2665. doi: 10.1068/a43589.

Bissell, D. (2014) 'Encountering stressed bodies: Slow creep transformations and tipping points of commuting mobilities', *Geoforum*, 51, pp. 191–201. doi: 10.1016/j.geoforum.2013.11.007.

Blackburn, M. (2019) '13. Being "Proficient" and "Competent": On "Languaging", Field Identity and Power/ Privilege Dynamics in Ethnographic Research', *Learning and Using Languages in Ethnographic Research*, pp. 164–176. doi: 10.21832/9781788925921-015.

Blažek, J. (2016) 'Economic micro-systems? Non-market and not-only-for-profit economic activities in eco-communities', *Human Affairs*, 26(4), pp. 377–389. doi: 10.1515/humaff-2016-0032.

Blühdorn, I. (2017) 'Post-capitalism, post-growth, post-consumerism? Eco-political hopes beyond sustainability', *Global Discourse*, 7(1), pp. 42–61. doi: 10.1080/23269995.2017.1300415.

Bobulescu, R. and Fritscheova, A. (2021) 'Convivial innovation in sustainable communities: Four cases in France', *Ecological Economics*, 181(November 2020), p. 106932. doi: 10.1016/j.ecolecon.2020.106932.

Bond, P. (2008) 'Reformist reforms, non-reformist reforms and global justice: Activist, NGO and intellectual challenges in the world social forum', *Societies without Borders*, 3(1), pp. 4–19. doi: 10.1163/187219108X256172.

Bond, S., Thomas, A. and Diprose, G. (2020) 'Making and unmaking political subjectivities: Climate justice, activism, and care', *Transactions of the Institute of British Geographers*, 45(4), pp. 750–762. doi: 10.1111/tran.12382.

Borchgrevink, A. (2003) 'Silencing Language', *Ethnography*, 4(1), pp. 95–121. doi: 10.1177/14661381030040010005.

Boschmann, E. E. and Cubbon, E. (2014) 'Sketch Maps and Qualitative GIS: Using Cartographies of Individual Spatial Narratives in Geographic Research', *Professional Geographer*, 66(2), pp. 236–248. doi: 10.1080/00330124.2013.781490.

Bossy, S. (2014) 'The utopias of political consumerism: The search of alternatives to mass consumption', *Journal of Consumer Culture*, 14(2), pp. 179–198. doi: 10.1177/1469540514526238.

Bourez, F. (2020) *Ethnographie d'une communauté en perpétuelle élaboration: expérimentations socio-*

politiques à Calafou (Catalogne). Université Paris Nanterre.

Boyer, R. (2015) 'Grassroots innovation for urban sustainability: Comparing the diffusion pathways of three ecovillage projects', *Environment and Planning A*, 47(2), pp. 320–337. doi: 10.1068/a140250p.

Boyer, R. (2016) 'Achieving one-planet living through transitions in social practice: A case study of dancing rabbit ecovillage', *Sustainability: Science, Practice, and Policy*, 12(1). doi: 10.1080/15487733.2016.11908153.

Braun, B. P. (2014) 'A new urban dispositif? Governing life in an age of climate change', *Environment and Planning D: Society and Space*, 32(1), pp. 49–64. doi: 10.1068/d4313.

Breadsell, J. *et al.* (2019) 'Interlocking practices and their influence in the home', *Environment and Planning B: Urban Analytics and City Science*, 46(8), pp. 1405–1421. doi: 10.1177/2399808318824114.

Bresnihan, P. (2016) 'The more-than-human commons: from commons to commoning', in Kirwan, S., Dawney, L., and Brigstocke, J. (eds) *Space, Power and the Commons: The Struggle for Alternative Futures*. London and New York: Routledge, pp. 93–113.

Brinkmann, S. (2014) 'Doing Without Data', *Qualitative Inquiry*, 20(6), pp. 720–725. doi: 10.1177/1077800414530254.

Brombin, A. (2019) 'The ecovillage movement: New ways to experience nature', *Environmental Values*, 28(2), pp. 191–210. doi: 10.3197/096327119X15515267418520.

Brook, I. (2012) 'Make, Do, and Mend: Solving Placelessness Through Embodied Environmental Engagement', in Brady, E. and Phemister, P. (eds) *Human-Environment Relations: Transformative Values in Theory and Practice*. Dordrecht, Heidelberg, London and New York: Springer.

Brown, E., Dury, S. and Holdsworth, M. (2009) 'Motivations of consumers that use local, organic fruit and vegetable box schemes in Central England and Southern France', *Appetite*, 53(2), pp. 183–188. doi: 10.1016/j.appet.2009.06.006.

Brown, G. and Pickerill, J. (2009) 'Space for emotion in the spaces of activism', *Emotion, Space and Society*, 2(1), pp. 24–35. doi: 10.1016/j.emospa.2009.03.004.

Brown, M. (2008) 'Comfort Zone: Model or metaphor?', *Journal of Outdoor and Environmental Education*, 12(1), pp. 3–12. doi: 10.1007/bf03401019.

Buch-Hansen, H. (2018) 'The Prerequisites for a Degrowth Paradigm Shift: Insights from Critical Political Economy', *Ecological Economics*, 146(December 2015), pp. 157–163. doi: 10.1016/j.ecolecon.2017.10.021.

Burkitt, I. (2019) 'Alienation and emotion: social relations and estrangement in contemporary

capitalism', *Emotions and Society*, 1(1), pp. 51–66. doi: 10.1332/263168919x15580836411841.

Bushell, S. *et al.* (2017) 'Strategic narratives in climate change: Towards a unifying narrative to address the action gap on climate change', *Energy Research and Social Science*, 28(April), pp. 39–49. doi: 10.1016/j.erss.2017.04.001.

Buttrick, N. R., Heintzelman, S. J. and Oishi, S. (2017) 'Inequality and well-being', *Current Opinion in Psychology*, 18, pp. 15–20. doi: 10.1016/j.copsyc.2017.07.016.

Cadon, B. (2017) *At Hack the Earth, the decadence lab from the eco-colony of Calafou*, *Makery.Info*. Available at: https://www.makery.info/en/2017/05/17/hack-the-earth-un-laboratoire-collectif-ecologique-et-decadentiste/ (Accessed: 27 September 2020).

Caffentzis, G. and Federici, S. (2014) 'Commons against and beyond capitalism', *Community Development Journal*, 49(SUPPL.1), pp. 92–105. doi: 10.1093/cdj/bsu006.

Calafou.org (no date) *Calafou: Colonia ecoindustrial postcapitalista*, *Calafou.org*. Available at: https://calafou.org/ (Accessed: 24 August 2020).

Çalişkan, K. and Callon, M. (2009) 'Economization, part 1: Shifting attention from the economy towards processes of economization', *Economy and Society*, 38(3), pp. 369–398. doi: 10.1080/03085140903020580.

Çalişkan, K. and Callon, M. (2010) 'Economization, part 2: A research programme for the study of markets', *Economy and Society*, 39(1), pp. 1–32. doi: 10.1080/03085140903424519.

Callén, B. and Sánchez Criado, T. (2015) 'Vulnerability Tests: Matters of "Care for Matter" in E-waste Practices', *Tecnoscienza: Italian Journal of Science and Technology Studies*, 6(2), pp. 17-40. doi: 10.1201/9780203501405-17.

Callon, M. (2004) 'Europe wrestling with technology', *Economy and Society*, 33(1), pp. 121–134. doi: 10.1080/0308514042000176766.

Callon, M. (2015) 'How to Design Alternative Markets: The Case of Genetically Modified/Non-Genetically Modified Coexistence', in Roelvink, G., St. Martin, K., and Gibson-Graham, J. K. (eds) *Making other worlds possible: Performing Diverse Economies*. Minneapolis: University of Minnesota Press, pp. 322–349.

Callon, M., Lascoumes, P. and Barthe, Y. (2009) *Acting in an Uncertain World: An Essay on Technical Democracy*. Cambridge (Mass.) and London: The MIT Press. doi: 10.5860/choice.47-3421.

Callon, M., Méadel, C. and Rabeharisoa, V. (2002) 'The economy of qualities', *Economy and Society*, 31(2), pp. 194–217. doi: 10.1080/03085140220123126.

Callon, M., Millo, Y. and Muniesa, F. (2007) *Market devices*. Malden (Mass.): Blackwell.

Callon, M. and Muniesa, F. (2005) 'Economic markets as calculative collective devices', *Organization Studies*, 26(8), pp. 1229–1250. doi: 10.1177/0170840605056393.

Cameron, J. (2021) 'Post-capitalism now: A community economies perspective', in Alexander, S., Chandra-Shekeran, S., and Gleeson, B. (eds) *Post-Capitalist Futures*. London: Palgrave MacMillan.

Cameron, J. and Hicks, J. (2014) 'Performative Research for a Climate Politics of Hope: Rethinking Geographic Scale, "Impact" Scale, and Markets', *Antipode*, 46(1), pp. 53–71. doi: 10.1111/anti.12035.

Candea, M. (2010) 'I fell in love with carlos the meerkat: Engagement and detachment in human-animal Relations', *American Ethnologist*, 37(2), pp. 241–258. doi: 10.1111/j.1548-1425.2010.01253.x.

Candecreix.cat (2019) *Can Decreix: the house of degrowth*, *Candecreix.cat*. Available at: http://www.candecreix.cat/ (Accessed: 8 September 2020).

Canmasdeu.net (no date a) *Can Masdeu: Our History*. Available at: https://www.canmasdeu.net/our-history/?lang=en (Accessed: 4 December 2020).

Canmasdeu.net (no date b) *Who we are*, *canmasdeu.net*. Available at: https://www.canmasdeu.net/who-are-we/?lang=en (Accessed: 26 September 2020).

Canniford, R. and Shankar, A. (2013) 'Purifying practices: How consumers assemble romantic experiences of nature', *Journal of Consumer Research*, 39(5), pp. 1051–1069. doi: 10.1086/667202.

Carlsson, C. (2015) 'Nowtopians', in D'Alisa, G., Demaria, F., and Kallis, G. (eds) *Degrowth: A vocabulary for a new era*. Abingdon and New York: Routledge, pp. 182–185.

Carr, C. and Gibson, C. (2016) 'Geographies of making: Rethinking materials and skills for volatile futures', *Progress in Human Geography*, 40(3), pp. 297–315. doi: 10.1177/0309132515578775.

Casey, K., Lichrou, M. and O'Malley, L. (2020) 'Prefiguring sustainable living: an ecovillage story', *Journal of Marketing Management*, 36(17–18), pp. 1658–1679. doi: 10.1080/0267257X.2020.1801800.

Castañeda, P. (2020) 'From the Right to Mobility to the Right to the Mobile City: Playfulness and Mobilities in Bogotá's Cycling Activism', *Antipode*, 52(1), pp. 58–77. doi: 10.1111/anti.12581.

Castree, N. (2003) 'Commodifying what nature?', *Progress in Human Geography*, 27(3), pp. 273–297. doi: 10.1191/0309132503ph428oa.

Cattaneo, C. (2015) 'Eco-communities', in D'Alisa, G., Demaria, F., and Kallis, G. (eds) *Degrowth: A vocabulary for a new era*. Abingdon and New York: Routledge.

Cattaneo, C. and Gavaldà, M. (2010) 'The experience of rurban squats in Collserola, Barcelona: what kind of degrowth?', *Journal of Cleaner Production*, 18(6), pp. 581–589. doi:

10.1016/j.jclepro.2010.01.010.
Cattaneo, C. and Di Mauro, S. E. (2015) 'Urban squats as eco-social resistance to and resilience in the face of capitalist relations: Case studies from Barcelona and Rome', *Partecipazione e Conflitto*, 8(2), pp. 343–366. doi: 10.1285/i20356609v8i2p343.
Chakrabarty, D. (2000) *Provincializing Europe: Postcolonial Thought and Historical Difference*. Princeton and Oxford: Princeton University Press.
Chamberlin, E. (1946) *The Theory of Monopolistic Competition: A re-orientation of the Theory of Value*. Oxford: Oxford University Press.
Chatham House (2018) *The Cement Sector: Seven Reasons Why it Needs to Change*, *medium.com*. Available at: https://medium.com/chatham-house/the-cement-sector-seven-reasons-why-it-needs-to-change-9cc8cc3038e4? (Accessed: 27 August 2020).
Chatterton, P. (2016a) 'Building transitions to post-capitalist urban commons', *Transactions of the Institute of British Geographers*, 41(4), pp. 403–415. doi: 10.1111/tran.12139.
Chatterton, P. (2016b) 'The Rocky Road of Post-Capitalist Grassroots Experimentation', *Sustainable Ecological Engineering Design*, 2230, pp. 31–44. doi: 10.1007/978-3-319-32646-7_4.
Chatterton, P. and Pickerill, J. (2010) 'Everyday activism and transition towards post-capitalist wolrds', *Transactions of the Institute of British Geographers*, 35(4), pp. 475–490.
Chatterton, P. and Pusey, A. (2020) 'Beyond capitalist enclosure, commodification and alienation: Postcapitalist praxis as commons, social production and useful doing', *Progress in Human Geography*, 44(1), pp. 27–48. doi: 10.1177/0309132518821173.
Chawla, L. (1998) 'Significant life experiences revisited: A review of research on sources of environmental sensitivity', *Journal of Environmental Education*, 29(3), pp. 11–21. doi: 10.1080/00958969809599114.
Chawla, L. (1999) 'Life paths into effective environmental action', *Journal of Environmental Education*, 31(1), pp. 15–26. doi: 10.1080/00958969909598628.
Chew, A. W. (2021) 'Disrupting the representational limit of abductively-driven research: A problematization of the link between abduction and representational thought', *Research in Education*, 109(1), pp. 90–108. doi: 10.1177/0034523720920670.
Chitewere, T. (2010) 'Equity in sustainable communities: Exploring tools from environmental justice and political ecology', *Natural Resources Journal*, 50(2), pp. 315–339.
Chitewere, T. and Taylor, D. E. (2010) 'Sustainable living and community building in Ecovillage at Ithaca: The challenges of incorporating social justice concerns into the practices of an ecological cohousing community', in Taylor, D. E. (ed.) *Environment and Social Justice: An International Perspective,*. Bingley (UK): Emerald Publishing Limited, pp. 141–176.

Christian, D. L. (2003) *How to join an Ecovillage or Intentional Community*. Gabriola Island (Canada): New Society Publishers.

Clark, N. (2011) *Inhuman nature. Sociable life on a dynamic planet*. Los Angeles, London, New Dehli, Singapore, Washington DC: Sage.

Clark, N. and Yusoff, K. (2014) 'Combustion and Society: A Fire-Centred History of Energy Use', *Theory, Culture & Society*, 31(5), pp. 203–226. doi: 10.1177/0263276414536929.

Clay, N. *et al.* (2020) 'Palatable disruption: the politics of plant milk', *Agriculture and Human Values*, 37, pp. 945-962. doi: 10.1007/s10460-020-10022-y.

Cleveland, D. A. *et al.* (2014) 'Local food hubs for alternative food systems: A case study from Santa Barbara County, California', *Journal of Rural Studies*, 35, pp. 26–36. doi: 10.1016/j.jrurstud.2014.03.008.

Cochoy, F. (2005) 'A brief history of "customers," or the gradual standardization of markets and organizations', *Sociologie du Travail*, 47(SUPPL. 1), pp. e36–e56. doi: 10.1016/j.soctra.2005.08.001.

Cockayne, D. G., Ruez, D. and Secor, A. (2017) 'Between ontology and representation: Locating Gilles Deleuze's "difference-in-itself" in and for geographical thought', *Progress in Human Geography*, 41(5), pp. 580–599. doi: 10.1177/0309132516650028.

Coeckelbergh, M. (2015) *Environmental Skill: Motivation, Knowledge, and the Possibility of a Non-Romantic Environmental Ethics*. New York and London: Routledge.

Coenen, L., Benneworth, P. and Truffer, B. (2012) 'Toward a spatial perspective on sustainability transitions', *Research Policy*, 41(6), pp. 968–979. doi: 10.1016/j.respol.2012.02.014.

Cole, R. J. *et al.* (2008) 'Re-contextualizing the notion of comfort', *Building Research and Information*, 36(4), pp. 323–336. doi: 10.1080/09613210802076328.

Collard, R. C., Dempsey, J. and Sundberg, J. (2015) 'A Manifesto for Abundant Futures', *Annals of the Association of American Geographers*, 105(2), pp. 322–330. doi: 10.1080/00045608.2014.973007.

Conde, M. and Walter, M. (2015) 'Commodity frontiers', in D'Alisa, G., Demaria, F., and Kallis, G. (eds) *Degrowth: A vocabulary for a new era*. Abingdon and New York: Routledge, pp. 71–75.

Conill, J. *et al.* (2012) *Otra vida es posible. Prácticas económicas alternativas durante la crisis*. Barcelona: Editorial UOC.

Connolly, W. E. (2005) 'The evangelical-capitalist resonance machine', *Political Theory*, 33(6), pp. 869–886. doi: 10.1177/0090591705280376.

Cope, M. (2017) 'Transcripts: Coding and Analysis', *International Encyclopedia of Geography: People, the Earth, Environment and Technology*, pp. 1–7. doi: 10.1002/9781118786352.wbieg0772.

Coppola, A. and Vanolo, A. (2015) 'Normalising autonomous spaces: Ongoing transformations in Christiania, Copenhagen', *Urban Studies*, 52(6), pp. 1152–1168. doi: 10.1177/0042098014532852.

Crang, M. and Cook, I. (2007) *Doing Ethnographies*. London, Thousand Oaks and New Delhi: Sage Publications.

Crowley, J. E. (2001) *The invention of comfort: Sensibilities & Design in early Modern Britain & Early America*. Baltimore: John Hopkins University Press.

Cumbers, A., Routledge, P. and Nativel, C. (2008) 'The entangled geographies of global justice networks', *Progress in Human Geography*, 32(2), pp. 183–201. doi: 10.1177/0309132507084818.

Cunningham, P. A. and Wearing, S. L. (2013) 'The Politics of Consensus: An Exploration of the Cloughjordan Ecovillage, Ireland', *Cosmopolitan Civil Societies: An Interdisciplinary Journal*, 5(2), pp. 1–28.

Daigle, M. (2015) *From Cuba with Love: Sex and Money in the Twenty-First Century*. Oakland, California: University of California Press.

Daly, M. (2017) 'Quantifying the environmental impact of ecovillages and co-housing communities: a systematic literature review', *Local Environment*, 22(11), pp. 1358–1377. doi: 10.1080/13549839.2017.1348342.

Davis, J. and Warring, A. (2011) 'Living utopia: Communal living in Denmark and Britain', *Cultural and Social History*, 8(4), pp. 513–530. doi: 10.2752/147800411X13105523597841.

Dawson, J. (2004) 'Wholesome Living', *Resurgence*, 225.

Dawson, J. (2006) *Ecovillages: New Frontiers for Sustainability*. Totnes: Green Books.

Dawson, J. (2013) 'From Islands to Networks: The History and Future of the Ecovillage Movement', in Lockyer, J. and Veteto, J. (eds) *Environmental Anthropology Engaging Ecotopia: Bioregionalism, Permaculture, and Ecovillages*. New York and Oxford: Berghahn Books.

Dawson, J. (2015) *Ecovillages: New Frontiers for Sustainability*. Cambridge: Green Books.

Debaise, D. (2013) 'A philosophy of interstices: Thinking subjects and societies from Whitehead's philosophy', *Subjectivity*, 6(1), pp. 101–111. doi: 10.1057/sub.2012.24.

Debelle, G. *et al.* (2018) 'Squatting Cycles in Barcelona: Identities, Repression and the Controversy of Institutionalisation', in Martínez-López, M. A. (ed.) *The Urban Politics of Squatters' Movements*. New York: Palgrave MacMillan, pp. 51–73.

Declós, C. (2013) *The battle for space in Barcelona: the 'rose of fire'*, *Opendemocracy.net*. Available at: https://www.jacobinmag.com/2018/08/schnapps-working-class-alcohol-drinking-bars (Accessed: 8 July 2020).

Degrowth.org (no date) *Can Decreix*, *Degrowth.org*. Available at: https://degrowth.org/can-

decreix/ (Accessed: 18 October 2019).

Deleuze, G. (1988) *Spinoza: Practical Philosophy*. San Francisco, CA: City LIghts Books.

Deleuze, G. (2004) *Difference and repetition*. London: continuum.

Deleuze, G. and Guattari, F. (1987) *A Thousand Plateaus: Capitalism and schizophrenia*. Minneapolis and London: University of Minnesota Press.

Deleuze, G. and Parnet, C. (2002) *Dialogues II*, *Journal of American Folklore*. New York: Columbia University Press. doi: 10.1353/jaf.2002.0006.

Demaria, F. *et al.* (2013) 'What is degrowth? from an activist slogan to a social movement', *Environmental Values*, 22(2), pp. 191–215. doi: 10.3197/096327113X13581561725194.

Demaria, F., Kallis, G. and Bakker, K. (2019) 'Geographies of degrowth: Nowtopias, resurgences and the decolonization of imaginaries and places', *Environment and Planning E: Nature and Space*, 2(3), pp. 431–450. doi: 10.1177/2514848619869689.

Denis, J. and Pontille, D. (2017) 'Beyond breakdown : exploring regimes of maintenance', *Continent*, 6(1), pp. 13–17.

Denzin, N. (1989) *Interpretative biography*. Newbury Park, London and New Delhi: Sage Publications.

Deriu, M. (2015) 'Conviviality', in D'Alisa, G., Demaria, F., and Kallis, G. (eds) *Degrowth: A vocabulary for a new era*. Abingdon and New York: Routledge, pp. 79–83.

DeSilvey, C. and Edensor, T. (2013) 'Reckoning with ruins', *Progress in Human Geography*, 37(4), pp. 465–485. doi: 10.1177/0309132512462271.

Despret, V. (2004) 'The Body We Care for: Figures of Anthropo-zoo-genesis', *Body & Society*, 10(2–3), pp. 111–134. doi: 10.1177/1357034X04042938.

Dewey, J. (1922) *Human Nature and Conduct: An Introduction to Social Psychology*. New York: Modern Library.

Diani, M. and Mische, A. (2015) 'Network Approaches and Social Movements', in Della Porta, D. and Diani, M. (eds) *The Oxford Handbook of Social Movements*. Oxford: Oxford University Press, pp. 1–22. doi: 10.1093/oxfordhb/9780199678402.013.9.

Dias, M. A. *et al.* (2017) 'The meaning and relevance of ecovillages for the construction of sustainable societal alternatives', *Ambiente e Sociedade*, 20(3), pp. 79–96. doi: 10.1590/1809-4422ASOC0083V2032017.

Díaz-Parra, I. and Mena, J. C. (2015) 'Squatting, the 15-M Movement, and Struggles for Housing in the Context of the Spanish Social Crisis', *Human Geography*, 8(1), pp. 40–53. doi: 10.1177/194277861500800103.

Dietrich, D. (2018) 'Hydrotropism: How roots search for water', *Journal of Experimental Botany*,

69(11), pp. 2759–2771. doi: 10.1093/jxb/ery034.

Donald, D. (2009) 'Forts , Curriculum , and Indigenous Métissage : Imagining Decolonization of Aboriginal-Canadian Relations in Educational Contexts', *First Nations Perspectives*, 2(1), pp. 1–24.

Donald, D. (2012) 'Indigenous Métissage: A decolonizing research sensibility', *International Journal of Qualitative Studies in Education*, 25(5), pp. 533–555. doi: 10.1080/09518398.2011.554449.

Dotter, C. (2017) *Can The World Bank's internatioanl poverty line reflect extreme poverty?* 232. Available at: http://www2.vwl.wiso.uni-goettingen.de/courant-papers/CRC-PEG_DP_232.pdf (accessed November 3, 2021).

Driscoll, D. (2018) 'Beyond organizational ties: foundations of persistent commitment in environmental activism', *Social Movement Studies*, 17(6), pp. 697–715. doi: 10.1080/14742837.2018.1519412.

Easterlin, R. A. (2003) 'Explaining happiness', *Proceedings of the National Academy of Sciences of the United States of America*, 100(19), pp. 11176–11183. doi: 10.1073/pnas.1633144100.

Eco-villages.eu (2018) *Ecovillages: An update on the situation of the ecovillages in France*, *Ecovillages Europe*. Available at: https://eco-villages.eu/en/2018/09/22/an-update-on-the-situation-of-the-ecovillages-in-france/ (consulted September 2, 2021).

Edensor, T. (2020) *Stone: Stories of Urban Materiality*. Singapore: Palgrave MacMillan.

Elder, G. H. (1998) 'The Life Course as Developmental Theory', *Child Development*, 69(1), pp. 1–12. doi: 10.1111/j.1467-8624.1998.tb06128.x.

Ellix Katz, S. (2003) *Wild fermentation: The Flavour, Nutrition and Craft of Live-Culture Foods*. White River Junction: Chelsea Green Publishing Company.

Ergas, C. (2010) 'A Model of Sustainable Living: Collective Identity in an Urban Ecovillage', *Organization & Environment*, 23(1), pp. 32–54. doi: 10.1177/1086026609360324.

Escobar, A. (1992) 'Imagining a Post-Development Era ? Imagining Critical and Social Movements Thought , Development and Social Movements', *Social Text*, 31/32(31), pp. 20–56.

Escribano, P., Lubbers, M. J. and Molina, J. L. (2017) 'Becoming part of an eco-community: Social and environmental activism or livelihood strategy?', *Social Sciences*, 6(4), pp. 1–16. doi: 10.3390/socsci6040148.

Escribano, P., Lubbers, M. J. and Molina, J. L. (2020) 'A typology of ecological intentional communities: Environmental sustainability through subsistence and material reproduction', *Journal of Cleaner Production*, 266. doi: 10.1016/j.jclepro.2020.121803.

Esteves, A. M. (2017) 'Radical Environmentalism and "Commoning": Synergies Between Ecosystem Regeneration and Social Governance at Tamera Ecovillage, Portugal', *Antipode*,

49(2), pp. 357–376. doi: 10.1111/anti.12278.

Etymonline.com (2021) *Motivate*, *Etymonline.com*. Available at: https://www.etymonline.com/word/motivate (accessed August 25, 2021).

Fazey, I. *et al.* (2018) 'Transformation in a changing climate: a research agenda', *Climate and Development*, 10(3), pp. 197–217. doi: 10.1080/17565529.2017.1301864.

Featherstone, D. *et al.* (2012) 'Progressive localism and the construction of political alternatives', *Transactions of the Institute of British Geographers*, 37(2), pp. 177–182. doi: 10.1111/j.1475-5661.2011.00493.x.

Feola, G. (2019) 'Degrowth and the unmaking of capitalism: Beyond 'decolonization of the imaginary"', *Acme*, 18(4), pp. 977–997.

Firth, R. (2012) 'Transgressing urban utopanism: Autonomy and active desire', *Geografiska Annaler, Series B: Human Geography*, 94(2), pp. 89–106. doi: 10.1111/j.1468-0467.2012.00398.x.

Fischetti, M. (2018) 'A Good Life for All', *Scientific American*, 318(6), p. 84. doi: 10.1038/scientificamerican0618-84.

Fisher, M. (2009) *Capitalist Realism: Is there no alternative*. London: Zed Books. doi: 10.1177/0096144292018004003.

Flick, U. (2014) *An Introduction to Qualitative Research*. 5th editio. Sage Publications.

Forde, E. (2017) 'The ethics of energy provisioning: Living off-grid in rural Wales', *Energy Research and Social Science*, 30(July), pp. 82–93. doi: 10.1016/j.erss.2017.06.018.

Forster, P. M. and Wilhelmus, M. (2005) 'The Role of Individuals in Community Change Within the Findhorn Intentional Community', *Contemporary Justice Review*, 8(4), pp. 367–379. doi: 10.1080/10282580500334221.

Fotopoulos, T. (2006) 'Is the eco-village a solution or part of the problem?', *The International Journal of Inclusive Democracy*, 2(3), pp. 1–5.

Friedlingstein, P. *et al.* (2019) 'Global Carbon Budget 2019', *Earth System Science Data*, 11, pp. 1783–1838.

García-Lamarca, M. (2017) 'From Occupying Plazas to Recuperating Housing: Insurgent Practices in Spain', *International Journal of Urban and Regional Research*, 41(1), pp. 37–53. doi: 10.1111/1468-2427.12386.

Gauntlett, D. (2012) *Making is Connecting: The Social Meaning of Creativity from DIY and Knitting to YouTube and Web 2.0*. London: Polity.

Geels, F. W. and Schot, J. (2007) 'Typology of sociotechnical transition pathways', *Research Policy*, 36(3), pp. 399–417. doi: 10.1016/j.respol.2007.01.003.

Gerlitz, C. (2017) 'Interfacing attachments: The multivalence of brands', in Cochoy, F., Deville,

J., and McFall, L. (eds) *Markets and the Art of Attachment*. London and New York: Routledge, pp. 72–88.

Gibson-Graham, J. K. (2006) *A Postcapitalist Politics*. Minneapolis and London: University of Minnesoto Press.

Gibson-Graham, J. K. (2008) 'Diverse economies: Performative practices for "other worlds"', *Progress in Human Geography*, 32(5), pp. 613–632. doi: 10.1177/0309132508090821.

Gibson-Graham, J. K., Cameron, J. and Healy, S. (2013) *Take Back the Economy: An Ethical Guide for Transforming our Communities*. Minneapolis and London: University of Minnesota Press.

Gibson-Graham, J. K., Cameron, J. and Healy, S. (2016) 'Commoning as a postcapitalist politics', in Amin, A. and Howell, P. (eds) *Releasing the Commons: Rethinking the futures of the commons*. Abingdon and New York, pp. 192–213.

Gibson-Graham, J. K. and Dombroski, K. (2020) *The Handbook of Diverse Economies*. Cheltenham and Northampton (Mass.): Edward Elgar Publishing.

Gibson-Graham, J. K. and Roelvink, G. (2009) 'An economic ethics for the Anthropocene', *Antipode*, 41, pp. 320–346.

Gilbert, M. R. (1994) 'The politics of location: Doing feminist research at "home"', *Professional Geographer*, 46(1), pp. 90–96. doi: 10.1111/j.0033-0124.1994.00090.x.

Gilman, D. and Gilman, R. (1991) *Eco-villages and sustainable communities:* Langlay, WA: The Context Institute.

Gilman, R. (1991) 'The Ecovillage Challenge', *In Context*, p. 10. Available at: https://www.context.org/iclib/ic29/gilman1/.

Ginn, F. (2014) 'Sticky lives: Slugs, detachment and more-than-human ethics in the garden', *Transactions of the Institute of British Geographers*, 39(4), pp. 532–544. doi: 10.1111/tran.12043.

Ginn, F. and Ascensão, E. (2018) 'Autonomy, Erasure, and Persistence in the Urban Gardening Commons', *Antipode*, 50(4), pp. 929–952. doi: 10.1111/anti.12398.

Ginn, F., Beisel, U. and Barua, M. (2016) 'Flourishing with Awkward Creatures: Togetherness, Vulnerability, Killing', *Environmental Humanities*, 4(1), pp. 113–123. doi: 10.1215/22011919-3614953.

Giraud, E. H. (2019) *What comes after entanglement? Activism, Anthropocentrism and an Ethics of Exclusion*, *Research Technology Management*. Durham and London: Duke University Press. doi: 10.1080/08956308.2020.1762442.

Glass, A. P. (2012) 'Elder Co-Housing in the United States: Three case studies', *Built Environment*, 38(3), pp. 345–363. doi: 10.2148/benv.38.3.345.

Glass, A. P. (2020) 'Sense of community, loneliness, and satisfaction in five elder cohousing

neighborhoods', *Journal of Women and Aging*, 32(1), pp. 3–27. doi: 10.1080/08952841.2019.1681888.

Gómez-Baggethun, E. (2015) 'Commodification', in D'Alisa, G., Demaria, F., and Kallis, G. (eds) *Degrowth: A vocabulary for a new era*. Abingdon and New York: Routledge, pp. 67–71.

Goodman, M. K. (2016) 'Food geographies I: Relational foodscapes and the busy-ness of being more-than-food', *Progress in Human Geography*, 40(2), pp. 257–266. doi: 10.1177/0309132515570192.

Gorz, A. (1967) *Strategy for Labor: A Radical Proposal*. Boston (Mass): Beacon Press.

Graeber, D. (2018) *Bullshit Jobs: The Rise of Pointless Work, and What We Can Do About It*. London: Allen Lane.

Graham, J. K. G. and Roelvink, G. (2009) 'An Economic Ethics for the Anthropocene', *Antipode*, 41, pp. 320–346. doi: 10.1111/j.1467-8330.2009.00728.x.

Graham, S. (2010) *Disrupted cities: When infrastructure fails*, *Disrupted Cities: When Infrastructure Fails*. New York and London: Routledge. doi: 10.4324/9780203894484.

Graham, S. and Thrift, N. (2007) 'Out of Order: Understanding Repair and Maintenance', *Theory, Culture & Society*, 24(3), pp. 1–25. doi: 10.1177/0263276407075954.

Graziano, V. and Trogal, K. (2019) 'Repair matters', *Ephemera : Theory and Politics in Organization*, 14(1), pp. 54–70.

Grear, A. (2020) 'Resisting Anthropocene Neoliberalism: Towards New Materialist Commoning?', in Grear, A. and Bollier, D. (eds) *The Great Awakening: New Modes of Life amidst Capitalist Ruins*. Earth, Milky Way: punctum books, pp. 317–356.

Grear, A. and Bollier, D. (2020) 'Introduction', in Grear, A. and Bollier, D. (eds) *The Great Awakening: New Modes of Life amidst Capitalist Ruins*. Earth, Milky Way: punctum books, pp. 13–23.

Greenberg, D. (2013) 'Academia's Hidden Curriculum and Ecovillages as Campuses for Sustainability Education', in Lockyer, J. and Veteto, J. (eds) *Environmental Anthropology: Engaging Ecotopia: Bioregionalism, Permaculture, and Ecovillages*. New York and Oxford: Berghahn Books, pp. 269–285.

Greenhough, B. (2014) 'More-than-human geographies', in Lee, R. et al. (eds) *The SAGE Handbook of Human Geography*. Los Angeles, London, New Delhi, Singapore, Washington DC: Sage Publications, pp. 94–120.

Greenhough, B. *et al.* (2018) 'Unsettling antibiosis: how might interdisciplinary researchers generate a feeling for the microbiome and to what effect?', *Palgrave Communications*, 4(1), pp. 1–12. doi: 10.1057/s41599-018-0196-3.

Greenhough, B. and Roe, E. (2010) 'From ethical principles to response-able practice', *Environment and Planning D: Society and Space*, 28(1), pp. 43–45. doi: 10.1068/d2706wse.

Grinde, B. *et al.* (2018) 'Quality of Life in Intentional Communities', *Social Indicators Research*, 137(2), pp. 625–640. doi: 10.1007/s11205-017-1615-3.

Grosz, E. (1994) 'A thousand tiny sexes: feminism and rhizomatics', in Boundess, C. and Olkowski, D. (eds) *Gilles Deleuze and the theatre of philosophy*. London: Routledge, pp. 187–210.

Gubrium, J. F. and Holstein, J. A. (1993) 'Family Discourse, Organizational Embeddedness, and Local Enactment', *Journal of Family Issues*, 14(1), pp. 66-81.

Gubrium, J. F. and Holstein, J. A. (1995) 'Deprivatization', 65(2), pp. 207–223.

Gubrium, J. F. and Holstein, J. A. (1998) 'Narrative practice and the coherence of personal stories', *Sociological Quarterly*, 39(1), pp. 163–187. doi: 10.1111/j.1533-8525.1998.tb02354.x.

Gudeman, S. (2001) *The Anthropology of Economy: Community, Market, and Culture*. Malden (Mass.) and Oxford: Blackwell.

Haberl, H. *et al.* (2020) 'A systematic review of the evidence on decoupling of GDP, resource use and GHG emissions, part II: Synthesizing the insights', *Environmental Research Letters*, 15(6). doi: 10.1088/1748-9326/ab842a.

Hall, C. (2010) 'Freedom, Values, and Sacrifice: Overcoming Obstacles to Environmentally Sustainable Behavior', in Maniates, M. and Meyer, J. M. (eds) *The Environmental Politics of Sacrifice*. Cambridge (Mass.) and London: The MIT Press, pp. 61-87.

Hall, M. (2011) *Plants as persons: A philosophical botany*. Albany: State University of New York Press.

Hall, R. (2015) 'The ecovillage experience as an evidence base for national wellbeing strategies', *Intellectual Economics*, 9(1), pp. 30–42. doi: 10.1016/j.intele.2015.07.001.

Hamelin, L. (2013) 'And To No More Settle For Less Than Purity : Reflections on the Kerista Commune', *Praxis: Politics in Action*, 1(1), pp. 58–73.

Haraway, D. (1988) 'Situated Knowledges: the Science Question in Feminism of Partial and the Privilege', *Feminist Studies*, 14(3), pp. 575–599.

Haraway, D. (1997) *Modest_Witness@Second_Millennium. FemaleMan_Meets_OncoMouse: Feminism and Technoscience*. London: Routledge.

Haraway, D. (2008) *When Species Meet*, *Environmental Philosophy*. Minneapolis and London: University of Minnesota Press. doi: 10.5840/envirophil20085218.

Haraway, D. (2016) *Staying with the Trouble: Making Kin in the Chthulucene*. Durham and London: Duke University Press.

Haraway, D. (2018) 'Staying with the trouble for multispecies environmental justice', *Dialogues*

in Human Geography, 8(1), pp. 102–105. doi: 10.1177/2043820617739208.

Harrison, P. (2007) '"How shall I say it...?" Relating the nonrelational', *Environment and Planning A*, 39(3), pp. 590–608. doi: 10.1068/a3825.

Hawkins, G. (2009) 'More-than-Human Politics: The Case of Plastic Bags', *Australian Humanities Review*, 46, pp. 43–55. doi: 10.22459/ahr.46.2009.04.

Hawkins, G. (2021) 'Detaching from plastic packaging: reconfiguring material responsibilities', *Consumption Markets and Culture*, 24(4), pp. 405–418. doi: 10.1080/10253866.2020.1803069.

Hayes-Conroy, A. and Martin, D. G. (2010) 'Mobilising bodies: Visceral identification in the Slow Food movement', *Transactions of the Institute of British Geographers*, 35(2), pp. 269–281. doi: 10.1111/j.1475-5661.2009.00374.x.

Head, L., Atchison, J. and Phillips, C. (2015) 'The distinctive capacities of plants: Re-thinking difference via invasive species', *Transactions of the Institute of British Geographers*, 40(3), pp. 399–413. doi: 10.1111/tran.12077.

Heiskanen, E. *et al.* (2009) 'Designed to travel? Transition management encounters environmental and innovation policy histories in Finland', *Policy Sciences*, 42(4), pp. 409–427. doi: 10.1007/s11077-009-9094-2.

Helfrich, S. and Bollier, D. (2015) 'Commons', in D'Alisa, G., Demaria, F., and Kallis, G. (eds) *Degrowth: A vocabulary for a new era*. Abingdon and New York: Routledge, pp. 75–79.

Henke, C. (2019) 'Negotiating Repair: The Infrastructural Contexts of Practice and Power', in Strebel, I., Bovet, A., and Sormani, P. (eds) *Repair Work Ethnographies: Revisiting Breakdown, Relocating Materiality*. Singapore: Palgrave MacMillan, pp. 255-283.

Hickel, J. and Kallis, G. (2020) 'Is Green Growth Possible?', *New Political Economy*, 25(4), pp. 469–486. doi: 10.1080/13563467.2019.1598964.

Hinchliffe, S. and Whatmore, S. (2006) 'Living cities: Towards a politics of conviviality', *Science as Culture*, 15(2), pp. 123–138. doi: 10.1080/09505430600707988.

Hird, M. J. (2010) 'Indifferent globality: Gaia, symbiosis and "other worldliness"', *Theory, Culture and Society*, 27(2), pp. 54–72. doi: 10.1177/0263276409355998.

Hitchings, R. (2006) 'Expertise and inability: Cultured materials and the reason for some retreating lawns in London', *Journal of Material Culture*, 11(3), pp. 364–381. doi: 10.1177/1359183506068810.

Hitchings, R. (2012) 'People can talk about their practices', *Area*, 44(1), pp. 61–67. doi: 10.1111/j.1475-4762.2011.01060.x.

Hitchings, R. and Day, R. (2011) 'How older people relate to the private winter warmth practices of their peers and why we should be interested', *Environment and Planning A*, 43(10), pp. 2452–

2467. doi: 10.1068/a44107.

Hoffrogge, R. (2018) *Booze and Socialism*, *Jacobinmag.com*. Available at: https://www.jacobinmag.com/2018/08/schnapps-working-class-alcohol-drinking-bars (Accessed: 17 August 2020).

Holloway, J. (2010) *Crack Capitalism*. London and New York: Pluto Press. doi: 10.2307/j.ctt183p362.

Hopkins, P. and Pain, R. (2007) 'Geographies of age: Thinking relationally', *Area*, 39(3), pp. 287–294. doi: 10.1111/j.1475-4762.2007.00750.x.

Hörschelmann, K. (2011) 'Theorising life transitions: Geographical perspectives', *Area*, 43(4), pp. 378–383. doi: 10.1111/j.1475-4762.2011.01056.x.

Horton, J. and Kraftl, P. (2009) 'Small acts, kind words and "not too much fuss": Implicit activisms', *Emotion, Space and Society*, 2(1), pp. 14–23. doi: 10.1016/j.emospa.2009.05.003.

Hulme, M. (2010) 'Problems with making and governing global kinds of knowledge', *Global Environmental Change*, 20(4), pp. 558–564. doi: 10.1016/j.gloenvcha.2010.07.005.

Huron, A. (2015) 'Working with Strangers in Saturated Space: Reclaiming and Maintaining the Urban Commons', *Antipode*, 47(4), pp. 963–979. doi: 10.1111/anti.12141.

IEA (2021) *Global Energy Review*, *Paris: International Energy Agency*. Available at: https://iea.blob.core.windows.net/assets/d0031107-401d-4a2f-a48b-9eed19457335/GlobalEnergyReview2021.pdf. (Accessed: 20 September 2021).

Illich, I. (1973) *Tools for Conviviality*. Glasgow: William Collins Son & Co Ltd.

Ingold, T. (2011) *Being Alive: Essays on Movement, Knowledge and Description*. London and New York: Routledge.

Jackson, T. (2009) *Prosperity Without With Growth: Economics for a finite planet*. London and Sterling (VA): Earthscan.

Jackson, T. (2019) *Zero Carbon Sooner - The case for an early zero carbon target for the UK*. 18. Guildford. doi: 10.13140/RG.2.2.15410.15045.

Jackson, T. and Victor, P. A. (2019) 'Unraveling the claims for (and against) green growth', *Science*, 366(6468), pp. 950–951. doi: 10.1126/science.aay0749.

Jaeggi, R. (2014) *Alienation*. New York: Columbia University Press.

Jaeggi, R. (2016) 'What (If anything) is wrong with capitalism? dysfunctionality, exploitation and alienation: Three approaches to the critique of capitalism', *Southern Journal of Philosophy*, 54, pp. 44–65. doi: 10.1111/sjp.12188.

Jasper, J. M. (2011) 'Emotions and social movements: Twenty years of theory and research', *Annual Review of Sociology*, 37, pp. 285–303. doi: 10.1146/annurev-soc-081309-150015.

Jaumier, S. *et al.* (2015) 'The Ethnographer as an Intruder: Negotiating the Boundaries of Intimacy in An Intentional Community', *M@n@gement*, 22(1), pp. 115–119.

Jeffrey, A., Mcfarlane, C. and Vasudevan, A. (2012) 'Rethinking Enclosure: Space, Subjectivity and the Commons', *Antipode*, 44(4), pp. 1247–1267. doi: 10.1111/j.1467-8330.2011.00954.x.

Jeffrey, C. and Dyson, J. (2021) 'Geographies of the future: Prefigurative politics', *Progress in Human Geography*, 45(4), pp. 641–658. doi: 10.1177/0309132520926569.

Jellis, T. (2013) *Reclaiming experiment: geographies of experiment and experimental geographies*. University of Oxford.

Jensen, C. B. and Morita, A. (2015) 'Infrastructures as Ontological Experiments', *Engaging Science, Technology, and Society*, 1, pp. 81–87. doi: 10.17351/ests2015.21.

Jones, O. (2011) 'Geography , Memory and Non-Representational Geographies', 12, pp. 875–885.

Kallis, G., Kerschner, C. and Martinez-Alier, J. (2012) 'The economics of degrowth', *Ecological Economics*, 84, pp. 172–180. doi: 10.1016/j.ecolecon.2012.08.017.

Karatzogianni, A. and Robinson, A. (2009) 'Rhizomatic politics: A new theory of social logics and assemblages', in Karatzogianni, A. and Robinson, A. (eds) *Power, Resistance and Conflict in the Contemporary World: Social Movements, Networks and Hierarchies*. Milton Park: Taylor & Francis, pp. 1–62.

Kasper, D. V. S. (2008) 'Redefining community in the ecovillage', *Human Ecology Review*, 15(1), pp. 12–24.

Kenis, A. and Mathijs, E. (2012) 'Beyond individual behaviour change: the role of power, knowledge and strategy in tackling climate change', *Environmental Education Research*, 18(1), pp. 45–65. doi: 10.1080/13504622.2011.576315.

Kirby, A. (2003) 'Redefining social and environmental relations at the ecovillage at Ithaca: A case study', *Journal of Environmental Psychology*, 23(3), pp. 323–332. doi: 10.1016/S0272-4944(03)00025-2.

Knorr-Cetina, K. (1999) *Epistemic Cultures: How the Sciences Make Knowledge*. Cambridge (Mass.): Harvard University Press.

Kociatkiewicz, J., Kostera, M. and Parker, M. (2020) 'The possibility of disalienated work: Being at home in alternative organizations', *Human Relations*, pp. 1–25. doi: 10.1177/0018726720916762.

Kollmuss, A. and Agyeman, J. (2002) 'Mind the Gap: Why do people act environmentally and what are the barriers to pro-environmental behavior?', *Environmental Education Research*, 8(3), pp. 239–260. doi: 10.1080/13504620220145401.

Kothari, B. A., Sangam, V. and Democracy, R. E. (2018) 'Eco-Swaraj vs. Global Eco-Catastrophe', *Asia Pacific perspectives*, 15(2), pp. 49–54.

Kraftl, P. (2007) 'Utopia, performativity, and the unhomely', *Environment and Planning D: Society and Space*, 25(1), pp. 120–143. doi: 10.1068/d397t.

Krzywoszynska, A. (2015) 'On being a foreign body in the field, or how reflexivity around translation can take us beyond language', *Area*, 47(3), pp. 311–318. doi: 10.1111/area.12202.

Krzywoszynska, A. (2017) 'Empowerment as skill: The role of affect in building new subjectivities', in Bastian, M. et al. (eds) *Participatory Research in More-than-human worlds*. London and New York: Routledge, pp. 127–141.

Kwa, C. (2002) 'Romantic and Baroque Conceptions of Complex Wholes in the Sciences', in Mol, A. and Law, J. (eds) *Complexities: Social Studies of Knwoledge Practices*. Durham (N.C.): Duke University Press, pp. 23–52. doi: 10.2307/j.ctv113144n.4.

De Laet, M. and Mol, A. (2000) 'The Zimbabwe Bush Pump: Mechanics of a Fluid Technology', *Social Studies of Science*, 30(2), pp. 225–263.

Last, A. (2017) 'Re-reading worldliness: Hannah Arendt and the question of matter', *Environment and Planning D: Society and Space*, 35(1), pp. 72–87. doi: 10.1177/0263775816662471.

Latouche, S. (2009) *Farewell to Growth*. Cambridge and Malden (Mass.): Polity Press.

Latour, B. (1987) *Science in Action: How to follow scientists and engineers through society*. Cambridge (Mass.): Harvard University Press.

Latour, B. (1993) *We Have Never Been Modern*. Cambridge (Mass.): Harvard University Press. doi: 10.1016/0956-5221(96)88504-6.

Latour, B. (1999) *Pandora's Hope: Essays on the Reality of Science Studies*. Cambridge (Mass.) and London: Harvard University Press.

Latour, B. (2004a) 'How to Talk About the Body? the Normative Dimension of Science Studies', *Body & Society*, 10(2–3), pp. 205–229. doi: 10.1177/1357034X04042943.

Latour, B. (2004b) 'Why has critique run out of steam? From matters of fact to matters of concern', *Critical Inquiry*, 30(2), pp. 225–248. doi: 10.1086/421123.

Latour, B. (2005) *Reassembling the Social: An Introduction to Actor-Network Theory*. Oxford: Oxford University Press.

Latour, B. (2010) 'An attempt at a "Compositionist Manifesto"', *New Literary History*, 41(3), pp. 471–490.

Law, J. (2004a) *After method: Mess in social science research*, *After Method: Mess in Social Science Research*. doi: 10.4324/9780203481141.

Law, J. (2004b) 'And if the global were small and noncoherent? Method, complexity, and the

baroque', *Environment and Planning D: Society and Space*, 22(1), pp. 13–26. doi: 10.1068/d316t.

Law, J. and Urry, J. (2004) 'Enacting the social', *Economy and Society*, 33(3), pp. 390–410. doi: 10.1080/0308514042000225716.

Lee, C. (2013) *The Energies of activism: Rethinking Agency in Contemporary Climate Change Activism*. University of Durham.

Lefebvre, H. (1996) *The Right to the City*. Paris: Anthropos.

LeVasseur, T. (2013) 'Globalizing the Ecovillage Ideal: Networks of Empowerment, Seeds of Hope', in Lockyer, J. and Veteto, J. (eds) *Environmental Anthropology Engaging Ecotopia: Bioregionalism, Permaculture, and Ecovillages*. New York and Oxford: Berghahn Books, pp. 251–269.

Libertarian Socialist Wiki (no date) *The Battle of Can Masdeu*, *Libertarian Socialist Wiki*. Available at: https://libsoc-wiki.fandom.com/wiki/Battle_of_Can_Masdeu (consulted June 5, 2020) (Accessed: 5 June 2020).

Libsoc-wiki.fandom.com (no date) *Battle of Can Masdeu*. Available at: https://libsoc-wiki.fandom.com/wiki/Battle_of_Can_Masdeu (Accessed: 2 December 2020).

Linebaugh, P. (2008) *The Magna Carta Manifesto: Liberties and Commons for All*. Los Angeles, Berkeley and London: University of California Press.

Listas.sindominio.net (2015) *[Logistica Cervecera] Rosa de foc en el HM?* Available at: https://listas.sindominio.net/pipermail/hackmeeting/2015-October/037538.html (Accessed: 8 October 2020).

Litfin, K. (2014) *Ecovillages: Lessons for Sustainable Community*. Cambridge and Malden: Polity Press.

Lockyer, J. (2010) 'Intentional Community carbon reduction and climate change action: from Ecovillages to Transition Towns', in *Low Carbon Communities: Imaginative Approaches to Combating Climate Change Locally*. Cheltenham and Northampton (Mass.): Edward Elgar Publishing, pp. 197–215.

Lockyer, J. (2017) 'Community, commons, and degrowth at Dancing Rabbit Ecovillage', *Journal of Political Ecology*, 24(1), pp. 519–542. doi: 10.2458/v24i1.20890.

Longhurst, R., Johnston, L. and Ho, E. (2009) 'A visceral approach: Cooking "at home" with migrant women in Hamilton, New Zealand', *Transactions of the Institute of British Geographers*, 34(3), pp. 333–345. doi: 10.1111/j.1475-5661.2009.00349.x.

Lorimer, J. (2007) 'Nonhuman charisma', *Environment and Planning D: Society and Space*, 25(5), pp. 911–932. doi: 10.1068/d71j.

Lorimer, J. (2015) *Wildlife in the Anthropocene: Conservation after Nature*. Minneapolis and London: University of Minnesota Press.

Lovell, H. (2019) 'Policy failure mobilities', *Progress in Human Geography*, 43(1), pp. 46–63. doi: 10.1177/0309132517734074.

Macintyre, A. (1953) *Marxism: An Interpretation*. London: SCM Press.

Mackay, R. and Avanessian, A. (2014) 'Introduction', in Mackay, R. and Avanessian, A. (eds) *#Accelerate: The accelerationist reader*. Falmouth: Urbanomic Media Ltd, pp. 1–51.

Maeckelbergh, M. (2011) 'Doing is believing: Prefiguration as strategic practice in the alterglobalization movement', *Social Movement Studies*, 10(1), pp. 1–20. doi: 10.1080/14742837.2011.545223.

Mafle Ferreira Duarte, L. G., Sahakian, M. and Ferreira Neto, J. L. (2021) 'Empowerment in an ecovillage: Unveiling the role of power relations in social practices', *Community Development*, pp. 1–15. doi: 10.1080/15575330.2021.1923045.

Magnusson, D. (2018) 'Going back to the roots: the fourth generation of Swedish eco-villages', *Scottish Geographical Journal*, 134(3–4), pp. 122–140. doi: 10.1080/14702541.2018.1465199.

Maniates, M. and Meyer, J. M. (2010) *The Environmental Politics of Sacrifice*. Cambridge (Mass.) and London: The MIT Press.

Marder, M. (2013) *Plant-Thinking: A philosophy of vegetal life*. New York and Chichester: Columbia University Press.

Marres, N. (2005) 'Issues spark a public into being: A key but often forgotten point of the Lippmann-Dewey debate', in Latour, B. and Weibel, P. (eds) *Making Things Public*. Cambridge (Mass.): MIT Press. doi: 10.1145/1183316.1183334.

Marres, N. (2007) 'The issues deserve more credit: Pragmatist contributions to the study of public involvement in controversy', *Social Studies of Science*, 37(5), pp. 759–780. doi: 10.1177/0306312706077367.

Marres, N. (2012) *Material participation: Technology, the Environment and Everyday Publics*. London and New York: Palgrave MacMillan.

Marres, N. (2013) 'Why political ontology must be experimentalized: On eco-show homes as devices of participation', *Social Studies of Science*, 43(3), pp. 417–443. doi: 10.1177/0306312712475255.

St. Martin, K., Roelvink, G. and Gibson-Graham, J. K. (2015) 'Introduction: An Economics Politics for Our Times', in Roelvink, G., St. Martin, K., and Gibson-Graham, J. K. (eds) *Making other worlds possible: Performing Diverse Economies*. Minneapolis and London, pp. 1–25.

Mason, P. (2015) *PostCapitalism: A Guide to Our Future*. London: Penguin Books.

Massey, M., O'Cass, A. and Otahal, P. (2018) 'A meta-analytic study of the factors driving the purchase of organic food', *Appetite*, 125, pp. 418–427. doi: 10.1016/j.appet.2018.02.029.

Massumi, B. (2002) *Parables for the Virtual: Movement, Affect, Sensation*. Durham and London: Duke University Press.

Matthews, D. (2019) 'Capitalism and mental health', *Monthly Review*, 70(8), pp. 49–62. doi: 10.14452/MR-070-08-2019-01_5.

Maynard, N. (2018) 'Activism across the lifecourse: Circumstantial, dormant and embedded activisms', *Area*, 50(2), pp. 205–212. doi: 10.1111/area.12349.

McCormack, D. P. (2003) 'An event of geographical ethics in spaces of affect', *Transactions of the Institute of British Geographers*, 28(4), pp. 488–507. doi: 10.1111/j.0020-2754.2003.00106.x.

McCormack, D. P. (2020) 'Is ANT capable of tracing spaces of affect?', in Blok, A., Farías, I., and Roberts, C. (eds) *The Routledge Companion to Actor-Network Theory*. London and New York: Taylor & Francis, pp. 181–190.

McCormack, D. P. and Schwanen, T. (2011) 'Guest editorial: The space-times of decision making', *Environment and Planning A*, 43(12), pp. 2801–2818. doi: 10.1068/a44351.

Mcfall, L. (2009) 'Devices and Desires: How Useful Is the "New" New Economic Sociology for Understanding Market Attachment?', *Sociology Compass*, 3(2), pp. 267–282. doi: 10.1111/j.1751-9020.2009.00195.x.

Mcfall, L., Cochoy, F. and Deville, J. (2017) 'Introduction: Markets and Arts of Attachment', in Cochoy, F., Deville, J., and McFall, L. (eds) *Markets and the Art of Attachment*. London and New York: Routledge, pp. 1-21.

McFarlane, C. and Silver, J. (2017) 'Navigating the city: dialectics of everyday urbanism', *Transactions of the Institute of British Geographers*, 42(3), pp. 458–471. doi: 10.1111/tran.12175.

McShane, K. (2018) 'The Role of Awe in Environmental Ethics', *Journal of Aesthetics and Art Criticism*, 76(4), pp. 473–484. doi: 10.1111/jaac.12595.

Meadows, D. (1972) *The limits to growth*. New York: Universe Books. doi: 10.1128/iai.65.9.3944-3946.1997.

Meijering, L., Huigen, P. and Van Hoven, B. (2007) 'Intentional communities in rural space', *Nederlandse Geografische Studies*, 98(348), pp. 27–38.

Merriman, P. (2019) 'Molar and molecular mobilities: The politics of perceptible and imperceptible movements', *Environment and Planning D: Society and Space*, 37(1), pp. 65–82. doi: 10.1177/0263775818776976.

Metcalf, B. (2004) *The Findhorn Book of Community Living*. Findhorn: Findhorn Press.

Metcalf, B. (2012) 'Utopian Struggle : Preconceptions and Realities of Intentional Communities', *RCC Perspectives*, (8), pp. 21–30.

Metcalf, B. (2013) 'Evolution of intentional community culture in the 21st Century', in

Proceedings of the 11th conference of the International Communal Studies Association. Social Sciences Directory, p. 92.

Metzger, M. (2016) 'Expanding the subject of planning: enacting the relational complexities of more-than-human urban common(er)s', in Kirwan, S., Dawney, L., and Brigstocke, J. (eds) *Space, Power and the Commons: The Struggle for Alternative Futures*. London and New York: Routledge, pp. 133-150.

Miyazawa, Y. *et al.* (2011) 'Root tropism: Its Mechanism and Possible Function in Drought Avoidance', in Turkan, I. (ed.) *Plant Responses to Drought and Salinity Stress: Developments in a Post-Genomic Era*. London and Amsterdam: Elsevier Ltd, pp. 350–378.

Mol, A. and Law, J. (2002) 'Complexities : An Introduction', in Mol, A. and Law, J. (eds) *Complexities: Social Studies of Knwoledge Practices*. Durham (N.C.): Duke University Press, pp. 1-22.

Monticelli, L. (2018) 'Embodying alternatives to capitalism in the 21st century', *TripleC*, 16(2), pp. 501–517. doi: 10.31269/triplec.v16i2.1032.

Morell, M. F. (2012) 'The Free Culture and 15M Movements in Spain: Composition, Social Networks and Synergies', *Social Movement Studies*, 11(3–4), pp. 386–392. doi: 10.1080/14742837.2012.710323.

Morton, T. (2012) *Hyperobjects: Philosophy and Ecology after the End of the World*. Minneapolis: University of Minnesota Press.

Mühlhoff, R. (2019) 'Affective disposition', in Slaby, J. and von Scheve, C. (eds) *Affective Societies: Key Concepts*. Abingdon and New York: Routledge, pp. 119–131.

Mühlhoff, R. and Schütz, T. (2019) 'Immersion, immersive power', in Slaby, J. and von Scheve, C. (eds) *Affective Societies: Key Concepts*. Abingdon and New York: Routledge, pp. 231–241.

Müller, M. (2007) 'What's in a word? Problematizing translation between languages', *Area*, 39(2), pp. 206–213. doi: 10.1111/j.1475-4762.2007.00731.x.

Murray, C. D. and Wynne, J. (2001) 'Researching community, work and family with an interpreter', *Community, Work & Family*, 4(2), pp. 157–171. doi: 10.1080/713658930.

Mychajluk, L. (2017) 'Learning to live and work together in an ecovillage community of practice', *European Journal for Research on the Education and Learning of Adults*, 8(2), pp. 179–194. doi: 10.3384/rela.2000-7426.rela9092.

Myles, C. C. (2020) *Fermented Landscapes: Lively Processes of Socio-environmental Transformation*. Lincoln (Ne): University of Nebraska Press.

Nadai, E. and Maeder, C. (2009) 'Contours of the Field(s): Multi-sited Ethnography as a Theory-driven Research Strategy for Sociology', in Falzon, M.-A. (ed.) *Multi-Sited Ethnography: Theory, Praxis, and Locality in Contemporary Research*. Farnham and Burlington: Ashgate Publishing

Limited.
Nancy, J.-L. (1991) *The Inoperative Community*. Minneapolis and Oxford: University of Minnesota Press.
Navaro-Yashin, Y. (2009) 'Affective spaces, melancholic objects: Ruination and the production of anthropological knowledge', *Journal of the Royal Anthropological Institute*, 15(1), pp. 1–18. doi: 10.1111/j.1467-9655.2008.01527.x.
Nelson, A. and Schneider, F. (2018) '"Open localism" - on Xue and Vasintjan III', in Nelson, A. and Schneider, F. (eds) *Housing for Degrowth: Principles, Models, Challenges and Opportunities*. Abingdon and New York: Routledge.
Nightingale, A. J. (2014) 'Questioning commoning', *Social & Cultural Geography*, 15(8), pp. 980–982. doi: 10.1080/14649365.2014.916995.
Nightingale, A. J. (2019) 'Commoning for inclusion? commons, exclusion, property and socio-natural becomings', *International Journal of the Commons*, 13(1), p. 16. doi: 10.18352/ijc.927.
North, P. (2010) 'Eco-localisation as a progressive response to peak oil and climate change - A sympathetic critique', *Geoforum*, 41(4), pp. 585–594. doi: 10.1016/j.geoforum.2009.04.013.
O'Brien, K. (2013) 'Global environmental change III: Closing the gap between knowledge and action', *Progress in Human Geography*, 37(4), pp. 587–596. doi: 10.1177/0309132512469589.
O'Connor, E. (2005) 'Embodied knowledge: The experience of meaning and the struggle towards proficiency in glassblowing', *Ethnography*, 6(2), pp. 183–204. doi: 10.1177/1466138105057551.
Opitz, I. *et al.* (2017) 'Effects of consumer-producer interactions in alternative food networks on consumers' learning about food and agriculture', *Moravian Geographical Reports*, 25(3), pp. 181–191. doi: 10.1515/mgr-2017-0016.
Orlikowski, W. J. (1996) 'Improvising organizational transformation over time: A situated change perspective', *Information Systems Research*, 7(1), pp. 63–92. doi: 10.4324/9780203361603-17.
Orlikowski, W. J. and Yates, J. (2002) 'It's about time: temporal structuring in organisations', *Organization Science*, 13(6), pp. 684–700.
Ostrom, E. (1990) *Governing the Commons :The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press.
Owens, L. (2009) *Cracking under Pressure: Narrating the Decline of the Amsterdam Squatters' Movement*. Amsterdam: Amsterdam University Press.
Owton, H. and Allen-Collinson, J. (2014) 'Close But Not Too Close: Friendship as Method(ology) in Ethnographic Research Encounters', *Journal of Contemporary Ethnography*, 43(3),

pp. 283–305. doi: 10.1177/0891241613495410.

Pajumets, M. and Hearn, J. (2021) 'Doing Gender by Not Doing Gender in Eco-Communities: Masculine Identity Talk Within a "Gender-Neutral" Worldview', in Pulé, P. M. and Hultman, M. (eds) *Men, Masculinities, and Earth: Contending with the (m)Anthropocene*. Cham (Switzerland): Palgrave MacMillan, pp. 309-329.

Papa, N. (2013) *Language Contact and Variation in the Spanish of Catalonia*, *Communication*. University at Albany, State University of New York.

Papadimitropoulos, V. (2018) 'Sustainability and Resilience in the Collaborative Economy: An Introduction to the Cloughjordan Ecovillage', *Journal of Public Policy and Administration*, 2(4), pp. 49–60. doi: 10.11648/j.jppa.20180204.12.

Parrique, T. *et al.* (2019) *Decoupling Debunked: Evidence and arguments against green growth as a sole strategy for sustainability*. Brussels. Available at: https://mk0eeborgicuypctuf7e.kinstacdn.com/wp-content/uploads/2019/07/Decoupling-Debunked.pdf (accessed November 3, 2021).

Paton, D. (2013) 'The quarry as sculpture: The place of making', *Environment and Planning A*, 45(5), pp. 1070–1086. doi: 10.1068/a45568.

Pavot, W. and Diener, E. (2008) 'The Satisfaction With Life Scale and the emerging construct of life satisfaction', *Journal of Positive Psychology*, 3(2), pp. 137–152. doi: 10.1080/17439760701756946.

Paxson, H. (2008) 'Post-pasteurian cultures: The microbiopolitics of raw-milk cheese in the United States', *Cultural Anthropology*, 23(1), pp. 15–47. doi: 10.1111/j.1548-1360.2008.00002.x.

Pellizzoni, L. (2015) *Ontological Politics in a Disposable World: The new Mastery of Nature*. London: Routledge.

Petrick, G. M. (2011) '"Purity as life": H.J. Heinz, religious sentiment, and the beginning of the industrial diet', *History and Technology*, 27(1), pp. 37–64. doi: 10.1080/07341512.2011.548972.

Pfau, T. (2005) *Romantic Moods: Paranoia, Trauma and Melancholy, 1790-1840*. Baltimore: John Hopkins University Press.

Phillips, C. (2017) 'Revealing Materials: plastics in alternative food economies', *Australian Geographer*, 48(2), pp. 169–184. doi: 10.1080/00049182.2016.1196522.

Philo, C. (2017) 'Less-than-human geographies', *Political Geography*, 60(January), pp. 256–258. doi: 10.1016/j.polgeo.2016.11.014.

Pickerill, J. (2013) 'Permaculture in practice: Low impact development in Britain', *Environmental Anthropology Engaging Ecotopia: Bioregionalism, Permaculture, and Ecovillages*, 17, pp. 180–194.

Pickerill, J. (2015a) 'Bodies, building and bricks: Women architects and builders in eight eco-

communities in Argentina, Britain, Spain, Thailand and USA', *Gender, Place and Culture*, 22(7), pp. 901–919. doi: 10.1080/0966369X.2014.939158.

Pickerill, J. (2015b) 'Cold Comfort? Reconceiving the Practices of Bathing in British Self-Build Eco-Homes', *Annals of the Association of American Geographers*, 105(5), pp. 1061–1077. doi: 10.1080/00045608.2015.1060880.

Pickerill, J. (2016a) 'Building the commons in eco-communities', in Kirwan, S., Dawney, L., and Brigstocke, J. (eds) *Space, Power and the Commons: The Struggle for Alternative Futures*. London: Routledge, pp. 31–54. doi: 10.4324/9781315731995.

Pickerill, J. (2016b) *Eco-Homes: people, place and politics*. London: Zed Books.

Pickerill, J. (2017) 'Critically Interrogating Eco-Homes', *International Journal of Urban and Regional Research*, 41(2), pp. 353–365. doi: 10.1111/1468-2427.12453.

St. Pierre, E. A., Jackson, A. Y. and Mazzei, L. A. (2016) 'New empiricisms and new materialisms: Conditions for new inquiry', *Cultural Studies - Critical Methodologies*, 16(2), pp. 99–110. doi: 10.1177/1532708616638694.

Pink, S. (2009) *Doing Sensory Ethnography*. London, Thousand Oaks and New Delhi: Sage Publications.

Pisters, S. R., Vihinen, H. and Figueiredo, E. (2020) 'Inner change and sustainability initiatives: exploring the narratives from eco-villagers through a place-based transformative learning approach', *Sustainability Science*, 15(2), pp. 395–409. doi: 10.1007/s11625-019-00775-9.

Pitt, H. (2015) 'On showing and being shown plants: A guide to methods for more-than-human geography', *Area*, 47(1), pp. 48–55. doi: 10.1111/area.12145.

Pitt, H. (2017) 'Questioning care cultivated through connecting with more-than-human communities', *Social and Cultural Geography*, 19(2), pp. 253–274.

Pitts, F. H. and Dinerstein, A. C. (2017) *Postcapitalism, basic income and the end of work: A critique and alternative*. 55. Bath. Available at: https://purehost.bath.ac.uk/ws/portalfiles/portal/202187863/bpd55.pdf (accessed November 3, 2021).

Plumwood, V. (2002) *Environmental Culture: The ecological crisis of reason*. London and New York: Routledge.

Plumwood, V. (2007) 'A review of Deborah Bird Rose's "Reports from a Wild Country: Ethics for Decolonisation"', *Australian Humanities Review*, 42.

Polanska, D. V. (2016) 'Organizing Social and Spatial Boundaries: Squatting's Material Practices and Social Relationships', *Human Geography*, 9(1), pp. 30–45. doi: 10.1177/194277861600900103.

Polkinghorne, D. E. (2005) 'Language and meaning: Data collection in qualitative research', *Journal of Counseling Psychology*, 52(2), pp. 137–145. doi: 10.1037/0022-0167.52.2.137.

Polletta, F. (2002) *Freedom Is an Endless Meeting: Democracy in American social movements*, *Freedom Is an Endless Meeting*. Chicago and London: University of Chicago Press. doi: 10.7208/chicago/9780226924281.001.0001.

Povinelli, E. A. (2011) *Economies of Abandonment: Social Belonging and Endurance in Late Liberalism*. Durham and London: Duke University Press. doi: 10.1080/14616742.2013.841565.

Prazeres, L. (2017) 'Challenging the comfort zone: self-discovery, everyday practices and international student mobility to the Global South', *Mobilities*, 12(6), pp. 908–923. doi: 10.1080/17450101.2016.1225863.

Prazeres, L. (2021) 'Homeley comforts abroad: navigating the comfort zone(s) within international student mobility', in McNally, D., Price, L., and Crang, P. (eds) *Geographies of Comfort*. Abingdon and New York: Routledge, pp. 121–137. doi: 10.4324/9781315557762.

Price, L. and Hawkins, H. (2018) 'Towards the geography of making: An introduction', in Price, L. and Hawkins, H. (eds) *Geographies of Making, Craft and Creativity*. Abingdon and New York: Routledge, pp. 1-30.

Price, O. M. *et al.* (2020) 'Finding convergence: Economic perspectives and the economic practices of an Australian ecovillage', *Environmental Innovation and Societal Transitions*, 34(December 2019), pp. 209–220. doi: 10.1016/j.eist.2019.12.007.

Puig de la Bellacasa, M. (2010) 'Ethical doings in naturecultures', *Ethics, Place and Environment*, 13(2), pp. 151–169. doi: 10.1080/13668791003778834.

Puig de la Bellacasa, M. (2019) 'Re-animating soils: Transforming human–soil affections through science, culture and community', *Sociological Review*, 67(2), pp. 391–407. doi: 10.1177/0038026119830601.

Pusey, A. (2010) 'Social centres and new cooperativism of the common', *Affinities: A Journal of Radical Theory, Culture, and Action*, 4(1), pp. 1–24.

Ramose, M. B. (2015) 'Ubuntu', in D'Alisa, G., Demaria, F., and Kallis, G. (eds) *Degrowth: A vocabulary for a new era*. New York and London: Routledge, pp. 212–215.

Ravaisson, F. (2008) *Of Habit*. Edited by C. Carlisle and M. Sinclair. London and New York: continuum.

Raworth, K. (2017) *Doughnut Economics: Seven Ways to Think Like a 21st Century Economist (2017)*. London: Random House Business. doi: 10.33568/rbs.2409.

Renau, L. D. R. (2018) 'Ecovillages in Spain: Searching an emancipatory social transformation?', *Cogent Social Sciences*, 4(1), pp. 1–18. doi: 10.1080/23311886.2018.1468200.

Reyes, C. (2019) 'Multilingual Space , Bilingual Set-up : Conducting Ethnographic Research in Two Catalonian Schools', in Gibb, R., Tremlett, A., and Danero Iglesias, J. (eds) *Learning and Using Languages in Ethnographic Research*. Bristol: Blue Ridge Summit, pp. 177–190.
Richardson, M. and Schankweiler, K. (2019) 'Affective witnessing', in Slaby, J. and von Scheve, C. (eds) *Affective Societies: Key Concepts*. Abingdon and New York: Routledge, pp. 166–178.
Riley, K. and Solic, K. (2017) '"Change Happens Beyond the Comfort Zone"*: Bringing Undergraduate Teacher-Candidates Into Activist Teacher Communities', *Journal of Teacher Education*, 68(2), pp. 179–192. doi: 10.1177/0022487116687738.
Ritchie, H. and Roser, M. (2020) *Finland: CO2 Country Profile*, *Our World in Data*. Available at: https://ourworldindata.org/co2/country/finland (accessed September 14, 2021).
Roberts, E. (2020) 'Warming with wood: Exploring the everyday heating practices of rural off-gas households in Wales', *Energy Policy*, 142(March), p. 111451. doi: 10.1016/j.enpol.2020.111451.
Roberts, J. A. (2013) 'Reflections of an unrepentant plastiphobe: An essay on plasticity and the STS life', in Gabrys, J., Hawkins, G., and Michael, M. (eds) *Accumulation: The Material Politics of Plastic*. Abingdon and New York: Routledge.
Robertson, B. J. (2007) *Organization at the Leading Edge: Introducing Holacracy*, *Integral Leadership Review*.
Roelvink, G. (2020) 'Affect and subjectivity: learning to be affected in diverse economies scholarship', in Gibson-Graham, J. K., Dombroski, K., and Roelvink, G. (eds) *The Handbook of Diverse Economies*. Cheltenham and Northampton (Mass.): Edward Elgar Publishing, pp. 428–435. doi: 10.4337/9781788119962.00060.
Roelvink, G., St. Martin, K. and Gibson-Graham, J. K. (2015) *Making Other Worlds Possible: Perfoming Diverse Economies*. Minneapolis: University of Minnesota Press.
Roelvink, G. and Zolkos, M. (2011) 'Climate change as experience of affect', *Angelaki - Journal of the Theoretical Humanities*, 16(4), pp. 43–57. doi: 10.1080/0969725X.2011.641344.
Del Romero Renau, L. and Lozano, A. V. (2016) 'From NIMBYsm to the 15M: A decade of urban conflicts in Barcelona and Valencia', *Territory, Politics, Governance*, 4(3), pp. 375–395. doi: 10.1080/21622671.2015.1042025.
Rosa, H. and Henning, C. (2017) *The Good Life Beyond Growth: New perspectives*. Abingdon and New York: Routledge. doi: 10.4324/9781315542126.
Rosa, Hartmut (2017) 'Available, accessible, attainable: The mindset of growth and the resonance conception of the good life', in Rosa, Henning (ed.) *The Good Life beyond Growth: New Perspectives*. Abingdon and New York: Routledge, pp. 39–53. doi: 10.4324/9781315542126.

Rose, G. (2003) 'A body of questions', in Pryke, M., Rose, G., and Whatmore, S. (eds) *Using Social Theory: Thinking through Research*. London, Thousand Oaks and New Delhi, pp. 47–65.

Rose, G. (2016) *Visual Methodologies: An Introduction to Researching with Visual Materials*. 4th edn. Los Angeles, London, New Dehli, Singapore, Washington DC: Sage.

Rotherham, I. (2015) 'Times they are a changin': Recombinant Ecology as an emerging paradigm', in Rotherham, I. (ed.) *Urban Environments: History, Biodiversity and Culture*. Sheffield: Wildrack Publishing.

Routledge, P. (2003) 'Convergence space: Process geographies of grassroots globalization networks', *Transactions of the Institute of British Geographers*, 28(3), pp. 333–349. doi: 10.1111/1475-5661.00096.

Routledge, P. (2008) 'Acting in the network: ANT and the politics of generating associations', *Environment and Planning D: Society and Space*, 26(2), pp. 199–217. doi: 10.1068/d001p.

Roysen, R. and Mertens, F. (2019) 'New normalities in grassroots innovations: The reconfiguration and normalization of social practices in an ecovillage', *Journal of Cleaner Production*, 236. doi: 10.1016/j.jclepro.2019.117647.

Royston, S. (2014) 'Dragon-breath and snow-melt: Know-how, experience and heat flows in the home', *Energy Research and Social Science*, 2, pp. 148–158. doi: 10.1016/j.erss.2014.04.016.

Rubin, Z. (2020) '"A Not-so-silent Form of Activism": Intentional Community as Collective Action Reservoir', *Humanity & Society*, pp. 1–24. doi: 10.1177/0160597620951945.

Rubin, Z. (2021) '"We Do This at Dancing Rabbit": Recruitment and Collective Identity Processes in the Ecovillage', *Journal of Contemporary Ethnography*, 50(4), pp. 443–465. doi: 10.1177/0891241621994651.

Ryff, C. D. and Singer, B. H. (2008) 'Know thyself and become what you are: A eudaimonic approach to psychological well-being', *Journal of Happiness Studies*, 9(1), pp. 13–39. doi: 10.1007/s10902-006-9019-0.

Sargisson, L. (2007) 'Strange Places : Estrangement, Utopianism, and Intentional Communities', *Utopian Studies*, 18(3), pp. 393–424.

Sargisson, L. and Sargent, L. T. (2004) *Living in Utopia: New Zealand's Intentional Communities*. Aldershot: Ashgate Publishing Limited.

Schiller-Merkens, S. (2020) *Scaling Up Alternatives to Capitalism : A Social Movement Approach to Alternative Organizing (in) the Economy*. Cologne. Available at: https://www.mpifg.de/pu/mpifg_dp/2020/dp20-11.pdf (accessed November 3, 2021).

Schmid, B. (2019a) 'Degrowth and postcapitalism: Transformative geographies beyond accumulation and growth', *Geography Compass*, 13(11). doi: 10.1111/gec3.12470.

Schmid, B. (2019b) 'Repair's diverse transformative geographies: Lessons from a repair community in Stuttgart', *Ephemera : Theory and Politics in Organization*, 19(2), pp. 229–251.

Schmid, B. and Smith, T. S. J. (2021) 'Social transformation and postcapitalist possibility: Emerging dialogues between practice theory and diverse economies', *Progress in Human Geography*, 45(2), pp. 253–275. doi: 10.1177/0309132520905642.

Schneider, F., Kallis, G. and Martinez-Alier, J. (2010) 'Crisis or opportunity? Economic degrowth for social equity and ecological sustainability. Introduction to this special issue', *Journal of Cleaner Production*, 18(6), pp. 511–518. doi: 10.1016/j.jclepro.2010.01.014.

Schot, J. and Geels, F. W. (2008) 'Strategic niche management and sustainable innovation journeys: Theory, findings, research agenda, and policy', *Technology Analysis and Strategic Management*, 20(5), pp. 537–554. doi: 10.1080/09537320802292651.

Schumacher, E. F. (1973) *Small is beautiful: Economics as if people mattered*. New York and London: Harper & Row.

Schwanen, T. (2016) 'Rethinking resilience as capacity to endure: Automobility and the city', *City*, 20(1), pp. 152–160. doi: 10.1080/13604813.2015.1125718.

Schwanen, T., Banister, D. and Anable, J. (2012) 'Rethinking habits and their role in behaviour change: the case of low-carbon mobility', *Journal of Transport Geography*, 24, pp. 522–532. doi: 10.1016/j.jtrangeo.2012.06.003.

Schwanen, T. and Nixon, D. (2019) 'Urban infrastructures: four tensions and their effects', in Schwanen, T. and van Kempen, R. (eds) *Handbook of Urban Geography*. Cheltenham and Northampton (Mass.): Edward Elgar Publishing.

Scott-Cato, M. and Hillier, J. (2010) 'How could we study climate-related social innovation? Applying Deleuzean philosophy to Transition Towns', *Environmental Politics*, 19(6), pp. 869–887. doi: 10.1080/09644016.2010.518677.

Scott, J. C. (2011) *Against the grain: A deep history of the earliest states*. New Haven and London: Yale University Press.

Sekulova, F. (2015) 'Happiness', in D'Alisa, G., Demaria, F., and Kallis, G. (eds) *Degrowth: A vocabulary for a new era*. Abingdon and New York: Routledge.

Sekulova, F. *et al.* (2017) 'A "fertile soil" for sustainability-related community initiatives: A new analytical framework', *Environment and Planning A*, 49(10), pp. 2362–2382. doi: 10.1177/0308518X17722167.

Sekulova, F., Kallis, G. and Schneider, F. (2017) 'Climate change, happiness and income from a degrowth perspective', in Victor, P. A. and Dolter, B. (eds) *Handbook on Growth and Sustainability*. Cheltenham and Northampton (Mass.): Edward Elgar Publishing, pp. 160–180.

Sennett, R. (2012) *Together: The Rituals, Pleasures and Politics of Co-operation*. New Haven and London: Yale University Press.

Shantz, A., Alfes, K. and Truss, C. (2014) 'Alienation from work: Marxist ideologies and twenty-first-century practice', *International Journal of Human Resource Management*, pp. 2529–2550. doi: 10.1080/09585192.2012.667431.

Shapiro, M. J. and Bennett, J. (2002) 'Introduction', in Shapiro, M. J. and Bennett, J. (eds) *The Politics of Moralising*. New York and Abingdon: Routledge, pp. 1–11.

Sharpe, B. *et al.* (2016) 'Three horizons: A pathways practice for transformation', *Ecology and Society*, 21(2). doi: 10.5751/ES-08388-210247.

Sharpe, S. (2014) 'Potentiality and Impotentiality in J. K. Gibson-Graham', *Rethinking Marxism*, 26(1), pp. 27–43. doi: 10.1080/08935696.2014.857842.

Sherry, J. (2019) 'The impact of community sustainability: A life cycle assessment of three ecovillages', *Journal of Cleaner Production*, 237, pp. 1–13. doi: 10.1016/j.jclepro.2019.117830.

Shot, D. (2014) *Rosa del Foc*, *Domestika.org*. Available at: https://www.domestika.org/en/projects/168980-rosa-de-foc (Accessed: 13 July 2020).

Shove, E. (2003) *Comfort, Cleanliness and Convenience: The social organisation of normality*. Oxford and New York: Berg.

Shove, E. *et al.* (2008) 'Comfort in a lower carbon society', *Building Research and Information*, 36(4), pp. 307–311. doi: 10.1080/09613210802079322.

Shove, E., Pantzar, M. and Watson, M. (2012) *The Dynamics of Social Practice: Everyday Life and How It Changes*. London, Thousand Oaks and New Delhi: Sage.

Singh, N. (2017) 'Becoming a commoner: The commons as sites for affective socio-nature encounters and co-becomings', *Ephemera : Theory and Politics in Organization*, 17(4), pp. 751–776.

Slaby, J. (2019) 'Affective arrangement', in Slaby, J. and von Scheve, C. (eds) *Affective Societies: Key Concepts*. Abingdon and New York: Routledge, pp. 109–119.

Smaje, C. (2014) 'Of holism and reductionism: Permaculture & the Science of Hunches'. Smallfarmfuture.org. Available at: https://smallfarmfuture.org.uk/wp-content/uploads/2011/11/Holism-and-reductionism-6-11-14.pdf (accessed August 23, 2020).

Smith, F. M. (1996) 'Problematising language: Limitations and possibilities in "foreign language" research', *Area*, 28(2), pp. 160–166. doi: 10.2307/20003653.

Smith, R. (2018) 'The rise of the underdogs: Situating and storying "entrepreneurial leadership" in the BrewDog business story', in Harrison, R. and Leitch, C. (eds) *Research Handbook on Entrepreneurship and Leadership*. Cheltenham and Northampton (Mass.): Editorial UOC, pp. 403–430. doi: 10.4337/9781783473762.00026.

Smith, T. S. J. (2018) *Material geographies of the maker movement: Community Workshops and the Making of Sustainability in Edinburgh, Scotland*. University of St. Andrew's.

Solnit, R. (2017) *Preaching to the Choir*, *Harper's Magazine*. Available at: https://harpers.org/archive/2017/11/preaching-to-the-choir/?single=1 (Accessed: 25 November 2020).

Springer, S. *et al.* (2012) 'Reanimating Anarchist Geographies: A New Burst of Colour', *Antipode*, 44(5), pp. 1591–1604. doi: 10.1111/j.1467-8330.2012.01038.x.

Srnicek, N. and Williams, A. (2016) *Inventing the Future: Postcapitalism and A World Without Work*. London and New York: Verso.

Stahn, B. D. (no date) *Weather in Barcelona and Catalonia*, *cataloniaholidaylettings.co.uk*. Available at: https://cataloniaholidaylettings.co.uk/faq/about-catalonia/vejret-i-catalonien (Accessed: 25 July 2021).

Star, S. L. (1999) 'The ethnography of infrastructure', *American Behavioral Scientist*, 43(3), pp. 377–391. doi: 10.1177/00027649921955326.

Steckermeier, L. C. (2021) *The Value of Autonomy for the Good Life. An Empirical Investigation of Autonomy and Life Satisfaction in Europe*, *Social Indicators Research*. Springer Netherlands. doi: 10.1007/s11205-020-02565-8.

Stoddard, E. *et al.* (2021) 'Three Decades of Climate Mitigation: Why Haven't we Bent the Global Emissions Curve?', *Annual Review of Environment and Resources*, 46(12), pp. 1–37.

Strathern, M. (1996) 'Cutting the Network', *The Journal of the Royal Anthropological Institute*, 2(3), pp. 517–535.

Strebel, I., Bovet, A. and Sormani, P. (2019) *Repair Work Ethnographies: Revisiting Breakdown, Relocating Materiality*. Singapore: Palgrave MacMillan.

Sullivan, E. (2016) 'Individualizing Utopia: Individualist Pursuits in a Collective Cohousing Community', *Journal of Contemporary Ethnography*, 45(5), pp. 602–627. doi: 10.1177/0891241615587527.

Sumner, J. B. (2004) *The Metric Tun Standardisation: Standardisation, Quantification and industrialisation in the British Beer Brewing Industry, 1760-1830*. University of Leeds.

Suzman, J. (2017) *Affluence without Abundance: What we can learn from the world's most successful civilisation*. New York, London, Oxford, New Delhi and Sydney: Bloomsbury.

Swain, D. (2019) 'Not Not but Not yet: Present and Future in Prefigurative Politics', *Political Studies*, 67(1), pp. 47–62. doi: 10.1177/0032321717741233.

Swyngedouw, E. and Ernstson, H. (2018) 'Interrupting the Anthropo-obScene: Immuno-biopolitics and Depoliticizing Ontologies in the Anthropocene', *Theory, Culture and Society*, 35(6).

doi: 10.1177/0263276418757314.

Tanu, D. and Dales, L. (2016) 'Language in fieldwork: Making visible the ethnographic impact of the researcher's linguistic fluency', *Australian Journal of Anthropology*, 27(3), pp. 353–369. doi: 10.1111/taja.12150.

Temenos, C. *et al.* (2017) 'Ideas in motion: Theorizing mobility transitions: An interdisciplinary conversation', *Transfers*, 7(1), pp. 113–129. doi: 10.3167/TRANS.2017.070109.

Temenos, C. and McCann, E. (2013) 'Geographies of Policy Mobilities', *Geography Compass*, 7(5), pp. 344–357. doi: 10.1111/gec3.12063.

Temesgen, A. K. (2020) 'Building an island of sustainability in a sea of unsustainability? A study of two ecovillages', *Sustainability (Switzerland)*, 12(24), pp. 1–28. doi: 10.3390/su122410585.

Thomson, R. *et al.* (2002) 'Critical moments: Choice, chance and opportunity in young people's narratives of transition', *Sociology*, 36(2), pp. 335–354. doi: 10.1177/0038038502036002006.

Thonhauser, G. (2019) 'Feeling', in Slaby, J. and von Scheve, C. (eds) *Affective Societies: Key Concepts*. London and New York: Routledge Taylor & Francis Group, pp. 52-61.

Thorpe, C. and Shapin, S. (2000) 'Who was J. Robert Oppenheimer? Charisma and complex organization', *Social Studies of Science*, 30(4), pp. 545–590. doi: 10.1177/030631200030004003.

Thrift, N. (2003) 'Practising Ethics', in Pryke, M., Rose, G., and Whatmore, S. (eds) *Using Social Theory: Thinking through Research*. London, Thousand Oaks and New Delhi: Sage Publications, pp. 106–121. doi: 10.4135/9780857020253.n6.

Thrift, N. (2004a) 'Intensities of feeling: Towards a Spatial Politics of Affect', *Geografiska Annaler, Series B: Human Geography*, 86(1), pp. 57–78.

Thrift, N. (2004b) 'Summoning life', in Cloke, P., Crang, P., and Goodwin, M. (eds) *Envisioning Human geographies*. London and New York: Routledge, pp. 81–104.

Thurnell-Read, T. (2014) 'Craft, tangibility and affect at work in the microbrewery', *Emotion, Space and Society*, 13, pp. 46–54. doi: 10.1016/j.emospa.2014.03.001.

Todd, Z. (2015) 'Indigenizing the Anthropocene', *Art in the Anthropocene: Encounters Among Aesthetics, Politics, Environment and Epistemology.*, pp. 241–254.

Toffler, A. (1980) *The Third Wave*. New York: William Morrow.

Tollefson, J. (2021) 'COVID curbed carbon emissions in 2020 - but not by much', *Nature*, 589(7842), p. 343. doi: 10.1038/d41586-021-00090-3.

Tremlett, A. (2009) 'Claims of "knowing" in ethnography: Realising anti-essentialism through a critical reflection on language acquisition in fieldwork', *Graduate Journal of Social Science*, 6(3), pp. 63–85.

Tsang, E. W. K. (1998) 'Inside story: Mind your identity when conducting cross-national

research', *Organization Studies*, 19(3), pp. 511–515. doi: 10.1177/017084069801900307.

Tsing, A. L. (2015) *The Mushroom at the End of the World: On the possibility of life in capitalism ruins*. Princeton and Oxford: Princeton University Press.

Tsing, A. L. (2019) 'On nonscalability', *Common Knowledge*, 25(1–3), pp. 143–162. doi: 10.1215/0961754X-7299210.

Tuan, Y.-F. (1974) *Topophilia: a Study of Environmental Perception, Attitudes, and Values*. New York: Columbia University Press.

Udall, J. (2019) 'Mending the commons with the "Little Mesters"', *Ephemera: Theory and Politics in Organization*, 19(2), pp. 253-281.

Ulug, C., Trell, E. M. and Horlings, L. (2021) 'Ecovillage foodscapes: zooming in and out of sustainable food practices', *Agriculture and Human Values*, 38(4), pp. 1041–1059. doi: 10.1007/s10460-021-10213-1.

University of Oxford (2021) *Central University Research Ethics Committee (CUREC)*, *ox.ac.uk*. Available at: https://researchsupport.admin.ox.ac.uk/ctrg/sponsorship-approvals/curec (Accessed: 3 November 2021).

Vadén, T. *et al.* (2020) 'Decoupling for ecological sustainability: A categorisation and review of research literature', *Environmental Science and Policy*, 112(January), pp. 236–244.

Vandeventer, J. S., Cattaneo, C. and Zografos, C. (2019) 'A Degrowth Transition: Pathways for the Degrowth Niche to Replace the Capitalist-Growth Regime', *Ecological Economics*, 156, pp. 272–286. doi: 10.1016/j.ecolecon.2018.10.002.

Vannini, Philipp; Taggart, J. (2015) *Off the Grid: Re-assembling domestic life*. New York and London: Routledge.

Vannini, P. and Taggart, J. (2013a) 'Domestic lighting and the off-grid quest for visual comfort', *Environment and Planning D: Society and Space*, 31(6), pp. 1076–1090. doi: 10.1068/d17412.

Vannini, P. and Taggart, J. (2013b) 'Voluntary simplicity, involuntary complexities, and the pull of remove: The radical ruralities of off-grid lifestyles', *Environment and Planning A*, 45(2), pp. 295–311. doi: 10.1068/a4564.

Vannini, P. and Taggart, J. (2014a) 'Do-it-yourself or do-it-with? The regenerative life skills of off-grid home builders', *Cultural Geographies*, 21(2), pp. 267–285. doi: 10.1177/1474474013493577.

Vannini, P. and Taggart, J. (2014b) 'Growing, cooking, eating, shitting off-grid organic food : Deconcession, convenience and taste of place', *Food, Culture and Society*, 17(2), pp. 319–336. doi: 10.2752/175174414X13892765366811.

Vannini, P. and Taggart, J. (2014c) 'Making Sense of Domestic Warmth: Affect, Involvement,

and Thermoception in Off-grid Homes', *Body and Society*, 20(1), pp. 61–84. doi: 10.1177/1357034X13499381.

Vannini, P. and Taggart, J. (2016) 'Onerous consumption: The alternative hedonism of off-grid domestic water use', *Journal of Consumer Culture*, 16(1), pp. 80–100. doi: 10.1177/1469540513509642.

Varga, M. (2019) 'From the Qualities of Products to the Qualities of Relations: Value Conventions in the Solidarity Economy in Sicily', *Valuation Studies*, 6(1), pp. 63–86. doi: 10.3384/vs.2001-5992.196163.

Vasudevan, A. (2015) 'The autonomous city: Towards a critical geography of occupation', *Progress in Human Geography*, 39(3), pp. 316–337. doi: 10.1177/0309132514531470.

Le Velly, R. and Dufeu, I. (2016) 'Alternative food networks as "market agencements": Exploring their multiple hybridities', *Journal of Rural Studies*, 43, pp. 173–182. doi: 10.1016/j.jrurstud.2015.11.015.

Le Velly, R., Goulet, F. and Vinck, D. (2020) 'Allowing for detachment processes in market innovation. The case of short food supply chains', *Consumption Markets and Culture*, 0(0), pp. 1–16. doi: 10.1080/10253866.2020.1807342.

Wakefield, S. (2018) 'Infrastructures of liberal life: From modernity and progress to resilience and ruins', *Geography Compass*, 12(7), pp. 1–14. doi: 10.1111/gec3.12377.

Wapner, P. (2010) 'Sacrifice in an Age of Comfort', in Maniates, M. and Meyer, J. M. (eds) *The Environmental Politics of Sacrifice*. Cambridge (Mass.) and London: The MIT Press, pp. 33–61.

Ward, K. (2018) 'Policy mobilities, politics and place: The making of financial urban futures', *European Urban and Regional Studies*, 25(3), pp. 266–283. doi: 10.1177/0969776417731405.

Waterman, A. S. (1993) 'Two Conceptions of Happiness: Contrasts of Personal Expressiveness (Eudaimonia) and Hedonic Enjoyment', *Journal of Personality and Social Psychology*, 64(4), pp. 678–691. doi: 10.1037/0022-3514.64.4.678.

Watson, E. E. (2004) '"What a dolt one is": Language learning and fieldwork in geography', *Area*, 36(1), pp. 59–68. doi: 10.1111/j.0004-0894.2004.00324.x.

Watts, V. (2013) 'Indigenous place-thought & agency amongst humans and non-humans (First Woman and Sky Woman go on a European world tour!)', *Decolonization: Indigeneity, Education & Society*, 2(1), pp. 20–34.

Welch, C. and Piekkari, R. (2006) 'Crossing language boundries in qualitative interviewing.', *Management International Review*, 46(4), pp. 417–437.

Welch, D. and Yates, L. (2018) 'The practices of collective action: Practice theory, sustainability transitions and social change', *Journal for the Theory of Social Behaviour*, 48(3), pp. 288–305. doi:

10.1111/jtsb.12168.
Wenger, E. (1998) *Communities of practice: Learning, Meaning and Identity*. Cambridge: Cambridge University Press.
Westskog, H., Winther, T. and Aasen, M. (2018) 'The creation of an ecovillage: Handling identities in a Norwegian sustainable valley', *Sustainability (Switzerland)*, 10(6), pp. 1–20. doi: 10.3390/su10062074.
Whatmore, S. (2002) *Hybrid Geographies: Natures, Cultures, Spaces (Book)*. London, Thousand Oaks and New Delhi: Sage Publications.
Whatmore, S. (2003) 'Generating materials', in Pryke, M., Rose, G., and Whatmore, S. (eds) *Using Social Theory: Thinking through Research*. London, Thousand Oaks and New Delhi: Sage, pp. 89–105.
Whatmore, S. (2006) 'Materialist Returns: Practising Cultural Geography in and for a More-Than-Human World', *Cultural Geographies*, 13, pp. 600–609. doi: 10.1191/1474474006cgj377oa.
Wheeldon, J. and Faubert, J. (2009) 'Framing Experience: Concept Maps, Mind Maps, and Data Collection in Qualitative Research', *International Journal of Qualitative Methods*, 8(3), pp. 68–83. doi: 10.1177/160940690900800307.
Whitburn, J., Linklater, W. and Abrahamse, W. (2020) 'Meta-analysis of human connection to nature and proenvironmental behavior', *Conservation Biology*, 34(1), pp. 180–193. doi: 10.1111/cobi.13381.
Williams, R. (1977) *Marxism and Literature.* Oxford and New York: Oxford University Press.
Wilson, H. F. and Anderson, B. (2020) 'Detachment, disaffection, and other ambivalent affects', *Environment and Planning C: Politics and Space*, 38(4), pp. 591–598. doi: 10.1177/2399654420912445f.
Winance, M. (2006) 'Trying Out the Wheelchair: The Mutual Shaping of People and Devices through Adjustments', *Science, Technology & Human Values*, pp. 52–72.
De Wolff, K. (2017) 'Plastic Naturecultures: Multispecies Ethnography and the Dangers of Separating Living from Nonliving Bodies', *Body and Society*, 23(3), pp. 23–47. doi: 10.1177/1357034X17715074.
World Bank (2020) *Global Action Urgently Needed to Halt Historic Threats to Poverty Reduction*, *worldbank.org*. Available at: https://www.worldbank.org/en/news/feature/2020/10/07/global-action-urgently-needed-to-halt-historic-threats-to-poverty-reduction (Accessed: 2 October 2021).
Worldbank (2021) *Poverty-Overview*, *worldbank.org*.
Wright, E. O. (2013) 'Transforming Capitalism through Real Utopias', *American Sociological*

Review, 78(1), pp. 1–25. doi: 10.1177/0003122412468882.
Xue, J. (2014) 'Is eco-village/urban village the future of a degrowth society? An urban planner's perspective', *Ecological Economics*, 105, pp. 130–138. doi: 10.1016/j.ecolecon.2014.06.003.
Xue, J. (2018) 'Housing for degrowth: space, planning and distribution', in Nelson, A. and Schneider, F. (eds) *Housing for Degrowth: Principles, Models, Challenges and Opportunities*. Abingdon and New York: Routledge.
Xue, J., Arler, F. and Næss, P. (2012) 'Is the degrowth debate relevant to China?', *Environment, Development and Sustainability*, 14(1), pp. 85–109. doi: 10.1007/s10668-011-9310-z.
Yates, L. (2015) 'Rethinking Prefiguration: Alternatives, Micropolitics and Goals in Social Movements', *Social Movement Studies*, 14(1), pp. 1–21. doi: 10.1080/14742837.2013.870883.
Yusoff, K. (2012) 'Aesthetics of loss: Biodiversity, banal violence and biotic subjects', *Transactions of the Institute of British Geographers*, 37(4), pp. 578–592. doi: 10.1111/j.1475-5661.2011.00486.x.
Yusoff, K. (2015) 'Geologic subjects: Nonhuman origins, geomorphic aesthetics and the art of becoming inhuman', *Cultural Geographies*, 22(3), pp. 383–407. doi: 10.1177/1474474014545301.