

Ecologies of Care: An Ethnographic Study of Collective Urban Food Gardens in Edinburgh, Scotland

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ABSTRACT

Collective urban food gardens have proliferated throughout cities of the Global North, particularly over the last decade. Drawing upon, and contributing to, an increasingly nuanced discourse of urban food gardening as political ecological praxis, this thesis explores how care, as an everyday, relational and deeply political enactment is entwined with the embodied, material and affective production of socionatures. Three diverse case studies located in Edinburgh, Scotland, form the basis of this detailed ethnography, drawing upon participant observation, semi-structured and go-along walking interviews. This thesis develops an ecologies of care framework by conceptualising care in relation to urban political ecology. Incorporating a care perspective which encapsulates the affective, practical, and ethical dimensions of socioecological relationships, enables an exploration of people's motivations, mobilisations and practices in relation to the continual remaking of collective urban food gardens. I demonstrate, what urban agent's 'care about' and 'care for', shapes how these intimate urban ecologies are cultivated, experienced and contested.

Despite their diverse modes of emergence and differential micro-political socioecological configurations, this thesis revealed three interconnected findings. First, the gardens are power-laden and fragile entanglements where multiple urban agents, competing agendas, and negotiations are interwoven with a politics of care, where they are simultaneously spaces of more-than-capitalist possibility and vulnerable to neoliberal co-option. Second, the gardens are both affectively and materially co-produced and sustained through multiple encounters and strategic practices of care, entangling human and more-than-human others, which has the potential to reconfigure the socioecological imaginaries of gardeners. Adopting a creative, experimental stance enabled gardeners to tinker, adapt, and enact care in multiple ways and in some instances, elicited a curiosity based upon openness to others by learning to be affected and therefore, make potentially transformative connections. Finally, the gardens are knowledge commons, where moments of collective experiential learning are nurtured in both spontaneous and structured formats, based on the interlacement of playful labour and vernacular creativity. The thesis concludes by discussing the collective urban food gardens as contradictory socionatural sites, in their capacity to both challenge and reinforce prevailing socioecological relations and their concomitant inequalities.

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All pictures are authors own, unless otherwise stated.

ABBREVIATIONS

AAIW	Alice's Adventures in Wonderland
AFM	Alternative Food Movement
AGM	Annual General Meeting
ANT	Actor Network Theory
BBC	British Broadcasting Corporation
CEC	City of Edinburgh Council
CIC	Community Interest Company
CLAS	Community Land Advisory Service
CSA	Community-Supported Agriculture
CSGN	Central Scotland Green Network
CSLD	Commission on Strengthening Local Democracy
CUFGs	Collective Urban Food Gardens
DIT	Do-it-together
DIY	Do-it-yourself
ECBA	Edinburgh Community Backgreen Association
ECM	Edinburgh City Mission
EDI Group	Edinburgh Development and Investment Group
ELGT	Edinburgh Lothian Greenspace Trust
FAO	Food and Agriculture Organization
FCFCG	Federation of City Farms and Community Gardens
FCI	Fountainbridge Canalside Initiative
fn.	Footnote
FPE	Feminist Political Ecology
G1	Grove 1
G2	Grove 2
GCG	Granton Community Gardens
GWG	Gracemount Walled Garden
GYOWG	Grow Your Own Working Group
IHMC	Introduction to Herbal Medicine Course
LCGP	Lochend Community Growing Project
LSG	Lochend Secret Garden
NBRC	North British Rubber Company
NESHG	North Edinburgh Social History Group
NFDP	National Food and Drink Policy
NGO	Non-Governmental Organisation
NHS	National Health Service
n.p.	No Page
NVA	<i>nacionale vita activa</i>
PAHs	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyls
PCG	Pilton Community Garden
PCHP	Pilton Community Health Project

PE	Political Ecology
PR	Public Relations
RBGE	Royal Botanic Garden Edinburgh
RHS	Royal Horticultural Society
SAGE	Sow And Grow Everywhere
SCIO	Scottish Charitable Incorporated Organisation
SEPA	Scottish Environment Protection Agency
SG	Scottish Government
SIMD	Scottish Index of Multiple Deprivation
SNH	Scottish Natural Heritage
STS	Science and Technology Studies
STV	Scottish Television
TGCG	The Grove Community Garden
UK	United Kingdom
UN	United Nations
UPE	Urban Political Ecology
US	United States

CHAPTER 1

INTRODUCTION

1.1 Care-full Urban Political Ecologies: Conceptualising Care within the Production of Socionatures

This thesis combines the interdisciplinary work of feminist care scholarship and heterogeneous urban political ecology (UPE) to provide a framework to explore the socioecological relations and practices which shape the intimate urban ecologies of collective urban food gardens (CUFGs), which are a specific manifestation of what are traditionally understood as community gardens. Conceptualising both the environment and care as political concepts and issues, draws attention to the politics of care in engendering and maintaining socioecological sustainable relations, where they are always in a process of ‘becoming’, intertwined within a complex web of capitalist and non-capitalist practices (Gibson-Graham 1996, 2006). I provide a detailed ethnographic exploration of three diverse CUFGs, located in Edinburgh, Scotland, to reveal why, how and for whom the specific socionatures are produced and the micro-political contestations that manifest between various actors. As complex socionatural assemblages, it is crucial to examine how the urban ecologies of CUFGs emerge, what everyday embodied affective relations maintain and sustain these entanglements and the potential and challenges of these socionatures as sites of more-than-capitalist possibility. Therefore, I consider how the situated, embodied practices of urban gardeners rework socioecological relations in the city through grounded political ecological praxis. I argue that incorporating a care perspective into UPE that encapsulates the affective, practical and ethical dimensions of human-environment relations (Puig de la Bellacasa 2011) enables an exploration of people’s motivations, mobilisations and everyday practical sensuous activity as “implicit activism” (Horton and Kraftl 2009) through which urban natures are co-produced and rendered meaningful. Examining CUFGs through this lens enables focus to be placed on the possibilities of an everyday, ordinary environmentalism that attempts to subvert the reproduction of urban socioecological inequality (Loftus 2012; Milbourne 2012).

This chapter examines the rise of food growing in the city, as both a practical activity and focus of academic scholarship, providing an overview of current literature to situate this thesis. I focus specifically on urban community gardens, which are collectively managed urban growing spaces, and outline the particular manifestation that are the focus of this

research, what I term ‘CUFGs’. This chapter documents my arrival at the research topic and questions, and concludes with a thesis outline.

1.2 Urban Food Growing in the City

Urban food growing projects have received sustained interest from numerous scholars over the last decade, simultaneously lauded for their ability to improve food security¹, alleviate poverty, enhance health and wellbeing, and foster community development (Saldivar-Tanaka and Krasny 2004; Wakefield *et al.* 2007; Alaimo *et al.* 2008; Firth *et al.* 2011; Milbourne 2012) and criticised for inherently reproducing and underwriting neoliberalism (Guthman 2008; Pudup 2008; Quastel 2009; Ghose and Pettygrove 2014). Thus, careful attention is needed to explore the complexities, contradictions, and possibilities that may emerge from this tension, in order to transgress this “potentially disabling dualism” (McClintock 2014: 149). In the following sections, I discuss the augmented growth and definitional ambiguity of the nebulous term, ‘community gardens’ and therefore, delineate what I refer to as ‘CUFGs’ to provide both clarity and context for this thesis. I then proceed to examine CUFGs as complex, contested spaces that are framed increasingly as political and contradictory sites.

1.2.1 *The Rise of ‘Urban’ Food Gardening in the Global North*

For the first time in history, in 2007, the global ‘urban’ population exceeded that of the ‘rural’ (UN 2014) with demographic projections suggesting that the world population will increase to over 9 billion by 2050 (UN 2015), 6 billion of which will live in cities (UN 2014). Moreover, rapid urbanisation of arable land may lead to a decrease in worldwide agricultural production of between 20-40 percent, depending on the extent and severity of ‘natural’ global disasters and regional conflicts (Lim 2014), placing the global food system under extreme pressure (Foresight 2011)². Thus, the material and political consequences of an increasingly urban planet have stimulated renewed interest in cities and their urban ecologies as sites of food

¹ According to the Food and Agriculture Organization (FAO) of the UN, “food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life” (quoted in Holt-Giménez 2011: 340).

² Within the ‘Global Food and Farming Futures’ report (Foresight 2011), commissioned by the UK Government, and as highlighted by Tornaghi, urban agriculture “does not appear even as a remote possibility” (2014: 559) as a component to meaningfully contribute to bolstering the food security of the population.

production. Under the ‘new food equation’ (Morgan and Sonnino 2010; Morgan 2015), characterised by socioecological crisis including widening inequalities, escalating world hunger, and climate change, cities are increasingly posited as crucial terrains in which to address the multifaceted global challenges of sustainable food security (Sonnino *et al.* 2014). It is argued, therefore, that urban food production will play a progressively strategic role in developing sustainable, healthy and liveable environments, disrupting the modernist perception that urbanity is a concept contrary to agriculture (Lim 2014; Steel 2009). Significantly, contemporary expressions of collective urban food gardening which seek to address multiple socioecological concerns including mundane, ordinary or everyday forms of disadvantage (Milbourne 2012) have proliferated in the Global North, particularly over the last decade. Notably, urban food growing in this context is distinct from the vital subsistence practices found in the Global South which develop out of necessity (Mougeot 2005; McClintock 2010).

1.2.2 Community Gardening in the UK

In order to situate the exploration of what I term, CUFGs, in this section I engage with and dissect, the general overarching expression ‘community garden’, as discussed in a growing body of multi-disciplinary literature. I argue, in order to provide definitional clarity, it is vital to differentiate between the vague phrase ‘community garden’ and the more specific term ‘CUFGs’, adopted throughout this thesis. I contend CUFGs are a particular manifestation of community gardens, placing emphasis on collaborative action in relation to urban food growing.

Communal urban gardening projects have burgeoned in the United Kingdom (UK) since the early 2000s where groups have appropriated a variety of spaces – from under-utilised lawn areas within housing estates to derelict brownfield land – in creative and imaginative ways involving a range of diverse stakeholders (Greenspace Scotland 2013). For the purpose of this research, it is important to distinguish between what are conventionally termed ‘community gardens’ and ‘allotments’ in the UK, in which the latter are a much more individualised, regulated, and structured form of ‘communal’ food growing, where small pieces of land (traditionally 200-250m²) are rented either by individuals or households (usually from local

authorities)³. Significantly, unlike allotments, there is no statutory requirement for the provision of community gardens; consequently they tend to “emerge in a more opportunistic way when spaces become available” (Greenspace Scotland 2011: 6). There are various studies relating to allotment gardening in the UK (see Crouch and Ward 1988; Crouch 1989; DeSilvey 2003), reflecting the revival of allotment culture since the 1970s, which in itself symbolised a rise in “eco-consciousness” (McKay 2013: 162). As highlighted by McKay, allotments are typically “one of those British horticultural eccentricities which are accepted and celebrated as part of the vibrant communal grassroots fabric of society” (2013: 163). This mainstream acceptance, however, possibly de-politicises the potential of these spaces as sites of socioecological critique (McKay 2013). Therefore, the topics emerging from the broader community gardening literature, particularly in the North American context that focus upon social and environmental justice, are seen as less relevant to contemporary allotment growing objectives and activities (Milbourne 2012).

Allotments, however, are historically deeply contested spaces originating from the enclosure legislation of the 18th and 19th centuries. Therefore, despite the origin of the allotment movement in the UK emerging from the profoundly socio-political transformation of communal land to private enclosures and their active role in response to food shortages (Crouch and Ward 1988), contemporary allotments are frequently considered to be recreational spaces. They are characterised as leisure-orientated and an “unpolitical retreat” (Lohrberg and Simon-Rojo 2016: 198) for increasingly middle-class gardeners. Furthermore, the expectation of cooperative effort is lower in comparison to community gardens which are characterised as vehicles to collectively address a variety of everyday socioecological injustices (Milbourne 2012). Therefore, while both are physical manifestations of urban food gardening, imagined as being in opposition to the conventional industrial food system, community gardens are distinguished from allotments as a result of the former’s greater public ownership, access, collective management and democratic control (Firth *et al.* 2011), in addition to their spontaneous emergence within interstitial urban spaces (Hou *et al.* 2009). However, the boundary between the two is somewhat permeable, complicated by the fact that contemporary allotment sites increasingly contain plots for community groups, small communal orchards and shared amenity spaces (Greenspace Scotland 2011).

³ The term ‘allotment’ is defined in the *Allotments Act* of 1925 as “an allotment garden or any parcel of land not more than five acres [about 2ha] in extent cultivated or intended to be cultivated as a garden farm, or partly as a garden farm and partly as a farm” (quoted in Mougeot 2005: 240).

1.2.3 The Historical Context of Urban Community Gardens in the UK

The contemporary community garden movement in the UK can be traced to the 1970s⁴ and positioned itself as distinct from earlier forms of collective urban agriculture (such as the Dig for Victory Gardens during World War II)⁵. Urban community gardens were usually developed by community activists and were citizen-led initiatives, rather than government-sponsored programmes, that increasingly drew upon the concerns of environmentalism and critiques of urban decay (FCFCG 2015). As an emerging interstitial activity, community gardening was considered a small-scale, low threshold, multidimensional practice that had the capacity to attract a wide range of participants to appropriate and transform neglected or derelict space in their neighbourhoods, drawing inspiration from the United States (US) movement (FCFCG 2015). Subsequently, these spaces have proliferated throughout the Global North and are visible, outdoor, accessible statements of collective action, consisting of bricolage structures that embody a do-it-together (DIT)⁶ aesthetic and ethos, which incorporate creativity, playful labour and imagination into these urban interventions (McKay 2013).

As communal gardening endeavours increased within the UK, a gradually more explicit collective identity emerged with the establishment of a national community gardening organisation. Notably, the Federation of City Farms and Community Gardens (FCFCG) was formed in the UK in 1980, suggesting that community gardeners saw themselves as distinct from allotment-holders⁷. The FCFCG aims to provide support and advice, and act as an advocate for, and raise public awareness about, community-managed gardens and farms. At present in the UK, there are approximately 1,000 community gardens, 120 city and school farms, in addition to a growing number of community-managed allotments (FCFCG 2015). Thus, the organisation acts to counter the perception of communal food production as a peripheral activity and concern, forging a collective voice by uniting diverse projects throughout the UK. Furthermore, the Royal Horticultural Society (RHS) coordinates the 'It's

⁴ The first city farm was established in Kentish Town, London, in 1972.

⁵ During World War II, the 'Dig for Victory' campaign was established by the British Ministry of Agriculture, where people were encouraged to grow their own food, due to rationing. A variety of open spaces ranging from domestic gardens to public parks were transformed into productive growing plots.

⁶ DIT draws upon the notion of do-it-yourself (DIY), however, refers to a prioritisation of collaborative and cooperative action.

⁷ The 'National Society of Allotment and Leisure Gardeners', established in 1901, is the national organisation which represents allotment holders in the UK.

Your Neighbourhood’ grassroots community gardening campaign (in Scotland, part of the ‘Keep Scotland Beautiful’ charity), which endeavours to support groups to improve their local environment and is incorporated within the well established Britain in Bloom scheme (RHS 2015).

1.2.4 Defining Community Gardens: The ‘Community’ in Community Gardens

Defining the term ‘community garden’ is extremely complex, however, is an essential task in order to situate the exploration of CUFGs in the contemporary city. It is frequently used in variable ways and regularly discussed without clarification (Guitart *et al.* 2012). Indeed, Pudup contends the term community garden is “richly connotative but inchoate” (2008: 1228). Furthermore, Hou *et al.* argue, combining “two powerful concepts – community and garden – elicits a wide range of meanings based on a person’s experience, expectations, and outlook” (2009: 11). In particular, the contested and ambiguous meaning of ‘community’, further complicates these socioecological entanglements as political enactments. Community is a slippery concept and has multiple meanings. It can refer to a geographically bounded area (such as a neighbourhood) and therefore a (presumed) shared proximate relationship or socially through a common belief, occupation, or hobby (in relation to a community of interest). Despite divergent and contradictory interpretations of ‘community’, they are typically associated with a degree of internal homogeneity (or commonality) and a metaphorical or physical ‘border’ (enacting a politics of inclusion/exclusion). The term ‘community’ therefore has multiple meanings:

It invokes feelings of safety, comfort, and mutuality. It is deployed by those who seek greater devolution and privatization of government functions at the local level as a way of enhancing accountability and responsiveness. It is used as a means of social control. It is used as a marker of inclusion, but also exclusion (Staeheli 2003: 815).

Therefore, Joseph (2002) cautions against the romance of ‘community’. Indeed, Young (1990a, 1990b) has productively highlighted that a politics of difference underpins our experience of the world, therefore diversity is inherent to ‘community’. Accordingly, Young argues, the veneration of localised communities is both deeply utopian and perilous, where the “ideal of the immediate copresence of subjects [...] is a metaphysical illusion. Even a face-to-face relation between two people is mediated by voice and gesture, spacing and

temporality” (1990b: 233). Thus, any naïve evocation to ‘community’ in relation to CUFGs needs to be mediated by a problematisation of their aims and political power dynamics in relation to the groupings they foster and the physical and symbolic boundaries they construct (Kurtz 2001). In this context, providing a definition of ‘community gardens’ is particularly confounding, when the term ‘community’ has become so encumbered with divergent meanings.

The social relations between participants are frequently emphasised within literature examining collective gardening, where the term ‘community’ is frequently evoked to denote human relationships, where it is posited that shared experiences can foster social capital (for example, Armstrong 2000; Glover 2004; Firth *et al.* 2011; Kingsley and Townsend 2006; Shiner *et al.* 2004). However, I argue the emphasis placed upon the purely ‘social’ is restrictive and politically debilitating in the context of environmental commitments that invariably involve alliances with nonhuman agents such as plants and animals. Consequently, the concept of ‘community’ is not useful as an analytical category to situate this research. Indeed, the complex UPE of CUFGs cannot be fully understood if we privilege the social dimensions. Therefore, instead of conceptualising the case study sites as projects that generate ‘community’ based upon local sociality, this thesis understands the CUFGs as complex entanglements of diverse socionatural relations between human and nonhuman agents, constituted through myriad heterogeneous flows, including people, soil, ideas, weather, and global capital (see Pink 2012: 84-102). This perspective enables an analysis that appreciates the complexity of the entanglements that form these places, which attends to the multifaceted and manifold shifting, sometimes ephemeral, socionatural relationships, which coalesce to form CUFGs. Indeed, I am interested in how everyday practices and relations of care, bind or loosen collectives, and how productive communal activities can lead to feelings of ‘being in common’ through the process of relating between human and nonhumans, rather than a construction of a social ‘community’.

1.2.5 Defining Collective Urban Food Gardens

While Ferris *et al.* argue, it is unhelpful to provide a precise definition of community gardens as this would “impose arbitrary limits on creative communal responses to local need” (2001: 560-561), various scholars have attempted to provide a loose outline to guide discussion. Glover *et al.* define a community garden as:

an organized, grassroots initiative whereby a section of land is used to produce food or flowers or both in an urban environment for the personal use or collective benefit of its members (2005: 79).

Recent literature has demonstrated that community gardens manifest in idiosyncratic forms and there is significant diversity in terms of design, participant dynamics, political context, management and activities that are shaped by a complex array of socioecological processes (Kurtz 2001; Nettle 2014). However, despite organisational and aesthetic differences, community gardens are typically “locally managed pieces of land that are developed in response to and reflect the needs of the communities in which they are based” (Greenspace Scotland 2011: 6). Designed, cultivated and cared for by “many different hands and evolving over time, a community garden is a distinct form of open space that reflects the many participants engaged in its creation and maintenance” (Hou *et al.* 2009: 3). Thus, the vague and diverse meaning of ‘community gardens’ reflects this heterogeneity.

As Guitart *et al.* (2012) highlight, the majority of research investigating community gardens (in the English-speaking world) focuses upon the North American context, reflecting that the contemporary urban gardening movement predominately originated in this geographic region and was frequently characterised by intense political struggles over the “right to the city” (Lefebvre 1996; see Eizenberg 2012, 2013; Schmelzkopf 1995, 2002; Staeheli *et al.* 2002 with regard to New York City). However, caution is needed when utilising the term ‘community garden’, as it is nebulous and used in the US to refer to a wide range of gardening endeavours that are typically similar to allotment sites rather than genuinely collectively initiated and managed spaces (Nettle 2014; Tornaghi 2014). Indeed, the term encompasses contemporary school, prison, and therapeutic gardens, in addition to historical examples such as manifestations during financial depressions and geopolitical conflicts such as Wartime Victory Gardens (Lawson 2005). This broad application in the majority of North American literature is problematic, as it includes projects that are both grassroots gardens where participation is voluntary and institutional-led compulsory initiatives. Therefore, Pudup (2008), proposes the term “organised garden project”, to refer to ‘top-down’ urban garden programmes, where participation can be enforced, highlighting the problematic use of the term ‘community garden’ to denote a wide range of gardening endeavours. Given the sweeping and extensive usage of the term ‘community gardens’, I argue it is particularly

important to provide definitional clarity when exploring the collective aspects of urban food gardening in the UK.

Thus, in order to circumvent the definitional ambiguity of ‘community gardens’, I identify the case study sites that form the basis of this thesis as ‘CUFGs’ for three interrelated reasons. First, the gardens are communal spaces, based on voluntary participation with organised memberships (to varying degrees) and collaborative management structures and therefore, are collective endeavours. Second, the gardens are located within the fabric of Edinburgh, and thus are implicated in urban land use dynamics and the spatial politics of the city. Finally, each garden places an emphasis on the production of food for human consumption and consequently, implicates them in the broader urban agricultural movement. Therefore, this thesis defines CUFGs as:

Formally or informally organised initiatives, which consist of an array of agents (human and nonhuman) that transform, cultivate, and manage urban land collectively in the form of productive food growing spaces.

The broad definition adopted throughout this thesis, acknowledges and highlights the different socioecological web of relations that form CUFGs. The definition recognises that the size, design, age, membership, aspirations, and organisational elements of CUFGs can vary extensively, thus enabling the in-depth exploration of three diverse garden manifestations. Importantly, this definition highlights the communal *food* growing aspects of these assemblages (i.e. an emphasis on fruit, vegetable and herb growing for consumption), as my interest focused upon the collective practices of cultivating, sharing and cooperatively working in productive, rather than ‘ornamental’, urban natures. By providing a definition of CUFGs, I have endeavoured to evade the theoretical ambiguity that surrounds adopting the nebulous term ‘community garden’, which as discussed, refers to a wide assortment of collective gardening activities. Explicitly determining a category of investigation permits an examination of collective urban food gardening as a geographically and historically situated phenomenon, that while drawing inspiration from various historical expressions (such as allotments), can be considered a specifically distinct manifestation (Nettle 2014).

1.3 Urban Food Gardening as a Political Practice

The augmentation of urban food gardens has been increasingly characterised as a political statement – an act of direct action where people are utilising food growing practices as a way to regain control of their everyday lives by materially reworking their living environments and challenging the commodification of food and land (McClintock 2010; Tornaghi 2014). Urban gardens have been increasingly explored as an urban social movement, which seeks to reclaim and remake space, thus asserting the “right to the city” (Lefebvre 1996) against neoliberal development politics (Schmelzkopf 1995, 2002; Staeheli *et al.* 2002). Therefore, these socionatural assemblages are conceived as spatial strategies that empower participants to actively contest inequalities and engage in the (re)production of space (Eizenberg 2013; Ghose and Pettygrove 2014). The role of these emergent political gardening practices has received increased attention particularly in relation to imagining and effecting alternative urbanism in the neoliberal city (Certomà and Tornaghi 2015; Tornaghi and Van Dyck 2015; Wekerle and Classens 2015) and as a vehicle to engender actually existing commons (Eizenberg 2013; Follmann and Viehoff 2015). As Wekerle and Classens state, “[f]ood gardens, no matter how vestigial, located in city centres or juxtaposed with commercial centres and tall buildings, challenge our preconceptions of neo-liberal urbanism” (2015: 1178). Urban food gardening, therefore, is characterised as an “insurgent practice” and “political act impacting on the ecology of space” (Tornaghi and Van Dyck 2015: 1250) that has the potential to enact a politics of the possible (Gibson-Graham 2006).

In this context, the resurgence of urban food growing activities in the contemporary city are conceptualised as explicit attempts to stimulate and facilitate new interactions and behaviours around the cultivation, preparation and sharing of food, where heterogeneous agents work collaboratively towards creating “an ideal future city they want to build in common” (Certomà and Tornaghi 2015: 1124; Tornaghi and Van Dyck 2015). Moreover, as Wekerle and Classens argue, CUFGs “have taken on a new political significance as the visible representation of food security and local food campaigns” (2015: 1178). In this sense, gardening is a radical practice (McKay 2013)⁸ where gardens contain the seeds of conviviality, where people can meet, share ideas, address community food insecurity and engage in “more sustainable ways of urban living” (Lohrberg and Simon-Rojo 2016: 200).

⁸ However, as McKay demonstrates, “the act of gardening can be ideologically fluid [...] and that radical gardening can be dangerous and regressive as well as potentially progressive and liberatory” (2013: 43).

Thus, CUFGs have been positioned as an important component within the broader context of alternative food movement (AFM) politics and practice. They have been discussed as a form of urban agriculture and a means of addressing food insecurity (Baker 2004; Domene and Sauri 2007; Evers and Hodgson 2011; Gottlieb and Fisher 1996; Mougeot 2005), tactics to foster food justice (Wekerle 2004; Levkoe 2006) and as everyday spaces in which ordinary forms of environmentalism are enacted to create new spaces of socioecological justice in the contemporary city (Milbourne 2012). Therefore, CUFGs can act as sites of resistance to structural inequalities, countering neoliberal urban transformation from the ground up (Certomà and Tornaghi 2015), however, can also fill the void left by the ‘rolling back’ of the state and therefore interpreted as tools of neoliberal governmentality (Guthman 2008; Pudup 2008; Rosol 2012). Thus, CUFGs are complex and contradictory spaces (McClintock 2014).

Drawing upon, and contributing to, an increasingly nuanced discourse developing around urban gardening as a political ecological activity, this thesis explores how macro socio-political power relations are entwined with the micro-politics of everyday inequalities in the development and maintenance of CUFGs. Indeed, by demonstrating how the materialities of the socionatures co-produced by gardeners, are entangled with macro and micro political processes and power relations, enables an analysis that appreciates the complexity of CUFGs as continuously unfolding socioecological entanglements. Furthermore, I demonstrate how care is co-produced and implicated in the motivations and mobilisation strategies of urban gardeners, where their embodied care practices continually re-make the CUFGs. In the following section, I outline the research trajectory from initial conceptualisation of the topic to the development of the ecologies of care framework which structures this thesis (developed in Chapters 2 and 3).

1.4 Unearthing the Research Process: Context, Scoping and Arrival

In the context of rising food prices, climate change and the maelstrom of a global financial crisis, I began the research process exploring a variety of urban food projects that are increasingly positioned as alternatives to the mainstream industrial food system. After exploring the academic literature regarding urban food growing, I became interested in why people cooperate and *collectively* organise and grow in the city. Furthermore, I was curious about the processes, relational dynamics, and everyday practices that lead to the creation and continuation of CUFGs. From surveying scholarship regarding collective gardening practices,

it became apparent that the majority of empirical research tended to focus on the benefits of experiencing and cultivating an established garden and frequently was permeated with an advocacy tone. I suggest that while this enabled the issue of urban food growing to be brought to the attention of the popular media and helpfully aligned with the objectives of urban gardeners, it also reinforced an uncritical approach. Inspired by recent nuanced and critical studies (see Alkon 2013; McClintock 2014; Sbicca 2012, 2014), I decided to explore the inherently complex political dynamics and multiple agendas that lead to the development and maintenance of CUFGs.

By focusing on the dynamics through which socionatures are produced including the actual everyday doings, the actions, and entanglements of humans and nonhumans that create new socioecological arrangements in what is often portrayed as a pervasive neoliberal environment – the city – enables an exploration of the material and affective labour that continually remake socionatures. This suggested an ethnographic approach to the research to develop an intimate understanding of complex embodied practices, processes and interactions (Pink 2012) that create and sustain CUFGs as socionatural assemblages, where the dynamics between nature and society continually unfolds. By utilising the researcher's body as an active investigatory instrument (Hammersley and Atkinson 2007), a situated ethnography would enable an exploration of the dynamic socionatural processes entangled in the place-specific re(production) of urban nature (Newman 2015).

As an organic urban gardener, I had become increasingly interested in the practices, potential and challenges of urban food growing. At times frustrating and at others rewarding, the process of growing is a deeply visceral socionatural activity, which is both affective and practical. As a lone (human) gardener in a private, residential space⁹ I had never been involved in an explicitly collective urban gardening project. Therefore, I developed an interest in moving beyond the confines of the familiar privatised back garden to collectively organised urban interventions that seek to rework the socioecological metabolic flows in the city around food production. Having read David Holmgren's (2011) book *Permaculture: Principles and Pathways Beyond Sustainability*, which accentuates a holistic ethical framework of 'earth care, people care, and fair share', led me to explore a diverse range of literature concerning care practices. Indeed, the ethics of permaculture highlights how care is "embedded in the

⁹ As far as gardening can be considered as a sole activity – the growing process is a deeply collaborative venture between a multiplicity of 'others' including the weather, bees, soil and water etc.

practices that maintain the webs of relationality that we form” (Puig de la Bellacasa 2010: 167). The emphasis placed upon interdependence and caring relations that extend beyond the human subject to include a range of nonhuman others stimulated my interest in exploring the various care practices which are entangled within CUFGs. While care practices have been examined in relation to a multiplicity of food-related initiatives such as community-supported agriculture (CSA) (see Wells and Gradwell 2001; Dowler *et al.* 2009; Jarosz 2011), care has not been investigated through sustained ethnographic study in relation to CUFGs. This constitutes a noteworthy omission, which this thesis seeks to address.

Notably, ‘thinking with care’ (Puig de la Bellacasa 2012) renders visible the everyday caring practices that sustain life in a multiplicity of contexts (for example, beyond the confines of the privatised home or institutional settings such as hospitals). Through this reading, I became curious as to what informal caring practices create and sustain the multiple socioecological relations of CUFGs. Indeed, by thinking with care, I aim to think differently about how diverse agents involved in the creation and sustenance of CUFGs can engender new sensitivities of producing more care-full socioecological spaces in the city. Informed by literature which conceptualised gardening as a political act (McKay 2013), I was intrigued to explore how care was practiced in both mundane and radical ways as part of re-working socioecological configurations that are implicated in both reproducing and challenging the neoliberal capitalist condition. In particular, I am concerned with the political possibilities of caring as a “different way of being in the world, relating to others as if they matter, with attentiveness and compassion, beyond exchange” (Skeggs 2014: 13).

To provide a theoretical framework to critically explore care practices in relation to CUFGs, I draw upon a diverse range of literature, namely, heterogeneous UPE and feminist care scholarship to disrupt the notion that the production of nature is a solely human activity (discussed in depth in Chapters 2 and 3). UPE is concerned with socially produced nature and provides an integrated and relational framework for critically exploring the ecological and socio-political processes that occur in the urban context (Heynen *et al.* 2006). My starting point was the notion of ‘socionature’ – the idea that nature and society are co-constituted through socioecological flows and are entangled with relations of power (Swyngedouw 2004). Conceptualising CUFGs as socionatural assemblages brings in to sharp focus the role of both humans and nonhumans in creating and sustaining these spaces. UPE, however, has paid little attention to the political opportunities a care perspective could facilitate in establishing

profoundly different urban socioecological assemblages¹⁰. I suggest that greater attention needs to be given to care as a basis for radical practices of everyday life (see *Precarias a la Deriva* 2006), particularly as a route to develop actually existing alternatives that draws upon Gibson-Graham's (2006) political strategy of "start where you are". Thus, instead of pre-supposing that grounded practices of collective food growing are always susceptible to co-option, based upon self-help and voluntaristic strategies to the neoliberal agenda, I explore how situated and collective caring practices can produce 'more-than-capitalist' relations and subjectivities in complex and at times, contradictory ways. Similarly, I do not assume that CUFGs in and of themselves 'solve' complex socioecological problems, indeed, they may raise more than they solve, therefore, adopting a "critical sensibility of the potentiality and structural limits that inform these efforts" is crucial when 'reaching in' to these entanglements (Robbins 2012: 251). I use the term 'more-than-capitalist' to denote the possibilities beyond economic exchange and value, where actually existing non-capitalist practices take place within, and are entangled with, neoliberal capitalism (Gibson-Graham 2006, 2011).

My particular understanding of care is based upon the broad definition offered by Bernice Fisher and Joan Tronto, who state that care is:

a species activity that includes everything that we do to maintain, continue, and repair our 'world' so that we can live in it as well as possible. That world includes our bodies, our selves, and our environment, all of which we seek to interweave in a complex, life-sustaining web (1991: 40).

I argue this definition enables political ecologists to insist that the 'interweaving' of human and nonhuman others provides a productive basis for understanding how care holds the world together and facilitates its continuation. Thus, conceptualising 'care' in its broadest sense is to be sensitive to how all beings are inter-dependent and that humans are only one species in the earth's ecology. The representation of a web is particularly valuable as it draws our consideration to the socionatural connections and affective ethical sensibilities that comprise our interconnected being. Exposing diverse care literature to UPE, which stresses the hybridity of socionature, orientates care to be conceptualised as an interconnected web of relations that sustains all socionatural life. By exposing the 'political' in UPE to feminist care

¹⁰ Feminist political ecology (FPE) has embraced care perspectives (see Jarosz 2011), however, this has tended to explore feminist care ethics in relation to gender and socionatural relations.

literature highlights ‘the personal is political’ and provides focused attention on the everyday micro-politics of socionatural entanglements, which remains an under-explored area within UPE (Truelove 2011). Furthermore, while both UPE and care ethics focuses upon unequal societal relations, the latter endeavours to move “beyond critique and toward the construction of new forms of relationships, institutions, and action that enhance mutuality and well-being” (Lawson 2007: 8).

This research takes inspiration from Hayes-Conroy and Hayes-Conroy who emphasise the importance of remaining attentive to the rigidities of the socio-material world and also open to “new possibilities that affective encounters may allow” (2013: 82). For Hayes-Conroy and Hayes-Conroy (2013), simultaneously attending to broader structural socio-political processes and feelings, emotions and affectivities within the same framework in political ecological research is crucial to exploring complex human-environment practices. As they argue, it is vital “to understand everyday embodied practices and emotive/affective relationships as processes in and through which broader political economic forces take shape and are constituted” (Hayes-Conroy and Hayes-Conroy 2013: 88). My endeavour to theorise care in relation to UPE seeks to draw attention to the relationality of such processes, highlighting that care is not individuated but interconnected and collective. Crucially, I argue, care provides an appropriate way to examine the multi-scaled (i.e. intimately personal to global) relations and practices, which together can influence how social collectives learn to be affected (Latour 2004) by enacting creative urban interventions based on ordinary forms of everyday environmentalism (Loftus 2012; Milbourne 2012).

Consequently, the ecologies of care framework adopted in this thesis considers macro-level forces without allowing them to over determine the micro-level and points to the complexity of relationships between people and their multi-scaled environment, while rendering visible the often overlooked embodied, situated care practices that sustain particular assemblages. Furthermore, examining the structural relations, care practices (affective, emotional, and ethical dimensions) entangled with practical, material, everyday doings, and knowledge processes of the production of socionatures, draws focus to the “latent, material agency in all socio-material interrelationships that exudes potentiality even as it is constrained by the structured tendencies of our uneven world” (Hayes-Conroy and Hayes-Conroy 2013: 88). Therefore, this thesis aims to add further empirical flesh to the nascent UPE and nebulous care literature. I suggest that bringing these diverse bodies of work into conversation with

each other, strengthens urban gardening scholarship by highlighting the complex and contradictory practices, relations and entanglements of these socioecological assemblages, and hence, care-full political possibilities.

1.5 Locating the Research: Urban Food Gardening in Edinburgh, Scotland

As previously stated, over the past ten years, communal urban gardens have proliferated throughout the UK (Milbourne 2012) increasing in both visibility and in some instances, institutional support (see Capital Growth 2013). Nonetheless, there has been relatively sparse in-depth ethnographic research conducted on CUFGs in UK cities (however, see Calvin 2011; Milbourne 2012; Pitt 2014). This is problematic as McClintock argues, because an undifferentiated view of urban food production and its possibilities “may result in its prescription as a panacea for urban ills without consideration for the geographic particularities” in which the activities are situated (2010: 192). Notably, there has been a paucity of in-depth ethnographic research conducted in Scotland, particularly Edinburgh, (with no peer-reviewed journal articles found in 2014)¹¹. This was unexpected, as I was aware of an augmented growth of collective food gardening activity within the city (over the past decade) from periodic visits since my time studying at the University of Edinburgh (2005-9). The curious omission of systematic, in-depth research examining CUFGs in Edinburgh was even more marked given the current attention ‘grow your own’ projects have received in a range of local and national policy documents (Witheridge and Morris 2016). I therefore decided to situate my research within the city of Edinburgh, to fill this lacuna. The specific CUFGs chosen illustrate different constellations of social, political and ecological characteristics (discussed in detail in Chapter 4) where a comparative approach was designed to enable an examination of the diverse ways sites of socionature are produced, inhabited, sustained and contested within the same city.

1.5.1 *Edinburgh: A Tale of Two Cities*

Edinburgh is a prosperous city and the largest financial and administrative centre in the UK outside of London. Post-devolution Scotland has emerged as one of the most centralised

¹¹ Indeed, there is a lack of academic literature focusing on CUFGs in Scottish cities (however, see Crossan *et al.* 2015 and Crossan *et al.* 2016 for an exploration of community gardens in Glasgow; and Witheridge and Morris 2016 for an analysis of the effect of public policy on community garden organisations in Edinburgh).

countries in Europe (Commission on Strengthening Local Democracy [CSLD] 2014), where there has been an increasing concentration of political power within Holyrood¹². Furthermore, the City of Edinburgh Council (CEC)¹³ “has become a major image-builder” (Hague and Jenkins 2005: 219) promoting the city as a European capital that is a hub of learning, culture and investment. Indeed, Edinburgh’s substantial professional and administrative middle-class is a result of its historic role as a capital city and location of financial and political power (Bondi 1999), where its economic configuration has produced a social structure that has remained disproportionately bourgeois. Significantly, urban elites have embraced the neoliberal notion of ‘competitive cities’ with enthusiasm, particularly in relation to the *Invest Edinburgh* initiative¹⁴. The campaign pervasively encourages the perception that Edinburgh is a uniformly affluent city, ignoring the fact that there are pockets of acute deprivation, predominantly concentrated in several peripheral housing estates (Lee and Murie 2002; two of the case studies that form the basis of this thesis are located in such areas). These stigmatised residential areas of the city constitute “Edinburgh’s *other* fringe”¹⁵ (Kallin and Slater 2014: 1353; emphasis in original) whereby the urban fabric is segregated along class lines (Lee and Murie 2002), exacerbated by the pervasive, on-going gentrification process (Kallin and Slater 2014).

In Scotland, community gardens have increasingly become incorporated into a variety of national and local level policy documents in response to multifaceted social, environmental, and health issues (Witheridge and Morris 2016). Within the first Scottish National Food and Drink Policy (NFDPP) *Recipe for Success* (SG 2009) and the subsequent revitalised discussion document, *Becoming a Good Food Nation* (SG 2014), community food growing activities are identified as contributing to the provision of affordable, healthy food. Subsequently, the Scottish Government (SG) established a ‘Grow Your Own Working Group’ (GYOWG) in December 2009, consisting of key stakeholders¹⁶, to take forward the elements of the NFDPP that related to community food growing. The group’s remit is to provide strategic support and produce practical advice and best practice guidance in relation to food growing. Furthermore,

¹² The location of the Scottish Parliament in Edinburgh.

¹³ The CEC is the municipal governing authority of the Edinburgh region; its spatial remit includes a large proportion of the city’s immediate hinterland.

¹⁴ See the *Invest Edinburgh* website: <http://www.investinedinburgh.com/why-invest-new/>.

¹⁵ The Edinburgh Fringe Festival is the largest arts festival in the world, taking place every August, in Edinburgh, Scotland.

¹⁶ Including: CEC, Community Food and Health (Scotland), ELGT, FCFCG, Greenspace Scotland, Nourish, the Scottish Allotments and Gardens Society, Soil Association Scotland, and Scottish Land and Estates.

cities are becoming increasingly key sites to imagine and enact “more sustainable urban foodscapes” (Moragues-Faus and Morgan 2015: 1560). Notably, Edinburgh is an original member of the emerging UK ‘Sustainable Food Cities Network’, launched in August 2013, which encourages cities and towns to adopt a cross-sector food partnership that works towards creating a sustainable food system. ‘Edible Edinburgh’, a steering group consisting of members of the public, private and third sector was established in September 2013, which subsequently, created the holistic city-wide *A Sustainable Food City Plan* (Edible Edinburgh 2014). These new governance configurations highlight the increasing recognition of the role cities play in addressing socioecological inequalities generated or associated with the food system (Moragues-Faus and Morgan 2015).

Despite the rationalised, planned and commodified nature of urban land, it is difficult to accurately establish how many community gardens actually exist in Edinburgh. To demonstrate this ambiguity, the FCFCG database contained 26 community food growing projects in April 2015, however the Edinburgh Lothian Greenspace Trust (ELGT)¹⁷ Community Food Growing Map included 41 gardens. Significantly, urban food gardening has emerged as an increasingly ‘visible’ activity within the urban fabric of Edinburgh, however, this is geographically uneven, with certain areas containing more urban food growing activities than others, as a result of three interrelated factors: 1) reliance on the energy and motivation of passionate community activists; 2) the directionality of funding targeting areas of ‘multiple deprivation’; and 3) the availability of land (as discussed in Chapter 5). Thus, examining the socionatural processes and care practices that create and sustain the intimate urban ecologies of three diverse CUFGs in Edinburgh, is a timely and pertinent area of research, contributing to a nuanced perspective on urban food gardening. I now proceed to outline the research aim and questions that structure this thesis.

¹⁷ ELGT is an independent charity and social enterprise established in 1991 (originally the Edinburgh Green Belt Trust). The organisation initially focused on the stewardship of the greenbelt landscape, however, in 2006, the Trust changed its name and also began to focus on the creation and improvement of urban greenspaces such as community gardens (see <http://www.elgt.org.uk/about-us>).

1.6 Aim and Research Questions

The research questions emerged from engagement with critical literatures on care and UPE and sought to provide a nuanced investigation of CUFGs that address gaps in current scholarship (as previously discussed). Notably, the questions evolved over time, given the embodied nature of ethnographic research, where I was able to respond to observations within the garden spaces. The overarching aim of this thesis is:

To examine the complexity of care practices that materialise and sustain the socioecological configurations of CUFGs

The research aim is addressed through three research questions:

- 1) What processes, agents and relationships contribute to the establishment of CUFGs?

To understand why, how, and by whom the three CUFGs are produced, I explore the particular agendas of multiple stakeholders that were instrumental to the creation of the CUFGs, and if these varied between projects. I investigate the various motivations, negotiations, tensions and arrangements that materialised in the formation process of each CUFG's development and whether care is a contributing factor in their establishment.

- 2) What everyday care practices maintain and sustain the CUFGs?

I focus specifically on the care practices of the gardeners, exploring when they materialised, and when they did not, between humans and nonhumans. I investigate what gardeners 'care about' and what they 'care for' and what tensions manifest in such relations and how care is entangled in reworking metabolic flows in more socioecological sustainable ways.

- 3) To what extent do socioecological caring practices embody transformative potential of creating 'more-than-capitalist' possibilities and what are the limitations?

To understand the more-than-capitalist potential and limitations of the CUFGs, I explore the forms of non-economic exchange and collaborative creative endeavours that occur within and

between CUFGs. I focus on the diverse knowledges, skills, and experiences shared and their role in fostering playful socioecological possibilities.

1.7 Thesis Outline

The thesis comprises of eight chapters that interweave the theoretical insights of UPE and care scholarship to explore the ways in which the intimate urban ecologies of CUFGs are produced. I have posited that CUFGs are best understood as assemblages of socionatural relations, providing the foundation upon which the thesis is built. Significantly, I have argued, ‘thinking with care’ (Puig de la Bellacasa 2012) renders visible the situated, mundane collective care practices that contribute to creating, sustaining and maintaining socioecological entanglements within the on-going sensuous acts of everyday life.

In Chapters 2 and 3, I provide a detailed overview of the relevant literature which informs all subsequent chapters. Chapter 2 examines the burgeoning UPE scholarship that seeks to provide potent critiques of the power relations which structure environmental processes. Drawing upon this literature, I argue, conceptualising the city as a socionatural assemblage enables us to dispel any notion that nature is somehow antithetical to the urban and therefore, provides a productive basis to explore the complex relationships that constitute CUFGs. Specifically, I examine the term ‘socionature’ adopted in this thesis to overcome the pervasive dichotomy of ‘nature’ and ‘society’. I then introduce the concept of metabolism to denote the transformative, interweaving interrelationship of social and biophysical change. I seek to expand upon this approach by developing a more embodied care-full UPE, which takes into account the everyday micro-politics of socionatural relationships and the emotive, and affective dimensions of the material activities that produces nature in specific ways. Insights from FPE are particularly fruitful in guiding this ethnographic study, highlighting the importance of exploring how grounded experiences interact and are shaped by broader structural processes. In this context, emphasis is placed on the emotive and affective body entangled within the production of socionatures. Thus, I argue, incorporating a nuanced relational understanding of UPE and care into explorations of the production of socionatures draws our attention to the emotional bodily labour involved in taking care of the environment and the ordinary implicit activism which may emerge in fostering an everyday environmentalism.

In Chapter 3 I provide a detailed examination of the notion of care that I utilise within this thesis, drawing upon a range of feminist care scholarship. I identify three interconnected dimensions of care, namely, care as an ethical obligation, practice, and affective state. I argue conceptualising care in a politically expansive manner that includes, but also expands beyond, intimate personal relationships between humans, gestures towards ways in which care can be thought of in a socioecological sense. Therefore, I argue, care is integral to broader assemblages of feelings and emotions, patterns of socionatural relations and bodily material encounters. I argue focusing on the articulations and actions, where gardeners ‘care about’ and ‘care for’ a multiplicity of entities, situations and circumstances, renders visible the politics of care in the context of CUFGs. By focusing on the ‘actually existing’ manifestations of care that emerge, highlights how care is always situated, context dependent and never neutral. By drawing these two nebulous bodies of literature together, I develop the ecologies of care theoretical framework that guides this thesis.

Chapter 4 describes the methodological framework and methods utilised in this study to answer the research questions. I document the multiple-case study approach adopted, outlining a justification for this framework and the number of case study sites chosen. The chapter describes the three distinct, but linked qualitative methods I adopted for this ethnographic study: participated observation, semi-structured and ‘go-along’ walking interviews. I then proceed to explain the process I undertook in leaving the field and then examine the ethical considerations in relation to the research. Finally, I outline the process I undertook for analysing the data.

In Chapters 5, 6 and 7, I present the empirical findings and analysis of the ethnographic study. Chapter 5 addresses research question 1 and provides a detailed account of how constellations of key agents and power relations embedded in metabolic circulatory flows were integral to the formation of the CUFGs. Taking each case study site in turn, I examine the motivations, differential agendas and negotiations that led to the formation of each CUFG, documenting their diverse development trajectories. I unpack the socionatural dynamics that manifest within the micro-particularities of the intimate urban ecologies, and the relations of care that emerged to address various inequalities, which endeavour “to maintain, continue, and repair our ‘world’” (Fisher and Tronto 1991: 40). Within the chapter summary, I identify similarities and differences in their development to better understand the myriad processes and practices through which the CUFGs emerge.

Chapter 6 addresses research question 2 and explores how the CUFGs are both affectively and materially co-produced through everyday labour, encounters, and exchanges between humans and nonhumans, examining when caring relations materialised, and when they did not. I relay the multiple stories of the enacted caring practices of gardeners, both the articulations and actions that sought to enhance, improve or nurture a certain matter. I examine what gardeners ‘cared about’ and ‘cared for’, focusing specifically upon ‘soil’, ‘seed-plant-produce’ and ‘human collectives’ to demonstrate the complexity and interconnected webs of caring relations and practices in CUFGs that co-produce socionature. Thus, a process of affect ‘attunement’ highlights the important ways a range of embodied experiences, rhythms and dynamics between various entities create attachments and detachments within the gardens, where attempts are made to rework metabolic flows in more socioecologically sustainable configurations.

In Chapter 7, I address research question 3 and explore the ways in which CUFGs provide opportunities for both collective and individual learning through various tactile, embodied experiential learning experiences, where knowledge is generated, utilised and diffused. I examine the intricacies of vernacular creativities, artistic practices and collective learning, which form the creative knowledge commons that sustain the CUFGs and open up the imaginative possibilities of a more-than-capitalist world. The CUFGs act as sites where people gather, collaborate and collectively reimagine through playful, affective and material labour, another world, even if only fleetingly, where moments of enchantment are crucial in maintaining participation.

In Chapter 8 I conclude by arguing that CUFGs can be considered ‘ecologies of care’, based upon collective action, persistent experimentation and practical tinkering (Mol *et al.* 2010). I argue that paying attention to the actually existing practices of care highlights how various inequalities can begin to be collectively addressed from starting from where you are (Gibson-Graham 2006). I draw together the empirical findings to document the complexities and ambiguities of urban gardening interventions to enact socio-spatial change and foster everyday environmentalisms (Loftus 2012; Milbourne 2012). The CUFGs are revealed as contradictory sites, permeated with creative possibilities, in which caring relations are entangled with embryotic commoning practices (Linebaugh 2008), through the sharing of produce, food, knowledge and skills. However, this is complicated by their fragility, within

the complex matrix of neoliberal capitalist urbanism and differential agendas. Thus this thesis seeks to better understand the potential and limitations of collective urban food growing interventions in reshaping socioecological relations in more caring ways.

CHAPTER 2

TOWARDS A CARE-FULL URBAN POLITICAL ECOLOGY

2.1 Introduction

This is the first of two chapters that contribute to the development of an ecologies of care analytical framework to situate this thesis. I seek to make an intervention into a burgeoning body of collective gardening literature that tends to fall within one of two perspectives: to be either celebratory, focusing on their perceived social and ecological benefits (Fusco 2001; Ferris *et al.* 2001; Kingsley and Townsend 2006) or critical, highlighting their role in facilitating neoliberal governmentality (Guthman 2008; Pudup 2008). The framework emerges from a critique of the prevailing scholarship, which regardless of the stance taken in relation to CUFGs (whether celebratory or critical), I argue, has failed to explore the intricate dynamics between ‘nature’ and ‘society’ that produce such manifestations. UPE provides a particularly productive lens to explore the complex relationships that constitute socionatures, and I begin this chapter by introducing this theoretical approach to understand how urban environments are produced and consequently, can be conceptualised as socionatural assemblages. However, I seek to expand upon this approach by developing a more embodied care-full UPE which takes into account the everyday micro-politics of socionatural relationships, an area currently under-investigated by UPE (Truelove 2011).

2.2 The Interweaving of Urban, Political, and Ecological Relations

2.2.1 Politicising the Production of Urban Nature

In this section I outline the body of scholarship loosely defined as UPE, which examines urban natures and their complex socioecological politics. UPE is a diverse and dynamic school of critical urban political-environmental research (Heynen *et al.* 2006). It builds upon and takes inspiration from the more established (albeit varied) work of political ecology (PE) in which the work of Blaikie (1985) and Blaikie and Brookfield (1987) laid the foundation of a research agenda which sought to combine the approaches of political economy with ecology. PE focuses “on the relationship between environmental change, socioeconomic impact, and political process” (Bryant 1992: 27). The majority of work aligned under the label of PE that emerged during the latter decades of the 20th Century, primarily focused on the

Global South, investigating issues such as the politics of soil degradation and environmental conflicts, predominantly in rural contexts (see Bryant and Bailey 1997). Consequently, the neglect of urban processes entangled with socioecological change was a significant omission within PE¹⁸ and therefore, UPE has sought a reorientation towards the city as an important site of political ecological processes and contestations (Heynen *et al.* 2006; Keil 2003, 2005). Significantly, UPE has been concerned with the urbanisation of nature, drawing attention to, and critiquing, the power-laden inequalities that permeate the city. Swyngedouw and Heynen suggest, “it is on the terrain of the urban that accelerating metabolic transformation of nature becomes most visible, both in its physical form and its socio-ecological consequence” (2003: 907). UPE scholars therefore have provided a sustained critique of modernity and/or capitalism (Lawhon *et al.* 2014), in particular the on-going, mutating neoliberalisation process, which valorises individualism, commodifies ‘nature’, and reduces sociality to capitalist exchange (Heynen 2007).

A review of publications utilising UPE as an analytical framework demonstrates the strong theoretical lineage and insights drawn from Marxist urban geography, as compared to PE (Zimmer 2010). Formative publications include Swyngedouw (1996; which arguably coined the neologism ‘Urban Political Ecology’) and his sustained study of water¹⁹ in Guayaquil, Ecuador (Swyngedouw 1997b, 2004). Furthermore, his co-authored work with Heynen (Swyngedouw and Heynen 2003), Keil’s review articles (2003, 2005) and Heynen *et al.*’s (2006) much cited edited volume, laid the foundation of an explicitly critical UPE. In particular, many of Karl Marx’s ideas, often refracted through the work of geographers David Harvey (1996) and Neil Smith (2010 [1984]), particularly his ‘production of nature’ thesis (discussed in section 2.3.2), infuse the work of a particularly critical (Marxist) UPE scholarship. In the following section, I discuss the contested meaning of ‘nature’, and explore in greater detail how the ideological separation of ‘nature’ and ‘society’ is maintained by contemporary capitalist relations (Smith 2010 [1984]), and outline the political implications of challenging such a bifurcation in relation to CUFG research.

¹⁸ Notably, Rocheleau *et al.*’s (1996) edited volume *Feminist Political Ecology* is an early (often overlooked) example of urban case studies labelled explicitly as (feminist) PE.

¹⁹ Within UPE scholarship, water has been a topic that has received extensive attention (Swyngedouw 1997b, 2004; Bakker, 2003, 2013; Debbané and Keil 2004; Gandy 2004; Kaika 2005; Loftus 2007; Budds 2009), largely due to its necessity for human survival and also because of the intense disputes over its meaning and commodification.

2.3 Nature's Relationship to Socio-Political Processes, Power and Urban Life

2.3.1 What is 'Nature'?

The concept of 'nature' is contested, ideological and highly promiscuous: simultaneously "very familiar and extremely elusive" (Soper 1995: 1). Therefore, struggles over nature are always conflicts over meaning. Consequently, what nature is *considered to be* is deeply political, with references to nature extremely diverse. According to Castree (2014), 'nature' has four principal meanings in contemporary Anglophone societies: 'External Nature' (to denote the nonhuman world of living and inanimate phenomena, 'pristine' or modified), 'Universal Nature' (signifies the entire physical world, including human beings), 'Intrinsic Nature' (the essential quality or defining property of something), and 'Super-Ordinate Nature' (the power or force governing some or all living things, such as gravity). Despite the differences between the four meanings, in everyday usage, a "common semantic denominator" is that nature is frequently defined by the "absence of human agency or by what remains (or endures) once human agents have altered natural processes and phenomena" (Castree 2014: 10). Furthermore, there is a tendency to spatialise those things that we consider to be 'natural', typically those places that ignite our ecological imagination, which must be protected from 'human impact'. Thus, we frequently consider nature to be 'non-social' – a stable, unmalleable domain separate from humans – located somewhere else, beyond the cities and towns where the majority of human society now lives. However, clearly, urban areas are not "places where nature stops" (Hinchliffe 1999: 138); a multiplicity of organisms live in cities, from foxes, rats, bats, birds, to myriad plants and bacterial life. Humans therefore interact, disrupt and 'restore' nature, however, as Hinchliffe and Whatmore argue, "nonhumans don't just exist in cities, precariously clinging to the towers and edifices of modernity, but potentially shape and are shaped by their urban relations" (2006: 127).

The conception of 'nature' embedded in the 'first wave' of UPE scholarship (see Heynen 2014) drew upon the insights of Karl Marx. According to Marx, nature is our "inorganic body". Humans live within and continually exchange with nature, therefore, "to say that man's [*sic*] physical and mental life is linked to nature simply means that nature is linked to itself, for man [*sic*] is a part of nature" (Marx 1975: 328). Consequently, nature is a differentiated unity, which for Marx, is based on sensuous activity. Loftus has argued that

while nature is often seen to hold an ambiguous position within Marx's writing, (either caricatured as a passive background against which human liberation and struggles unfold, or a resource to be utilised for a utopian future), for Marx, "nature is a key moment in the project of making a better future world that contains new associational possibilities with a range of human and nonhuman others" (Loftus 2012: 25). UPE scholars confront the pervasive assumption of nature's 'externality' from society by recognising nature's inherent relational configuration with the 'social', thus:

nature is not conceived as an external blueprint or template but as an integral dimension to the urban process which is itself transformed in the process to produce a hybridized and historically contingent interaction between social and bio-physical systems (Gandy 2004: 364).

Therefore, the pervasive artificial ontological divide between nature and society (and countryside and city) has been rejected and reconceptualised by UPE scholars, building on the work of Cronon (1991, 1995), Williams (1993 [1973]) and Davis (1990, 1995), which demonstrated the fallacy of the nature-society divide. Cronon saliently illustrates this by exploring 'wilderness' – a constructed vision used to denote an external, nonhuman nature – arguing that it is "the creation of very particular human cultures at very particular moments in human history" (1995: 69). Ontologically, the (enduring) nature-society distinction is unfeasible and debilitating in making sense of our complex, hybridised world. Indeed, there is no singular Nature²⁰; rather there are "a multitude of existing or possible socionatural relations" (Swyngedouw 2007: 13). Thus, in the context of this research, the ecologies of care framework takes as its starting point the socionatural complexity and multidimensionality of 'nature'. This disrupts the assumption that the social dimensions of the gardens are the people, their activities, and the urban fabric that encapsulates these places, and nature is the 'green' organic matter and nonhuman life that are assembled within the garden boundary (see Classens 2015). Furthermore, I argue, understanding CUFGs as socionatural entanglements that are produced, holds political possibilities for an everyday (care-full) environmentalism, where the challenge "is to restructure productive activity and to transform the relationships through which environments are produced" (Loftus 2009: 159). I now proceed to examine the

²⁰ I utilise 'Nature' (capitalised) to refer to a singular discursive meaning of the natural world and 'nature' (non-capitalised) to denote the heterogeneous, diverse things that encompass the physical environment.

notion of the production of nature in some detail, examining the work of Neil Smith (2010 [1984]).

2.3.2 *The Production of Nature*

Neil Smith's (2010 [1984]) provocative 'production of nature' thesis has been particularly influential in relation to UPE scholarship. Building on a materialist historical framework, Smith forcefully argued that in the present moment industrial capitalism was quite literally 'producing nature' (saliently highlighted by the creation of genetically modified organisms) in relation to the limited interests of economic accumulation. Smith differentiates between the production of nature in a non-capitalist society and when capitalism functions at a global scale. Smith contends that in the latter, the distinction between 'first' and 'second' nature is transformed, and therefore, both should be comprehended as produced, where 'first nature' is produced through human labour and seen to relate to use value, and 'second nature' produced through human relations and consequently, associated with exchange abstraction. Therefore, nature is actively produced and contested through human labour and "is defined, delimited, and even physically reconstituted by different societies, often in order to serve specific, and usually dominant, social interests" (Castree 2001a: 3). Smith's explicitly Marxist dialectical approach to the production of nature unpacks the capitalist processes driving such transformations that materially produce nature anew, where the separation of nature from society is ideological:

What jars us so much about this idea of the production of nature is that it defies the conventional, sacrosanct separation of nature and society, and it does so with such abandon and without shame. We are used to conceiving of nature as external to society, pristine and pre-human, or else as a grand universal in which human beings are but small and simple cogs. But [...] our concepts have not caught up with reality. It is capitalism which ardently defies the inherited separation of nature and society, and with pride rather than shame (2010 [1984]: 7).

In this sense, urban environments are envisaged "as formed (and reformed) by socio-environmental processes with material and ideological consequences" (Alkon 2013: 663). For Smith (2010 [1984]), the labour process and production activity are the mediating relations between 'nature' and 'society', whereby 'doing things' or undertaking activities to ensure

human survival, results in humans transforming ‘natural’ entities and in the process they transform humans (Marx 1976). Within capitalist relations nature is increasingly incorporated under the logic of exchange value, therefore, for Marxists such as Smith, capitalism cannot produce natures in socially or ecologically just ways because capital accumulation is the main priority which invariably (re)produces inequalities. Consequently, they advocate the production of nature in explicitly non-capitalist ways. It must be noted, however, as discussed by Ekers and Loftus that “Smith in no way claims that the ‘appropriation of nature’ is specific to capitalist societies” (2012: 236).

Nevertheless, as Castree and Braun (1998) identify, the production of nature thesis is ‘productivist’ – namely, it overstates capitalist production to the neglect of other (non-economic) processes and practices which concurrently socialise nature. As Neil Smith argues, however, an “aversion to production” emanates from an understanding that “restricts production to those acts of manual and not imaginative work, economic and not cultural creation, individual labour rather than social accomplishment, and the making of objects rather than productive consumption by subjects” (1998: 277). However, by privileging the role of capital, and how capitalist relations produce nature, the agency of nonhumans is neglected (Bakker and Bridge 2006; a point I explore in sections 2.3.3 and 2.4.2).

Furthermore, Smith’s argument tends to discuss the human labour that produces nature in the abstract, thus Ekers and Loftus argue for a more “socially and culturally textured account of practical activity – and of those engaged in this activity” (2012: 235) within understandings of the production of socionature. As Guthman argues, it is “not only regions and spaces, but also bodies are made different in their health and capabilities, made dispensable or valuable, degraded or enhanced in the production process” (2011: 238). Indeed, we need to understand which social groups actually come to perform the actions and practices of producing natures and pay attention to the lives, embodied experiences and meanings of those engaged in processes that transform natures. There is no universal subject that labours; there are multiple axes of difference that dissect people’s positionality. As highlighted by Mitchell (1996), natures are produced through practical labour, however, they embody the specific histories of the classed, gendered, and racialised groups and relations that contribute to their making. The ideological erasure of labouring acts that produce nature in historically and geographically specific ways, therefore, is literally “the lie of the land” (Mitchell 1996).

As Neil Smith later acknowledged, we need to focus upon the production of nature in “all its multifold forms” (2011: 262) in ways that “takes seriously the realities of the production of nature interwoven with deep emotional significance” (Smith 1998: 280). As Ekers and Loftus argue, we must also draw our attention towards the “*subjects* who labour that both produce and consume natures” (2012: 243; emphasis in original). Moreover, expanding our understanding of material activity to “encompass reproductive and creative work” (Loftus 2012: 18) is crucial to comprehending the bodily affective dimensions of the production of nature; significantly, this “might be found within waged and unwaged work, within playing, thinking, movement and protest” (Loftus 2009: 160). As feminist scholars have continuously contended, asserting the importance of social reproduction to everyday life is crucial to disrupt masculinist production-orientated analysis, which ignores the role of the body as a site of political contestation and focus of capital accumulation (Katz 2001). Consequently, it is important to examine the sensuous everyday material and affective labour, not just the relations between capital and labour that produce socionatures. As Guthman has argued, the way in which Smith examined labour, meant that:

only humans can labour. While other bodies may work, labour remains the conscious and intentional transformation of nature for use. Labour is thus defined through personhood, and personhood is a human subject inside a skin. The worker-subject re-works (outside) nature not only through manipulation but also intention (2011: 236).

However, owing to insights from posthumanism, “we begin to see the limitations of this formulation” (Guthman 2011: 236), which to some extent disregards the liveliness of nonhumans and prioritises the practical activity of humans for understanding the production of nature. In this sense, the importance placed upon human labour weakens the prominence of companion species (Haraway 2008). Indeed, the more-than-human play important roles in the metabolic flows that produce the human subject and socionatural environment (a topic I return to in section 2.4.2). I now proceed to examine the notion of hybridity, as conceptualised within Actor Network Theory (ANT), and its influence on UPE scholarship, particularly in relation to understanding the agency of nonhumans.

2.3.3 Socionature and Hybridity: The Co-constitution of 'Nature' and 'Society'

At the core of UPE scholarship is the interwoven status of socionature. Combining Marxist and poststructuralist theory, Swyngedouw (1996, 1999, 2004, 2006) introduces the neologism 'socio-nature' to illustrate the false distinction of the nature-society boundary, and highlights that the city is a product of diverse socionatural flows and thus, a hybrid. In this context, the natural and the social are so deeply entwined that their separation, in both thought and practice, is impossible (Castree 2001a). Indeed, the notion of the city as a hybrid; co-constituted by natural and societal processes is central to UPE investigations of the production of socionature. The influence of ANT is explicitly evident in much UPE scholarship (see, for example, Swyngedouw 1996, 1997a, 1999, 2005; Kaika 2005). In this section, I outline the fertile and at times, antagonistic theoretical cross-fertilisation, between these two schools of thought. Drawing on the work of hybridity by Bruno Latour (1993) and Donna Haraway (1991) the city has been characterised as a 'cyborg' inhabited by socio-material hybrids. Gandy asserts the cyborg is consistent:

with neo-Marxian conceptions of relations between material and abstract space since the cyborg is at root both a materialist concept and an idealist construct that eschews a purely phenomenological or fragmentary worldview through its recognition of multiple and interconnected collectivities of agency (2005: 37).

For Haraway, a cyborg is a "hybrid of machine and organism, a creature of social reality as well as a creature of fiction" (1991: 149). Thus, cities, as interconnected 'ecosystems', are essentially "cyborgs" (Haraway 1991). Haraway's (1997) explicitly feminist and Marxist take on ANT have been particularly influential in understanding the hybridised nature of environments. Thus, hybrid natures or "quasi-objects"²¹ (Latour 1993) such as the re-engineering of rivers or the construction of houses are a specific historical result of complex assemblages of associational socio-environmental processes. The idea of distributed agency (Callon 1986) has been particularly central in understanding how the city itself is a product of socionatural relations, where nonhuman actants "play an active role in mobilizing socio-natural circulatory and metabolic processes" (Heynen *et al.* 2006: 12). For instance, Gandy (2002, 2005) and Robbins and Fraser (2003) have demonstrated how biophysical actants

²¹ For Latour, "quasi-objects are in between and below the two poles (nature and society), at the very place around which dualism and dialectics had turned endlessly without being able to come to terms with them" (1993: 55).

shape environmental transformations and change capitalist landscapes, actively contributing to their form. Significantly, nonhuman actants do not always comply with the requirements of profit-driven urban metabolic relations (see Wolch 1996; Whatmore 1999; Kirsch and Mitchell 2004; Latour 2005).

As a system of thought ANT is a relational approach to ‘society’ where power is a dispersed performative process. Power is diffused throughout assemblages of humans and nonhumans where the ability of actants to recruit, strengthen, or resist associations with other objects, shapes and structure power (Latour 1986, 1993, 1994; Law 1994). The focus upon the agency and sociability of nonhuman actants (such as Callon 1986; Latour 1993, 2005; Whatmore 2002) is central to ANT. However, the notion of symmetry, in which power is a diffused and relational enactment of human and nonhuman activity, has caused Marxists to reject a ‘strong’ reading of ANT. Therefore, while one of the major criticisms of UPE is that the independent agency of nature is often neglected, Castree argues, “geographical advocates of a strong ANT agenda risk ignoring the possibility that some actants ‘marshal’ the power of many others and, in so doing, limit the latter’s agency and circumscribe their existence” (2002: 135). Both Castree (2002) and Gareau (2005) suggest that protagonists of ANT are frequently reluctant to concede that some actants and their assemblage networks command and conserve more power than others. Moreover, it is also argued that there is often a tendency in ANT to prefer to investigate the micro-level and describe the relations between individual actants through a ‘generalised symmetry’²² (Rudy 2005). Conversely, Marxist UPE scholars investigate metabolic circulatory processes within a political economic framework that remains attentive to questions of power and inequality at the macro-level of analysis (Brenner *et al.* 2011). Therefore, while recognising the agency of nonhuman actants, UPE insists on the “social positioning and political articulation of such ‘acting’” (Swyngedouw and Heynen 2003: 902).

This tension highlights a critical ontological difference between ANT and Marxism, where for the latter the “priority resides with social relations of production (including nature) that

²² The concern over ‘generalised symmetry’ and the ‘flattening’ effects of ANT in terms of relations, however, are more a reading of those who use ANT as a theory rather than a method. The impression of a ‘flat’ sense of relations is probably more a result of a recurrent misreading of Latour, where he has explicitly stated, “ANT is not, I repeat is not, the establishment of some absurd ‘symmetry between humans and nonhumans’. To be symmetric, for us, simply means *not* to impose a priori some spurious *asymmetry* among human intentional action and a material world of causal relations” (Latour 2005: 76; emphasis in original).

govern interactions between humans and objects within a capitalist political economy, not the objects themselves as proponents of ANT would have us believe” (Perkins 2007: 1153). Indeed, some have argued that incorporating even ‘weak’ variations of ANT detracts from the fundamental tenants of Marxist geography (Brenner *et al.* 2011). However, many scholars have called for a theoretical reconciliation between relational forms of Marxism and ANT perspectives (Castree 2002; Gareau 2005; Perkins 2007), highlighting their mutual materialist basis and rejection of the binary of nature and society.

It is argued that historical-geographical materialist perspectives such as Marxist UPE, however, are “concerned with the contested making of socionatural networked arrangements, rather than with a mere dense description of such networks” (Swyngedouw and Heynen 2003: 903). Thus, there seems to be a sentiment amongst critical/radical (Marxist) scholars that ANT is inadequate at dealing with issues of difference, inequalities and power relations (Haraway 1997; Rudy 2005; Swyngedouw and Heynen 2003) and insufficiently critical, theoretical and explanatory. Consequently, Marxist UPE has tended to embrace the insights of ANT in relation to hybrid networks and nonhuman actants, however, reject other (fundamental) aspects of the orientation as ‘uncritical’. Accordingly, Castree and MacMillan (2001) argue, applying this ‘weak ANT’ has enabled Marxist scholars to reflect upon the agency of nonhuman material and beings, while upholding the notion that power originates from traceable and discernible capitalist relations. Therefore, while there has been a move to comprehend urban environments as hybrid assemblages, where the agency of nonhumans has been given greater consideration, thus strengthening Marxist UPE theoretical understanding, it has been selective in its uptake and influence.

Thus, I now turn to examine the concept of metabolism utilised by UPE scholars to denote the circulatory flows which constitute our hybridised socio-material world, which has “no clear boundaries, centres, or margins” (Heynen *et al.* 2006: 12). I also examine the notion of ‘metabolic rift’, used to describe the alienation experienced under conditions of capitalist organisation, given its increasing prevalence within discussions of urban food production (McClintock 2010; Sbicca 2014). I explore the opportunities urban food growing practices provides for radically rearranging political ecological relationships and therefore de-alienating labour, land and food (McClintock 2010).

2.3.4 Metabolism: The Transformation of Nature and the Metabolic Rift

The notion of metabolism is central to UPE and is “more complex and much different in its intellectual and political context than its traditional use in the urban field” (Keil 2005: 642). The concept can be traced to the early 19th century in which it was first used to “describe chemical changes within living cells” (Wachsmuth 2012: 506) and later to “characterize processes of organic breakdown and recomposition, within individual organisms (at a cellular scale) and between organisms and their environment” (Wachsmuth 2012: 506). Clearly then, the metaphors of ‘metabolism’ and ‘circulation’ have a “long conceptual, cultural, social, material, and arte-factual history” (Swyngedouw 2006: 22). They signify movement, change, dynamism and flux and convey a sense of transformation that is both constructive and destructive. Therefore, as a concept, metabolism can broadly be comprehended as “the relationship of exchange within and between nature and humans” (Clausen and Clark 2005: 425). For Gandy, notions of urban metabolism must be understood as relational and hybridised, rather than functional-linear, which he argues, “consistently failed to grasp the way in which urban space is historically produced” (2004: 364). He argues a dialectical and hybridised conception of urban metabolism can replace a scientific model (associated with concepts such as ‘ecological footprints’) by focusing on “a historically driven conception of urban nature which is rooted in the political dynamics of capitalist urbanization as a contested and multi-dimensional process of urban change” (Gandy 2004: 374).

The notion of urban metabolism in which Swyngedouw (1996, 2006) develops, draws heavily from Marx’s original formulation of ‘social metabolism’. Marx appropriated and modified the term ‘metabolism’ (*stoffwechsel*) from the German agro-chemist Justus von Liebig’s use of the idea within soil chemistry (Foster 2000) to describe both the human transformation of nature through labour and the capitalist system of commodity exchange. Specifically, Marx (1981) appropriated von Liebig’s concept in *Capital* to explain the decline in soil fertility as a consequence of 19th Century capitalist farming methods in Europe (Gunderson 2011) and to describe the increase of “an irreparable rift in the interdependent process of social metabolism, a metabolism prescribed by the natural laws of life itself” (Marx 1981: 949). The notion of metabolism is particularly “useful for unravelling the socionatural relations inherent to urban environmental *change*. This is because *change* tends to be considered in too neutral a way, too often” (Heynen 2006a: 502; emphasis in original).

The concept of ‘metabolic rift’ has been systematically developed by social scientists particularly to explain changes in nutrient cycling under capitalist agriculture and to understand contemporary environmental problems (Clark and York 2005; Clausen and Clark 2005; Clark and Foster 2009; Foster 1999, 2000²³; Gunderson 2011) and current ecological crises as “rupture[s] in the metabolic processes of a system” (Clausen and Clark 2005: 427). Indeed, the notion of metabolic rift has been utilised to investigate the ways in which small-scale or sustainable agriculture can counter this fissure (Clausen 2007; McClintock 2010). Foster and Magdoff (2000) argue, social scientists’ curiosity in sustainable agriculture can be directly traced to Marx’s use of soil science in demonstrating the detrimental environmental consequences of agriculture which is embedded in a capitalist economic system. Furthermore, despite the production, storage and distribution of food being central to urban metabolic flows, industrial and post-industrial imaginaries have consigned the importance of food, both ideologically and physically, to the hinterland (Lim 2014; Steel 2009). McClintock contends that there are three distinct, but interdependent forms of metabolic rift:

(i) *ecological rift*, which includes both the rift in a particular biophysical metabolic relationship (such as nutrient cycling) and the spatio-temporal rescaling of production that follows in its wake; (ii) *social rift*, arising from the commodification of land, labour and food at various scales and (iii) *individual rift*, the alienation of humans from nature and from the products of our labour (2010: 193; emphasis in original).

However, as McClintock (2010) asserts, metabolic rift theory has excessively concentrated on ecological rifts at the global scale (see Foster *et al.* 2010), reinforcing the dualism between town and country, and has not adequately attended to individual and social rifts functioning at local (however, always interconnected) scales within cities. Both local food projects and the animal rights movement have presented themselves as alternatives that can ‘repair’ the socioecological rifts created by modern agrifood business (Gunderson 2011). However, as Sbicca posits, greater fine-grained understanding is needed in relation to how people “imagine, resist, and create alternatives that might mend metabolic rifts” (2014: 818). Crucially, this should not be enacted and imagined in an archaic manner, in terms of returning to a mythical, pristine, ‘harmonious’ relationship to nature, but in constructing diverse socioecologically just relationships. It is posited that urban food gardening projects are

²³ See Harvey 1996: 194-196 for a general critique of John Bellamy Foster’s approach to environmental sociology.

particularly pertinent to explore this metabolic ‘healing’, as such activities can be characterised “as a counter-movement in response to economic crisis and to the commodification of land and labour” (McClintock 2010: 202). However, it is crucial to articulate that for Marx, there is no route ‘back’ to an ancient (idealised) relationship with nature and for Harvey, overcoming alienation in relation to the ecology of modern cities should not be conceived in an atavistic manner and therefore:

we cannot somehow abandon in a relatively costless way the immense existing ecosystemic structures of, say, contemporary capitalism in order to ‘get back close to nature’ [...] The created environments of an urbanizing world, their qualities and particular difficulties [...] have to move to the center of our attention relative to much of the contemporary preoccupation with wilderness (Harvey 1996: 185-6).

By considering ecosystems as ‘constructed’ socionatures, it becomes apparent that the “environment of the everyday is produced through both capitalist and non-capitalist activity” (Loftus 2009: 160), where “there can be no reconnection with some mythical preexisting, pristine nature” (Loftus 2012: 32). In the following section I examine what these insights suggest for an everyday environmentalism grounded in the urban (Loftus 2012).

2.3.5 The Urbanisation Process and Everyday Environmentalisms

The analytical dissolution of the nature-society binary demonstrates that ‘urbanisation’ is a process of socio-metabolic transformations. As Swyngedouw argues, urbanisation is “primarily a particular socio-spatial process of metabolizing nature, of urbanizing the environment” (2004: 8). This disrupts the idea that the city is the opposite of ‘nature’ and instead focuses upon the power relations and processes through which the “city is constituted as a socio-natural assemblage” (Loftus 2012: 3). Consequently, in this context, we can move beyond conceptualising “the city as the antithesis of an imagined bucolic ideal” (Gandy 2006: 72). Thus, Harvey succinctly argues, there is “nothing unnatural about New York City” (1993: 28), or any other city for that matter. Furthermore, it is “inconsistent to hold that everything in the world relates to everything else” and then fail to integrate “understandings of the urbanizing process into environmental-ecological analysis” (Harvey 1996: 427).

Understanding nature and society as materially and discursively co-produced, highlights there is no singular Nature, but rather a variety of diverse (and therefore, potential) natures. This insight can lead to a politics that seeks to create radically different, and socioecologically just natures, based on “imagining new ways to organize processes of socio-metabolic transformation” (Swyngedouw 2007: 38). This is contrasted with the “fantasy” of “sustainability” as conceived of under the postpolitical condition, which “imagines the possibility of an originally fundamentally harmonious Nature, one that is now out-of-synch but which, if ‘properly’ managed, we can and have to return to by means of a series of technological, managerial, and organizational fixes” (Swyngedouw 2007: 23). The notion of sustainability commonly celebrated suggests the mutual dependence of environmental protection, economic growth and social equity; however, the latter has been systematically and problematically marginalised within an emerging postpolitical consensus (Swyngedouw 2007). This invariably leads to the deeply inequitable relations that are entangled in contemporary ecologies to be obfuscated within environmental debates, and therefore, never questioned (Loftus 2012). Thus, UPE scholars have argued that socioecological sustainability can only be achieved by enhancing the “democratic content of socio-environmental construction by means of identifying the strategies through which a more equitable distribution of social power and a more inclusive mode of the production of nature can be achieved” (Heynen *et al.* 2006: 13). Food growing initiatives have increasingly been posited as sites where interstitial tactics can be deployed to challenge alienation (McClintock 2010), where grassroots activities that evade (elements of) capital and the state, have the potential to disrupt or create ruptures in the urban fabric that seek to engender sustainable metabolisms and “develop less commodified modes of sociality” (Sbicca 2014: 827).

Significantly, the notion that nature is *socially* produced challenges “contemporary environmentalists’ preoccupation with the defence of pristine landscapes that are supposedly untouched by human interventions” (Ekers and Loftus 2012: 236). Indeed, by acknowledging that nature and society are so intimately entwined that it is impossible to separate the two, expands (or refocuses) environmental concerns to the everyday and mundane spaces of urban areas. The environmental justice movement has productively highlighted the urban nature of environmental problems, emphasising the importance of equal protection from environmental pollution and procedural justice, which accentuates the right to be included in environmental decision-making (Agyeman *et al.* 2002; Agyeman and Evans 2004). Understanding the environment as something lived, experienced on a deeply intimate and global scale, renders

visible the various ways people can transform the ecology of their neighbourhood into a laboratory of creative experimentation for ecological politics. Thus, an UPE informed everyday environmentalism (Loftus 2012) is particularly pertinent for exploring the socio-political potential and challenges of CUFGs, where different socioecological relationships can be imagined and enacted. As Mansfield *et al.* (2015) have argued, environmentalism becomes very different when we understand the ‘environment’ as intensely socioecological, where multiple socionatures can be fostered and contested, rather than preserved or protected, with reference to an external, pristine Nature. Furthermore, an everyday environmentalism which takes at its starting point the small acts, implicit activisms (Horton and Kraftl 2009) and creative ‘doings’ of urban residents in relation to the complex urban ecologies in which they live, draws attention to everyday concerns and a politics of collective care directed towards forms of banal socioecological disadvantage, rather than a spectacular external Nature. In the following section, I examine how UPE has explored issues relating to urban food, particularly socio-economic inequality, in the sense of the immense differentials which exist in terms of determining access to basic resources in the form of nutritious, affordable, culturally appropriate food and opportunities to assert the right to urban metabolism (Shillington 2013).

2.3.6 Urban Political Ecological Perspectives on (Urban) Food and Inequality

Food has remained an under-investigated topic within UPE scholarship, despite Keil’s (2005) call for greater attention to the complexities of the PE of food and food security. There are notable exceptions that have explored urban food gardens (Domene and Sauri 2007; Shillington 2013; McClintock 2014; Classens 2015), the socionature of organic food (Alkon 2013), urban hunger (Heynen 2006b), and food deserts (McClintock 2011), however, the production and consumption of food has remained an under-researched subject matter. This thematic gap within UPE is unexpected, particularly due to the fact that early PE approaches explored the “metabolic rift” that caused the “decline in the productivity of agricultural land on the one hand, and the problematic accumulation of excrement, sewage and garbage in the city on the other” (Swyngedouw 2006: 23). Food is crucial to producing our socionatural bodies, it allows us to survive and labour and therefore, vital for social reproduction and the continuation of everyday life (Heynen 2009). Food, it is argued, is “in many ways the ultimate socio-nature” (Alkon 2013: 664). Eating is a fundamental human need for existence in which the species of plants and animals that humans consume are living organisms, manipulated, cultivated and shaped by agriculture and multiple networked technologies. Indeed, food

(calorific matter, cultural product, spiritual vessel, economic commodity) is implicated in the “socionatural production of multiple spaces: body, home, city, and beyond” (Shillington 2013: 104) and is never neutral. Food, therefore, is a highly complex socionatural hybrid:

generally sold as a commodity, valued and distributed according to social standards and unequally available based on hierarchies of race, class, gender, national status etc. But as it is consumed, food once again becomes nature in the form of human bodies (Alkon 2013: 667).

Moreover, the processes of food distribution, along with food preferences, taboos and cultural expectations are socially constructed. Levins and Lewontin suggest:

[e]ating is obviously related to nutrition, but in humans this physiological necessity is imbedded in a complex matrix: within which what is eaten, who you eat with, how often you eat, who prepares the food, which foods are necessary for a sense of well-being, who goes hungry and who overeats have all been torn loose from the requirements of nutrition and the availability of food (1985: 260).

Urban food production practices, spanning the complex ecologies of intimate spaces of the home (Shillington 2013) and metropolitan urban vegetable gardens (Domene and Sauri 2007), demonstrate that socioecological processes produce urban space and consequently, urban metabolism. Across the world, the growing of food enables people to create liveable urban spaces that help challenge socioecological inequalities, and “create particular ecologies that assist in asserting their rights to the city, or more specifically, their right to urban metabolism” (Shillington 2013: 104; Heynen *et al.* 2006). Lefebvre’s notion of the right to the city was “formulated as a transformed and renewed *right to urban life*” (1996: 158; emphasis in original; Harvey 2003; Marcuse 2009). Crucially, this was articulated as the right to produce, participate, and live in a *new* city; the right to create different urban forms that reflect the everyday desires and struggles of ordinary citizens, not the dictates of capital. Therefore, the right to urban metabolism is concerned with the “ability of individuals and groups to produce socioenvironmental conditions which create socially and ecologically just living conditions for themselves while at the same time not violating others’ ability to do the same” (Shillington 2013: 106).

In this sense, urban gardens are both a means to ensure access to healthy food and seen as part of a larger movement which enables people to reclaim a greater degree of power in determining the management of food and environmental systems, encapsulated with the concept of food sovereignty, which is a community's "right to define their own food and agricultural systems" (Holt-Giménez 2011: 340; drawing upon *La Via Campesina*²⁴). Thus, it is argued, urban food gardening can facilitate the production of more desirable socioecological conditions through complex relations that continually need to be sustained in the reproduction of garden ecologies and the entanglements that participants maintain (or challenge and alter) to create material and emotive spaces. However, as Domene and Sauri (2007: 288) demonstrate, the kinds of socioecological landscapes produced (in terms of aesthetics, use, and ownership) are linked to broader "issues of urban development, urban sustainability, and the social preferences for certain urban natures". Through their exploration of urban gardens in Barcelona, Spain, they argue that specifically "class-produced natures" are endowed with particular material and discursive practices; highlighting that socioenvironmental change is never neutral (Domene and Sauri 2007: 288).

2.3.7 The Socionature of Collective Urban Food Gardens

Drawing upon the insights of UPE discussed in this chapter, I conceptualise CUFGs as socionatural hybrids, which helps to disrupt the pervasive assumption that "urban gardens are 'good' because they bring 'nature' into the city" (Classens 2015: 236). Adopting an UPE approach enables an analysis of the political-ecological processes through which specific socionatures are produced, who benefits, and the dynamics that are needed to maintain them into the future. Failing to scrutinise the multidimensionality and co-constitutive dynamics between nature and society in relation to CUFGs results in producing an uncritical discourse (Classens 2015) that effaces the inherently political relations that underpin their creation and maintenance within and against variegated "actually existing neoliberalism" (Brenner and Theodore 2002; Peck and Tickell 2002). As Sbicca argues, given the uneven, incomplete nature of neoliberalisation, "many interstitial social spaces operate as incubators of resistance for progressive and radical food activists", however, they are also often "imbued with neoliberal subjectivities and tactics" (2014: 823). Indeed, McClintock (2014) argues, urban gardens are contradictory spaces; they are political entanglements of contestations and power

²⁴ An international movement of peasant farmers' organisations that advocates for food sovereignty.

dynamics, where multiple agendas co-exist or conflict with each other. As McKay (2013) has demonstrated, communal gardens are deeply political sites, historically venerated by both the ideological Left and Right, where the material and discursive role of ‘nature’ is utilised to promote various socio-political and moral objectives. While gardens can be conceptualised as sites of control, etching ideology onto the landscape (Cosgrove 1985), focus has recently orientated around the intimate, passionate material relationships humans develop with nonhumans (Hitchings 2003; Degen *et al.* 2009), thus, drawing attention to the micro-politics and affective dimensions of the production of socionatures.

As Mansfield *et al.* argue, “scholars have convincingly demonstrated the ubiquity and complexity of social natures, but relatively little attention has been paid to understanding the politics internal to these social natures” (2015: 285). Thus, this thesis asserts that conceptualising CUFGs as socionatural hybrids and focusing on the particularities of socioecological relations, in which the case studies are grounded, enables an embodied exploration of the alliances, antagonisms and detachments maintained (or challenged). This is particularly important given that urban food gardening is increasingly characterised as a politically informed praxis-orientated process enacted to gain (some) social control over the production of (intimate) urban ecologies by asserting use value, over exchange value and profit (Certomà and Tornaghi 2015; Tornaghi 2014; Tornaghi and Van Dyck 2015). I now turn to discuss what I characterise as a more embodied UPE, which argues for the role of the material labour and emotive-affective processes that produce socionatures in specific, grounded ways rooted in the everyday life of ordinary citizens, to inform investigations of urban political ecologies. I conclude the chapter by arguing that taking care practices seriously within UPE enables the role of the senses, emotions and ethical obligations to be given prominence in an analysis of CUFGs as socionatural assemblages, in which various urban agents, power relations and negotiations structure intimate urban ecologies.

2.4 Towards a More Embodied, Situated, Care-Full Urban Political Ecology

So far, I have discussed the explicitly relational Marxist-inspired UPE scholarship reflecting the literature’s influential position in excavating the deeply political human-environment relations intertwined in the production of socionatures. However, recent reflexive evaluations of UPE (see Heynen 2014; Lawhon *et al.* 2014) have expressed concern that Marxist-

orientated investigations have placed too much emphasis on the structural capitalist processes that produce urban natures to the detriment of other practices, therefore, called for UPE to engage with a diverse range of theoretical influences. Indeed, UPE has been criticised for failing to incorporate a range of theoretical approaches, such as poststructuralism and posthumanism, into their investigations, which characterise PE more broadly (Grove 2009; Gabriel 2014; Hinchliffe 2008). Indeed, PE is not characterised by a singular theory or focus, but rather a multiplicity of topics and philosophical influences, particularly ‘second generation’ PE, which consistently remains attentive to the deeply political nature of socioecological struggles (Rocheleau 2008; Robbins 2012).

Based on these critiques, this section argues for a more ‘situated’, theoretically heterogeneous UPE, taking inspiration from feminist theory, poststructural insights and relational Marxism as advocated by Lawhon *et al.* (2014). While it is crucial to retain focus on the deeply unequal production of the urban environment, this move necessitates us to “reformulate our understanding of power as relationally constructed and enacted [...] as diffuse, residing nowhere but enacted everywhere” (Lawhon *et al.* 2014: 508). I argue that UPE scholarship can be strengthened by incorporating a variety of perspectives into investigations of the production of socionatures (see Gabriel 2014) that account for both the structural and agential processes that form these entanglements by adopting a relational ontology. Poststructural understandings of relational space are particularly pertinent (see Massey 1991, 2005; Murdoch 2006), which focus on the processes and interrelations that interweave to constitute space that becomes a “meeting place” (Massey 1991: 28), where these relational flows intersect. I argue, considering how multi-sensuous affective intensities and emotions circulate through and shape socionatural assemblages can deepen understandings of the transformation of politicised urban environments. Indeed, UPE has largely failed to articulate the affective dimensions of metabolism and how these circulatory processes are experienced at the intimate, personal scale of everyday life, thus this thesis aims to fill this lacuna.

2.4.1 *Situated Urban Political Ecology: Everyday Practices and Embodied Relations*

Within UPE the importance of the everyday has increasingly been emphasised (see Loftus 2012; Lawhon *et al.* 2014), where exploring the city ‘from the ground up’ and investigating the everyday practices of citizens that endeavour to produce socionatures in more

socioecologically sustainable ways, provides fertile terrain to examine the internal politics of socationatures (Mansfield *et al.* 2015). Lefebvre defines everyday life as:

residual, defined by ‘what is left over’ after all distinct, superior, specialized, structured activities have been singled out by analysis [...] Everyday life is profoundly related to *all* activities, and encompasses them with all their differences and their conflicts; it is their meeting place, their bond, their common ground (2014: 119; emphasis in original).

As Lawhon *et al.* argue, everyday practices “can be a mode through which to appropriate power and shift it towards a different use. The everyday provides a pragmatic site through which to actively participate in the (re)production of a different order of things, a different culture and society” (2014: 511). Lefebvre (1994) compares everyday life to ‘fertile soil’ from which transformation must necessarily emerge. Indeed, for Lefebvre, the everyday mundane holds creative possibilities for change:

Everyday life is made of recurrences: gestures of labour and leisure, mechanical movements [...] hours, days, weeks, months, years, linear and cyclical repetitions, natural and rational time, etc.; the study of creative activity (of production, in its widest sense) leads to the study of re-production or the conditions in which actions producing objects and labour are re-produced, re-commenced, and re-assume their component proportions or, on the contrary, undergo gradual or sudden modifications (1994: 18).

Indeed, for Lefebvre, there is “a power concealed in everyday life’s apparent banality, a depth beneath its triviality, *something extraordinary in its very ordinariness*” (Lefebvre 1994: 37: emphasis in original). Indeed, for Lefebvre, creativity and play were crucial to his critique of everyday life, which was somewhat an attempt to extend the margins of artistic practice into the quotidian, placing importance upon creative action in the pursuit of a more socially just society. In this sense, a critique which emerges from the everyday (Lefebvre 2014) is based upon lived experience, developing from the practices which make the world, through entanglements of humans and nonhumans in the production of environments, revelling “in the dirt and grime, the anomie and the creativity, of city life” (Loftus 2012: xiv).

Mobilising Lefebvre’s notion of everyday life as a theoretical lens to expose the political ecology of hunger and access to food, Heynen argues:

Through the *everyday*, the universal needs of eating and bodily/urban metabolism can be articulated in a way that many political economic/political ecological perspectives fail to articulate through their explicitly top-down, and narrow structural perspectives (2006b: 137; emphasis in original).

This statement highlights the tendency of UPE scholarship to focus upon structural, top-down analysis while untangling the material metabolisms that permeate the contemporary condition. Indeed, metabolism – the transformative, interweaving interrelationship of social and biophysical processes – is primarily discussed in relation to large-scale changes. While UPE has sought to politicise the notion of ‘change’, demonstrating that it is never neutral and fraught with unequal relations of power (Heynen *et al.* 2006), there have been scarce investigations grounding the conception of metabolism in everyday embodied experiences. Indeed, scholars aligning with FPE have asserted that UPE has tended to focus on the ‘macro-scale’ of social power relations, failing to fully consider the subjective, embodied, emotive dimensions of urban environmental change (an orientation FPE has productively examined). Drawing insights from feminist geography, cultural ecology and PE, it is argued, FPE “seeks to explain how women’s knowledges and the gender division of labor are critical in understanding environmental degradation and change” (Jarosz 2011: 308). More broadly, a FPE approach provides greater “focused attention on constructions of social difference and micropolitics within the scale and spaces of the everyday, an area often under-explored within UPE” (Truelove 2011: 145).

Indeed, this thesis draws inspiration from FPE and aims to provide a detailed ethnographic account of the everyday micropolitics of CUFGs and how these grounded experiences interact, and are shaped by, broader structural processes. Thus, by considering macro-level forces “without allowing them to over determine the micro-level picture” renders visible the specificity, complexity and interconnected nature of people’s “relationships to their environments in different contexts” (Hovorka 2006: 209-10). FPE has therefore, “increased the visibility” of the ‘micro-scales’ of the household and neighbourhood, which are “usually neglected or rejected in the political economy literature” (Abbruzzese and Wekerle 2011: 146). Significantly, FPE argues that locally grounded, embodied experiences of people are important “in the context of global processes of environmental and economic change” (Rocheleau *et al.* 1996: 4). Consequently, investigations of the “micropolitics of context,

subjectivity, and struggle” (Mohanty 2003: 225) illuminate the contested processes entangled within the affective and material production of socionatures.

While it is acknowledged that FPE “has had a predominately rural focus” (Truelove 2011: 145) it has been applied in other contexts (such as cities in the Global North and South) to investigate embodied experience, the micro-politics of unequal material conditions and care ethics (see Jarosz 2011). Indeed, Jarosz (2011) has argued that bringing care ethics and embodied care work into conversation with PE provides a productive avenue to ethnographically explore people’s motivations to undertake agricultural activities by focusing on the socionatural relations and politics of caring practices. Jarosz (2011) contends PE can be enriched by care scholarship which “attends to how nourishing oneself and others forms the basis of a politics of liberatory transformation that challenges the hegemonic discourses of neoliberalism” (Jarosz 2011: 308). Indeed, within broader PE, there is relatively little reference to, and examination of, the situated, grounded, collective multi-sensuous *caring* practices undertaken, in relation to transformative metabolic processes. Thus, this thesis aims to contribute an ethnographic study to address this omission, by bringing UPE into conversation with care scholarship. This is significant, as Hayes-Conroy and Hayes-Conroy (2013) argue, because a greater appreciation is needed of the ways in which everyday embodied, visceral practices and emotive relationships are shaped by, and entangled with, broader structural political economic forces.

Indeed, scholars aligned with FPE have recently (re)emphasised the importance of the affective and emotive body to the wider PE concerns of unequal structural power relations (Elmhirst 2011; Nightingale 2011; Sultana 2011; Hayes-Conroy and Hayes-Conroy 2013). The current work of Farhana Sultana has been particularly noteworthy for developing an emotional political ecology approach, which “elucidates how emotions matter in nature-society relations” (2015: 633, 2011; Singh 2013; Nightingale 2011). Indeed, Sultana has argued that focusing on the “embodied emotional geographies of places, peoples and resources” (2015: 633) can provide much needed depth to often abstract articulations of ‘resource struggles’ or metabolic processes. Thus, the production of socionatures are “as much about embodied emotions, feelings and lived experiences as they are about property rights and entitlements” (Sultana 2015: 634). Taking inspiration from this emerging scholarship and its assertion that emotions “influence outcomes of practices and processes of resource access/use/control” (Sultana 2015: 634), this thesis seeks to reveal how care (as an

affective state, practice and ethical obligation) also shapes the labour activities and politics of the production of socionatures. Indeed, Singh (2015) utilises the term affective labour, drawing upon Hardt and Negri's term (Hardt 1999; Hardt and Negri 2004), "to draw attention to the blending of emotional, cognitive, and bodily labor involved in taking care of the environment" (2015: 58). This highlights how embodied labour produces "not only material outputs but also affects" (Singh 2015: 58).

I argue that a care perspective highlights the complexity of emotions (Thien 2005) in relation to socioecological entanglements, however, crucially, highlights how emotions may or may not be implicated in everyday, embodied practices. Indeed, this thesis explores the diverse everyday care practices that coalesce in the formation and continual remaking of socionatures. I suggest that greater attention needs to be given to care as the basis for radical practices of everyday life (*Precarias a la Deriva* 2006) in relation to the socionatural transformation of urban nature that can produce more-than-capitalist relations and subjectivities. Considering the everyday, affective relations which lead people to 'care about' and 'care for' (Collins 2015) their socioecological environment by creating and maintaining CUFGs, highlights both the explicit and implicit everyday actions of citizens, where "implicit activism" are based on small acts and mundane practices (Horton and Kraftl 2009: 16). Notably, implicit activism are "politicised, affirmative and potentially transformative, but which are modest, quotidian, and proceed with little fanfare" (Horton and Kraftl 2009: 21). This draws our attention towards the everyday mundane forms of care practices that seek to enact social change. Thus, I argue that drawing upon diverse readings of care (discussed in Chapter 3) can lead to a more expansive and novel approach to understanding gardeners' motivations, situated embodied practices, the spaces that they (re)create together with nonhumans, and the emergent subjectivities that can both subvert and conform to neoliberal expectations.

2.4.2 More-Than-Capitalist Possibility: Entangling Humans and Nonhumans

As discussed in the previous section, various scholars have articulated a concern that UPE, in its particularly neo-Marxist manifestation, places too much emphasis on capitalist metabolic flows and a 'structural' conception of power, which consequently renders it particularly difficult to envisage an urban sphere outside of capitalism (Gabriel 2014). Indeed, capitalist relations, specifically in their neoliberal variety within this Marxist narrative, are so pervasive that it is often challenging to imagine 'alternatives' or even 'more-than-capitalist' expressions

of collective action and practices that do not emerge either from, or as a form of resistance to, capitalism (Gibson-Graham 1996, 2006; Grove 2009; Gandy 2012). For Gibson-Graham (2006), a post-capitalist politics accentuates the significance of caring for people and the wider socioecological environment as an ethical orientation. This confronts and challenges discourses of competition, personal responsibility with regard to inequalities, and processes of privatisation and unrestrained capital accumulation. This stance destabilises the structural relations between human and nonhumans in neo-Marxist ‘capitalocentric’ interpretations of UPE. Focusing on the prevalence of capitalist *practices* in shaping urban nature, therefore, does not reduce accounts of the city to an exclusively monolithic (neoliberal) capitalist space (Gabriel 2014). Indeed, Bennett has argued there is progressive potential in denying “capitalism quite the degree of efficacy and totalizing power that its critics (and defenders) sometimes attribute to it”, and therefore provocatively asks, “why should one bother to criticize what is inevitable or challenge what is omnipotent?” (2001a: 115-16). Consequently, pluralising the ‘economy’ (Gibson-Graham 2006) does not foreclose the possibility of socionatures to be contradictory or emancipatory spaces where embryotic forms of commons (de Angelis 2003, 2010; Linebaugh 2008; Gibson-Graham, Cameron and Healy 2013) are nurtured that prioritise sharing knowledge, skills and resources, based on collaborative and cooperative action.

Furthermore, the role of nonhumans and their agency has been inadequately incorporated into accounts of UPE (Grove 2009) to the detriment of exploring the multiplicity of forces that coalesce to produce urban nature, which I suggest is crucial for the investigation of CUFGs as truly human-nonhuman assemblages. As identified by Grove (2009), UPE approaches have failed to effectively explore the ‘cultural politics’ of what counts as ‘nature’ (Heynen 2014) and have tended to “gloss over the potentialities inherent in contested meanings of the non-human for radical politics” (Grove 2009: 208). As Shillington argues, “human relations with nature are not always rooted in the process of assigning an exchange value to that which they interact with/use” (2008: 773). Indeed, as sites where multiple socionatures are produced, CUFGs offer dynamic spaces to explore the entanglements of humans and nonhumans, where natures are valued other than for exchange or profit. Thus, the ecologies of care framework conceptualises the act of gardening as a collaborative effort between a multiplicity of entities, relations of care, and processes reworking urban metabolism into diverse socioecological configurations. As numerous scholars have highlighted, gardening is a “hybrid achievement”

(Power 2005: 39; Hitchings 2003), where the biophysical processes (and agencies) of plants, for example, are crucial to the productive ecologies of CUFGs.

Thus, rather than considering nonhumans purely in terms of their socially mobilised enrolment (by humans) to achieve particular exploitative or elite ends (such as in the work of Swyngedouw and Heynen 2003), I attempt to render the power and agencies of nonhumans visible in various socioecological relations entangled within the vernacular urban ecologies of CUFGs. Hinchliffe and Whatmore posit that it is the more-than-human dynamic interactivity that creates habitable cities, which demands attention to be placed on the “diversity of ecological attachments and heterogeneous associations through which the politics of urban nature is fabricated, rather than reading the political ecology of the city off *a priori* or abstract social divisions” (2006: 135). Indeed, numerous (corporeal, aesthetic, economic) socioecological relations can permeate urban gardens (Shillington 2008). Thus, following Bhatti *et al.* (2009: 73), multi-sensuous, tactile encounters that emerge while co-producing socionatures may lead to “caring through cultivating”, entangling emotional, affective and material relations.

As Gibson-Graham argues, “actively *connecting* with the more than human, rather than simply *seeing* connection”, is a deeply ethical project (2011: 2; emphasis in original), where a socioecological ‘being-in-common’ can be nurtured (Nancy 2000; Gibson-Graham 2003, 2006). Consequently, moments of enchantment, or a state of wonder, which is to “be struck and shaken by the extraordinary that lives amid the familiar and the everyday” (Bennett 2001a: 4) can enable care, action, revulsion and so on, and therefore, can assist in bringing about “socioecological transformations, offering greater momentum for mobilization than pure critique” (Buck 2015: 372). Participatory, experimental, immersive spaces such as CUFGs, therefore, can offer “room for enchantment” (Buck 2015: 376), however, this does not imply that these moments need to be associated with ‘nature’, as Bennett questions, “Can’t – don’t – numerous human artifacts also fascinate and inspire?” (2001a: 91). As Bhatti *et al.* (2009: 62) state in relation to gardens, “everyday life is full of enchanting encounters that work to provide creativity, emotional attachments, and prosaic pleasures”. However, crucially, rather than conceptualising moments of enchantment in somewhat romanticised terms, I argue that power is crucial to such experiences and therefore, enchantment “is influenced by who is doing the enchanting, designing, making, and relationship building” (Buck 2015: 376). Focusing on the actual everyday grounded care practices and urban

metabolisms that are enacted to produce the ‘urban’ enables an exploration of the production and maintenance of socionatures and in this case, CUFGs – not as an arrangement of fixed relations driven by an underlying and overarching mono-capitalistic force – but as a series of indeterminate entanglements in which a range of humans and nonhumans coalesce in diverse and unpredictable ways that are implicated in the very making and remaking of cities.

2.5 Conclusion

This chapter provided a detailed examination of the relational UPE insights which I draw upon to develop the ecologies of care framework. I argue, investigating how a politics of care is implicated in the everyday practices and the emotional and embodied facets of the production of socionatures, highlights the contradictory processes that simultaneously empower and subjugate deeply sensuous actions by collectives. Thus, examining the production of socionatures requires a framework that attends to the complexities of everyday life and enables an exploration of the emotional and affective motivations, experiences and labour of participants, while scrutinising the deeply political socio-material forces that produce uneven socioecological relations. I argue, combining insights from UPE and care literature provides a pertinent avenue to explore the complex relations and practices that create, maintain and sustain CUFGs. Thus, I now turn to elucidate the dimensions of care that underpin the ecologies of care framework.

CHAPTER 3

THE DIMENSIONS OF CARE

3.1 Introduction

In this chapter, I outline the multidimensional notion of care that informs the ecologies of care framework I utilise to explore CUFGs. Clarification is particularly important given that the word ‘care’ in contemporary everyday usage is primarily associated with health-related fields and therefore, has become synonymous with a form of concern-responsive action for those who may be ill or frail. I argue, we need to better understand what care is, in all its complexity and ambivalence, in order to develop a holistic conceptualisation of care as an approach to practices and encounters in which people cultivate in their continuous relations with co-produced socioecological worlds. Drawing on a diverse range of literature including feminist care ethics and practices of care scholarship, particularly, insights from feminist Science and Technology Studies (STS)²⁵, I identify three interconnected dimensions of care: namely, care as an ethical obligation, care as a practice and care as an affective state (corresponding with Puig de la Bellacasa 2011). I argue, only by understanding these various interwoven elements of care can its emancipatory potential and challenges in relation to situated ecologies of care be explored.

Despite the centrality of care to human (and nonhuman) flourishing, this importance “has not been reflected in the scholarly attention it receives” (Mol *et al.* 2010: 7), therefore:

for a long time care figured in academia as a more or less tedious practical necessity, rather than as an intellectually interesting topic. Or worse: care hardly figured at all. It was relegated to the private realm: there was no need to study it, or talk about it in public settings. Someone or other just needed to get on with it (Mol *et al.* 2010: 7).

Care theorists have emphasised the centrality of care to the flourishing of all beings and entities and therefore, its importance as a topic of investigation. Consequently, in recent years there has been increasing engagement with care in human geography to explore the complex

²⁵ I use the term ‘feminist STS scholars’ to refer to academics who are active in the field of STS and in varying ways find inspiration in, and also contribute to, feminist theory and practice. However, it is crucial to acknowledge that these scholars are a highly heterogeneous group, with diverse research interests and deploy a variety of approaches.

spaces, practices and sites of care (see Bondi 2008; Cloke 2002; Conradson 2003; DeVerteuil and Wilton 2009; Lawson 2007, 2009; McDowell 2004; McEwan and Goodman 2010; Milligan and Wiles 2010; Popke 2006; Smith 1998; Smith 2005; Staeheli 2003; Staeheli and Brown 2003). Within this thesis I endeavour to contribute to, and strengthen, this growing body of research by placing care at the centre of this critical exploration of CUFGs. Critically exploring the multiple ecologies of care through sustained ethnographic observation enables the researcher to enrich the analysis with detailed observations of bodies, plants, tools and materially heterogeneous practices, therefore, highlighting the affective dimensions of care and the everyday ethical relations that permeate socioecological relationships. Indeed, care can be expressed in various ways: “it may be verbal, visual, tactile, intuitive, tacit, unconscious and so on” (Bondi 2008: 262). By situating care as an essential part of how we relate to a multiplicity of others, I seek to lift the “aura of invisibility” (Bowden 1997: 5) that surrounds the importance of care in everyday life (Barnes 2012). In the following sections, I outline the three dimensions of care separately, only in order to make visible and discuss in detail these components, however, in reality they coalesce to constitute the entirety of ‘care’.

3.2 Care as an Ethical Obligation

A key body of scholarship that has been particularly influential to a diverse array of care perspectives is care ethics literature, developed primarily by feminists (predominately from North America and Europe) since the early 1980s (see Gilligan 1982; Tronto 1993). In contrast to other traditions in ethics, such as the ethics of justice, care ethics highlighted that in practice, universal principles are rarely productive in moral deliberation and instead situated, context-dependent solutions to specific problems need to be determined. At the core of this body of work, is a powerful critique of the autonomous, rational, Cartesian subject and the insistence of an interrelated, affective web of care in which everyone is embedded. In this context, independence is a delusion, therefore, to care is to recognise and accept an obligation to look after and meet the needs of another. As Sevenhuijsen has argued, care is thus, an “ability and a willingness to ‘see’ and to ‘hear’ needs, and to take responsibility for these needs being met” (1998: 83).

While the centrality of care to human flourishing has been reiterated by feminist ethics of care scholars (see Tronto 1993), researchers and activists aligned to Disability Studies (see Shakespeare 2006) have provided important critiques, highlighting the power relations that

can permeate asymmetrical relationships of care. Thus, they defend the implementation of a formal and functional relationship of help or personal assistance, to the exclusion of an emotional dimension, where any dependency is a result of social organisation (i.e. architectural and cultural barriers). Theorists of feminist care ethics argue, however, that everybody is inter-dependent and involved in affective and asymmetrical relations of care over their life course (Tronto 1993). Furthermore, while relations between people may intend to be impersonal, complex emotional dynamics can develop (Karner 1998). Moreover, feminist scholars have helped disrupt any romanticised notion of care and instead highlighted its complex, situated and tension-laden nature, given the uneven power relations that it can introduce. Due to the prominent influence of the theoretical insights of care ethics on broader care literature, I discuss the development and tensions of this (diverse) perspective in detail and then progress to explore how an ethics of care lens has been applied in relation to the more-than-human.

3.2.1 *Feminist Care Ethics*

A feminist ethic of care approach is generally informed by the influential work of moral psychologist Carol Gilligan (1982) and the subsequent ‘politicisation’ of this approach by scholars such as Joan Tronto (1993, 2013), Virginia Held (1993, 2006), Olena Hankivsky (2004), Grace Clement (1996), Kimberly Hutchings (2000), Selma Sevenhuijsen (1998, 2003), Fiona Robinson (1999, 2006a, 2006b) and Eva Feder Kittay (1999). Gilligan’s (1982) study provided a significant challenge to the enduring argument in western philosophy that women’s moral logic was not only dissimilar, “but inferior to, that of men” (McDowell 2004: 156). Significantly, while Gilligan (1982) explicitly raised the prospect of a moral ‘different voice’ – in her initial writing, this was not overtly gendered – however, has been broadly considered and extensively understood as a “*women’s* moral voice” (Tronto 1993: 77; emphasis added). Consequently, early articulations of the ‘ethic of care’ were “built from the standpoint of values grounded in women’s maintenance of everyday relationships” (Puig de la Bellacasa 2010: 157).

Problematically, care ethics scholars, intimately correlated care with ‘mothering’ and “were accused, often not without justification, of essentialism” (Robinson 2006a: 14). For Tronto, the propensity to associate the ethic of care with women’s morality and ‘mothering’ (as found

in the work of Ruddick 1989²⁶), is highly questionable, as the notion of ‘gendered morality’ “helps to preserve the distribution of power and privilege” (1993: 91) along axes of difference including gender, class, sexuality, ethnicity, and education. Indeed, by uncritically emphasising presumed ‘feminine’ values such as caring and nurturing, maternal compassion, and the significance of sustaining human relationships, it has been argued that some feminists ironically fortified stereotypical notions, which facilitated the patriarchal status quo (Crittenden 2001). In particular, critics contended that the association of women with ‘care’ unhelpfully reinforced sexist categories and supported, rather than disrupted, women’s subordination (Curtin 1991; Tronto 1993). It is in this context that Sherilyn MacGregor has highlighted that care ethics is a somewhat “double-edged sword” (2006: 61) for feminism. Focus on caring, simultaneously provides opportunities to assert the importance and progressive capacity for valuing modes of thinking and practices not appreciated in ‘masculine’ frameworks, while uncritical emphasis placed on care-related morality can reinforce destructive notions of gender. Thus, many feminist philosophers have sought to problematise and politicise women’s caring. As Bowden argues:

Condemnation of caring runs the danger of silencing all those who recognize its ethical possibilities, and risk capitulating to dominant modes of ethics that characteristically exclude consideration of women’s ethical lives. On the other hand, romantic idealization is also a danger (1997: 18-19).

It is imperative, however, to highlight that subsequent writings on care ethics have accentuated the ‘feminist’, not the ‘feminine’, by politicising care as a “daily activity and a kind of work” (Robinson 2006a: 15). Indeed, feminist geographer Linda McDowell (2004) cautions against essentialist conceptions, which ultimately naturalise women’s nurturing capabilities. McDowell argues, while there is a relationship between gender and an ethic of care, this is based on “common practices and responsibilities” (2004: 156). Accordingly, as many feminists have noted, it is vital not to “suggest that women automatically have some form of attachment to a superior ethical stance that is a consequence of their nurturing capabilities” (McDowell 2004: 156). Furthermore, it is crucial not to uncritically assume that caring values are of an inherently higher moral order than dominating ‘masculine’ expressions, but to accentuate the values of interdependence over individualism, in which

²⁶ However, Ruddick (1989) does argue that mothering is a practice, in contrast to a biologically based attribute, which everybody, including men can engage.

“care is a fundamental aspect of human life” (Tronto 2005: 130), where “the individual, is far from autonomous, and only exists through and with others within networks of care” (England 2010: 133).

Feminists have crucially asserted that everyday practices of caring in ‘private’ arenas *are political*, and thus disrupted the conventional reductionism of politics to ‘public life’.

However, Tronto (1993) argues by traditionally consigning ‘caring’ to the private sphere of personal relationships, many feminists have inadvertently reinforced the ideological dualism between the ‘public’ and ‘private’ realms. Indeed, Robinson similarly declares that “values associated with care and the dependence that is often involved in caring relations are widely gendered ‘feminine’; this has contributed to their relegation to the ‘private’ sphere and to the assumption of their irrelevance to public life” (Robinson 2006a: 8). Thus, as Morgan and Sonnino emphasise, the “challenge for feminism, and indeed for progressive politics generally, is to develop an ethic of care that is not exclusively associated with the private realm” (2008: 167).

The ideological separation of private (domestic) and public (economic) spheres is a key reason for the devaluation and feminisation of caring work (Tronto 1993). Furthermore, the pervasive boundaries between ‘politics’ and ‘ethics’, in addition to the particular and abstract moral observer, operate to obscure the political efficacy of an ethic of care. Thus, a politicised ethic of care is an approach to personal, moral, social *and* political life, which recognises the mutual interdependence of human beings and the possibilities of care as a radical concept to stimulate democratic politics (Tronto 1993, 2013). As McDowell argued, “the notion of an ethic of care based on mutual obligations and relations of trust is as applicable to the public sphere of the labour market as it is to social relations in the familial or domestic arena” (2004: 157). Consequently, a feminist *political* ethic of care “is distinguished by its conviction that care is relevant and important for the public sphere, rather than simply for the sphere of private or intimate relations” (Robinson 2006a: 8). The political possibilities of an ethics of care, therefore, expand by adopting a broad, nuanced description of care. Accordingly, Fisher and Tronto (1991) define care as:

a species activity that includes everything that we do to maintain, continue, and repair our ‘world’ so that we can live in it as well as possible. That world includes

our bodies, our selves, and our environment, all of which we seek to interweave in a complex, life-sustaining web (1991: 40).

While this definition has been criticised for being too general and expansive (Held 2006), by comprehending ‘care’ as an activity and recognising the necessity of care in sustaining human and nonhuman relationships, I argue that an open characterisation remains one of its major strengths (see Tronto 2013 for a detailed justification). Indeed, Tronto asserts that when care is conceptualised as something more than just the work that supports vulnerable others (such as care of children or the elderly) and is seen “as an integral moral and political concept” (1993: 124), then care can be used as a basis for re-thinking the moral boundaries that currently preserve power inequalities. Care from this perspective, demands to be recognised as an interpersonal, relational activity and practice (in contrast to a set of principles or a mere disposition) and implies a reaching out towards something other than the self. Thus, Tronto’s politicised interpretation of care extends beyond personal and social relations to include the socioecological environment that we are always entangled within. Nevertheless, this remains an under-examined area of investigation (however, see Barnes 2012 for a tentative exploration and Till 2012 for an elaboration of a place-based ethics of care).

Tronto (1993) has defined the characteristics of an ethic of care to include the moral dimensions of attentiveness, responsibility, competence, and responsiveness. These are linked to the four phases of care identified as: *caring about* (recognising needs), *caring for* (accepting responsibility), *care-giving* (the actual work of caring), and *care-receiving* (reception of care and judging its effectiveness) (see Fisher and Tronto 1991; Tronto 1993). Significantly, Tronto (2013) adds a further phase of care: *caring with* (care needs are met consistent with democratic commitments to justice, equality and freedom). By conceptualising care in a political and moral context, Tronto (1993) demands that the boundaries between public and private values be renegotiated, which she believes can ultimately transform the way society treats those who do the act of caring.

A *critical* feminist ethic of care recognises that caring takes place in specific personal and social contexts under a diverse range of circumstances with particular others (Sevenhuijsen 2000). Thus, a politicised ethic of care requires the virtues of care to be valued in multiple settings from the most intimate to global inter-relationships. Care, therefore, is a form of relationship and consequently, “*creates* relationality” (Puig de la Bellacasa 2010: 164;

emphasis in original). Accordingly, Robinson states that a feminist political ethic of care “is guided by a fully relational moral ontology”, and clarifies that “the notion of the self is incoherent unless it is understood as constructed and existing through a series of complex and ever-changing networks of relations with others” (2006a: 13). Tronto draws upon Gilligan’s (1982) study to assert that morality “is not grounded in universal, abstract principles but in the daily experiences and moral problems of real people in their everyday lives” (1993: 79). Walker makes a similar point, suggesting that morality is a “socially-embodied medium of understanding and adjustment in which people account to each other for the identities, relationships and values that define their responsibilities” (1998: 61). Subsequently, a moral orientation based on care disrupts the dualism between autonomy and dependence:

The human capacity for self-determination and for taking responsibility can only fully blossom in a relational context. People develop a sense of ‘self’ because there are others who recognize and confirm their sense of individuality, who value their presence in the world and who make concrete efforts to enable them to develop their capabilities (Sevenhuijsen 2003: 184).

Therefore, for Sevenhuijsen, a “democratic ethic of care” originates from the claim that “everybody needs care and is (in principle at least) capable of care giving” (2000: 15). Indeed, care is a daily practice, central to human flourishing. Moreover, the parameters of care giving have spread beyond the spaces of the home (Lawson 2007) and as Robinson states:

Care is often, and should be, delivered by a wide variety of agents – family members, friends, neighbours, communities, schools, health care organizations, as well as states, corporations and even regional or international organizations (2006a: 15).

Care ethics has been applied and theorised beyond the ‘personal’ to the wider perspectives of economics, policy and politics (see Sevenhuijsen 2000; Morgan and Sonnino 2008; Tronto 2013). Notably, as care emphasises interdependence, cooperation, and collective action, it is understood as something quite antithetical to the neoliberalisation process, in which prominence is placed on personal responsibility and individual achievement. As Robinson argues, care ethics can “be regarded as incompatible with the values of contemporary global capitalism [...] which emphasizes individual rights, autonomy, objectivity, reciprocity and

profits” (2006b: 337). Thus, a political ethic of care enables an identification of inequalities and imbalanced social structures, while the values of care can assist making better-informed judgements sensitive to context and help decide what should be considered appropriate and valuable collective aims (Sevenhuijsen 1998). While the neoliberal model privileges the autonomous, self-governing, working individual as the ideal citizen (or neoliberal subject), a political ethic of care highlights the necessarily interdependent nature of people who need and give care. Thus, “[m]aximising entry into wage labour would no longer be seen as the key to individual well-being” (Robinson 2006a: 20).

Neoliberal public policy has endeavoured to relocate responsibility for social welfare within the ‘private’ sphere of the home and position care in the community (Staeheli 2003). As Staeheli has argued, community has become “a ‘space of betweenness’ linking public and private in ways that reflect political ideologies about responsibility for social welfare” (2003: 818). Moreover, neoliberalism’s ethic of self-reliance has increasingly permeated into both government rhetoric (such as the ‘Big Society’) and the institutions of social welfare which signals a “shift in responsibility for care from state-provided (or supported) care to care as a familial and individual responsibility” (England 2010: 132). Significantly, there is both the presumption, and rendering invisible of, unpaid caring at multiple scales (from family commitments to civic volunteering) (Smith 2005). Thus, within a neoliberal context, people’s “roles as wage earners are exulted, but their caregiving roles are ignored” (England 2010: 137). Indeed, Tronto argues, since “our society treats public accomplishment, rationality, and autonomy as worthy qualities, care is devalued insofar as it embodies their opposites” (Tronto 1993: 117). Neoliberal logic supposes self-sufficiency, prioritising individualism and revering the ‘free’ market, however, this (pervasive) notion fundamentally ignores the interdependence of people. Indeed, without networks of care, individuals would be incapable of paid work (England 2010). Therefore, as Tronto (1993) argues, the notion of care must be politicised in order to render visible the cornucopia of caring activities undertaken by myriad people everyday in different contexts to enact progressive change.

Conceptualising care as a radically political enacted relational practice and ethical obligation extends the notion of ‘caring’ to human and nonhuman others. As highlighted in this section, a politicised and de-gendered ethic of care has been productively extended beyond the private sphere to include the public realm. This thesis therefore moves beyond the obvious sites of care (such as hospitals), to perhaps the unexpected spaces of CUFGs to explore the multiple

ways care is expressed, practiced and contested, and the transformative relations that may materialise in relation to socioecological entanglements. Indeed, exploring care in relation to socionatures requires that we examine care practices between multiple entities in a more-than-human world. In the following section, I explore scholarship that examines an ethic of care in relation to the socioecological environment.

3.2.2 *A Relational Ethic of Care in a More-Than-Human World*

FPE literature has effectively demonstrated the advantages of examining human-environment relations through a care ethics lens (Abbruzzese and Wekerle 2011; Jarosz 2011). FPE has primarily “concerned itself with women’s social activism and responsibilities to others and to nature, and it has not endorsed the idea that caring for others or the environment is an essentially feminine activity” (Jarosz 2011: 320; Rocheleau *et al.* 1996). The broad definition of care offered by Fisher and Tronto (1991) discussed in section 3.2.1, enables political ecologists to insist that the ‘interweaving’ of human and nonhuman elements provides a productive basis for understanding how care holds the world together and facilitates its continuation. Indeed, conceptualising ‘care’ in its broadest sense is to be sensitive to how all beings are dependent on each other. Through her investigation of permaculture, Puig de la Bellacasa argues:

humans are not the only ones caring *for* the earth and its beings – we are *in* relations of mutual care. Many nonhuman agencies are taking care of many human needs, as much as humans have their own tasks in the maintenance of the web of caring (2010: 164; emphasis in original).

By bringing the ethics of permaculture – care of earth, care of people, return of the surplus – into direct conversation with the notions of naturecultures and biopolitics, Puig de la Bellacasa accentuates an approach to the ethical, based on an “everyday *doing*” (2010: 152; emphasis in original) that highlights interdependence, decentres the human and connects the individual to the collective. There is a co-production of care, which involves a multifaceted network of actors and actions connecting multidirectional flows and associations (Tronto 1993). Moreover, the interdependent nature of human-environment interactions raises questions about responsibility, morality and power. In the context of conservation efforts, van Dooren (2014) emphasises the role of ‘violent-care’, whereby care for some species results in

the suffering, elimination, or death of others. Consequently, ‘dispensable’ animals provide food for endangered species and predators are culled to enable others to flourish. Thus, the relations of care that permeate “interdependent existences” (Puig de la Bellacasa 2012: 199) are often fraught, never simple or innocent. Extending care beyond the self to the more-than-human is entangled with societal ethics, as Tronto argues, “to be judged as a morally admirable society, it must, among others things, adequately provide for care of its members *and its territory*” (1993: 126; emphasis added).

As Smith has previously noted, the reference to ‘territory’ in Tronto’s (1993) conception of personal and societal responsibility towards care, “provides a reminder of the ecological dimension, usually overlooked in elaborations of an ethic of care” (1998: 25). While Tronto (1993) does not pursue this relationship further, Till (2012: 5) develops the concept of a “place-based ethics of care” to explore how people care for, and are cared by, place, which are “significant ethical and political practices that may work to constitute more democratic urban realms”. Till argues in her exploration of what she terms “wounded cities”, the importance of memory-work and the forms of care that manifest in relation to the environment to help repair them. In this context, urban space “must be understood as inhabited worlds infused with many forms of value, rather than as property or according to capitalist forms of exchange-value only” (Till 2012: 6). Indeed, Till contends that cities are material and symbolic places which become enfolded in residents “bodies-selves-environments” (2012: 6). Furthermore, feminist political ecologists, eco-feminists, and environmental ethics scholars have explored an ethics of care in relation to the environment (Jarosz 2011; MacGregor 2006). Jarosz asserts, PE provokes “difficult and necessary questions about politics, ethics, and social justice in relation to human activity and environmental change” (2004: 921) and contends that care ethics can effectively enrich discussions of ethics in PE (Jarosz 2011). Focusing upon interconnected care practices enable us to recognise the wider ecology of animal, plant and mineral life to which humans are only a small part and the potential care ethics holds for informing our understanding for social and environmental justice. Indeed, Till (2012: 8) has argued, a “place-based ethics of care offers possibilities to create and plan for more socially just cities” while valuing the mundane, playful and creative everyday activities enacted to maintain and repair our world (Tronto 1993, 2013).

Applying an ethic of care in relation to the ‘environment’ or ‘nature’ highlights the manifold ways people connect with, and care for, place and nonhuman others, including nonhuman animals and plants. Curtin (1991) argues for a *politicised* ecological ethic of care, expanding and politicising the notion of care to include all nonhuman animals. Curtin contends:

an ethic of care has an intuitive appeal from the standpoint of ecological ethics. Whether or not nonhuman animals have rights, we certainly can and do care for them. This includes cases where we regularly experience care in return (1991: 65).

Extending the notion of care to nonhuman relations (for example, with the environment), therefore, becomes an important step in understanding the everyday ethical interconnected and intricate entanglements between humans and nonhumans (McEwan and Goodman 2010; Puig de la Bellacasa 2010). As Dean argues, an “ethic of care – whether it is defined as a feminist or an ecological ethic – provides the crucial link between an abstract principle of co-responsibility and the substantive practice by which we continually negotiate our rights and duties” (2001: 502).

For Haraway, a care-full curiosity that emanates, folds, and entangles a variety of species is underpinned with a desire to know more about other lively creatures, thus, “[c]aring means becoming subject to the unsettling obligation of curiosity, which requires knowing more at the end of the day than at the beginning” (2008: 36). I find the notion of curiosity particularly fruitful in relation to embodied practices of care, where through the process of doing, enacting and relating, a sense of curiosity and concern for our interconnected world can be nurtured. To be curious, is to be attentive to otherness and open to difference. Thus, the obligation to ‘know more’ materialises from engagements that require a profound situated and critical knowledge about the object or focus of our care that recognises our interdependency and therefore, compels that we be held accountable. As Haraway contends, curiosity “should nourish situated knowledges and their ramifying obligations” (Haraway 2008: 289).

3.3 Care as a Practice

As discussed in section 3.2.1, feminist care ethics scholars have demonstrated the importance of care to human flourishing as an everyday activity and practice and affirmed the significance of caring motives, which includes the desire to nurture, share, learn and build

relationships between human and nonhuman entities. However, in general, within this body of literature, care remains conceptualised as a dyadic relationship between one person (the carer) and another (the cared for). By discussing care as a form of shared work distributed in a collective of humans and nonhumans, STS scholars (see Mol 2008; Mol *et al.* 2010; Puig de la Bellacasa 2011; Winance 2010) have shown how each person is both the object and subject of care, which provides a basis for exploring the multidimensionality of ecologies of care. I now turn to the work of Annemarie Mol (in particular, her co-edited 2010 and single-authored 2008 work) to explore care as a form of persistent practical tinkering.

3.3.1 *Care as Attentive Practical Tinkering*

In order to expand the notion of care beyond particular contexts and anthropocentric understanding, I argue it is crucial to conceptualise care as a practical activity that is informed and shaped by everyday experiences that involves an array of entities. Feminist STS scholars have been particularly influential in not only articulating that care is central to daily life (such as Haraway 2008; Mol 2008; and Puig de la Bellacasa 2011, 2012) but also forcefully arguing that “if care practices are not carefully attended to, there is a risk that they will be eroded” (Mol *et al.* 2010: 7). Thus, focusing critical attention on the materiality of practices and the agency of nonhumans, acts as a corrective to care ethics scholarship that observes technology (in both narrow and broad senses of the word) with suspicion. In their edited book, *Care in Practice* (2010), Mol *et al.* argue that care is a form of shared work between various human and nonhuman actants. Consequently, care is conceptualised as a set of materially heterogeneous practices, which are always grounded and specific to context. Mol *et al.* (2010) argue that care is not restricted to a particular sphere, domain, or site, but is an active everyday ‘doing’ and subsequently, expands and multiplies what we might traditionally understand as ‘care work’. Moreover, they advocate an ethnographic approach to explore the particular, and often silent (non-verbal) care practices in diverse contexts, to render visible care’s complexity and inter-dependent nature. I draw upon insights from this body of literature to argue that care is an unfolding, embodied, process, which is based on ‘doing’, recognising that there is a “large non-verbal component” to heterogeneous care practices (Mol *et al.* 2010: 10).

Care in Practice (Mol *et al.* 2010) is a collection of thirteen empirical case studies spanning a range of settings from farming to telecare control rooms which demonstrate care is never

homogenous and always multiple (Law 2010). Each chapter provides an extensive description of a specific local context, highlighting the different aspects of care practices and the ‘tinkering’ involved to achieve ‘good care’ in a “world full of complex ambivalence and shifting tensions” (Mol *et al.* 2010: 14). In this context, care is active, improvised and “seeks to improve life” (Mol *et al.* 2010: 15). However, the notion of good and bad care is complex and often permeated with uncertainty and tensions:

Good and bad may be intertwined; good intentions may have bad effects; if one looks hard enough any particular ‘good’ practice may hold something ‘bad’ inside it (and vice versa); ‘good enough’ care may be a wiser goal than care that is ‘ever better’; while sometimes it is simply unclear whether (for whom, to what extent, in which way) some form of care deserves to be praised or to be criticised (Mol *et al.* 2010: 12-13).

Thus, Mol *et al.* argue, it “makes little sense” to determine what is ‘good’ in the abstract or general, but instead to explore how “different goods might coexist in a given, specific, local practice” (2010: 13). The notion of care as something practiced builds upon Mol’s monograph *The Logic of Care* (2008) that explores the treatment and life of people with diabetes, through extensive ethnographic observations of practices of care within a hospital in the Netherlands. Mol (2008) fastidiously documents the care that is enacted by an assemblage of humans and nonhumans, including doctors, patients, and an array of technological equipment. She provides a critical exploration of the current (neoliberal) model of healthcare premised upon a ‘logic of choice’, where patients are treated as consumers and citizens that have both the right and responsibility to care for the self by making ‘rational’ and ‘objective’ informed decisions and choose a course of action from the healthcare services provided. However, for Mol (2008), the pervasive rationale that places responsibility of decision-making onto patients is contrary to the way care work is actually undertaken. Therefore, she proposes that an alternative rationale – a ‘logic of care’ – underpins the relationship between patients and the healthcare system. In this context, care is an on-going, continuous process of adjusting and monitoring diverse kinds of interventions in an attempt to achieve and sustain a good quality of life for the relational patient.

‘Good care’ for Mol (2008) emerges from the practical tinkering, continuous attentive experimentation, and multiple negotiations between human and nonhuman agencies. This is a valuable reminder that caring is never only an achievement between two individuals. Indeed,

people often are ‘carer’ and ‘cared for’ simultaneously or in arrangements of caring or non-caring associations that are influenced by technologies that support our everyday lives. Mol’s (2008) analysis, therefore, provides guidance for investigating the more-than-human dimensions of carescapes. The insistence upon refusing to detach and isolate the human and nonhuman dimensions of care is of particular importance in relation to this thesis, in terms of exploring the relational practices in CUFGs that collectively form particular ecologies of care.

3.4 Care as an Affective State

Articulating the affective dimensions of care reflects recent work in geography which focuses on the role of affect, feelings and emotions (see Anderson 2006). While Anderson distinguishes between the three different modalities that are “enacted from heterogeneous processes of circulation, expression, and qualification” (2006: 734), he argues, they “slide into and out of one another to disrupt their neat analytic distinction” (2006: 737). The affective dimensions of care gesture towards the aspects of care practices that potentially “escapes or remains in excess of the practices of the ‘speaking subject’” (Blackman and Venn 2010: 9). Drawing upon the work of ‘*Precarias a la Deriva*’, a militant research collective based in Madrid, Spain, I argue the affective component is crucial “in order to unravel the politically radical character of care” (2006: 40). Indeed, care encompasses “an essential creative character [...] that cannot be codified. What escapes the code situates us in that which is not yet said, opens the terrain of the thinkable and liveable, it is that which creates relationships” (*Precarias a la Deriva* 2006: 40). Thus, as an embodied labour, ‘care work’ is imbued with power to influence, engender change (both good and bad) and frequently, is invested with meaning, feelings and emotion. Care therefore, is an “affectively charged and selective mode of attention that directs action, affection, or concern at something, and in effect, it draws attention away from other things” (Martin *et al.* 2015: 635). Consequently, a person who cares first must be prepared and available *to be moved* by another thing, object or phenomena.

3.4.1 To Affect and Be Affected

As a relational, embodied, affective undertaking, care is “fundamental to our capacity to live together” (Barnes 2012: 3). I argue the affective aspects of care are crucial to understand the lived, visceral experiences of practices of care, whereby emotions and feelings are always implicated in varying degrees and intensities. To care is to be moved (in both positive and

negative ways) that involves encounters that comprise sensuous and somatic experiences including listening, touching, smelling, and observing that can strengthen or reduce a subject's capacity to act or think. The emotional dynamics of caring relations are imbued with power relations which can be both empowering and tension-laden. Therefore, within intimate and deeply personal relations of care, both the 'carer' and 'cared for' are entangled in a dynamic process of giving and receiving care. However, negative emotional and material effects, such as emotional exhaustion and potential 'burnout', can occur when adequate support is not available (see Evans and Thomas 2009). Thus, as Anderson has argued, the "affectivities of different types of relation can be witnessed in the qualitative differences that energetically enhance or deplete the living of space-times" (2006: 735).

Indeed, care is the result of interwoven intellectual, emotional and physical competencies, where different bodies "are always thoroughly entangled processes" (Blackman and Venn 2010: 9), rather than unchanging or static entities, which relationally meet, encounter and co-emerge with one another. Thus, care can foster uncomfortable and difficult challenges in a more-than-human world. Indeed, our actions are affected by and affect a range of others in the interconnected web of entangled species and things. Consequently, 'to care' is the capacity to affect and be affected by another in particular space-times. These capacities are facilitated (or restricted) by practices and technologies which enhance (or restrain) the body's potential for action. This is not based on disinterest or apathy, but instead to be emotionally invested (to whatever extent) and therefore have a stake in them in some way based on shared, but not symmetrical 'attunements'. Thus, it must be emphasised that while enacting care, it is difficult to maintain a position of indifference. Care requires us to act, to respond in some way, while not seeking to control (Tronto 1993). The significant non-verbal component to care, although palpable, may exceed the structures of language. Consequently, finding the 'right' words is a complex task to capture the differential intensity, energy, dynamism or flow that permeate heterogeneous care practices in particular milieus (Mol *et al.* 2010). In this sense, the seminal work of Brian Massumi (2002) is particularly pertinent, where affect is produced as intensities which are positioned outside the representations of feelings or discourse of emotions²⁷.

²⁷ It is important to note that Massumi distinguishes between 'affect' and what are conventionally understood as 'emotions'. He argues, an "emotion is a subjective content, the sociolinguistic fixing of the quality of an experience which is from that point onward defined as personal [...] affect is unqualified [...] it is not ownable or recognizable" (2002: 28). Significantly, the term affect has a long intellectual tradition including scholars such as Baruch Spinoza and more recently, Gilles Deleuze and Isabelle Stengers. The term however,

For Bennett (2001a) opening ourselves up to the power, materiality and agency of things, and engaging in moments of affective enchantment can increase a subject's ethical sensitivity to others. In this context, "ethical generosity" may transpire from the co-production of affective moments of joy (Bennett 2001a: 171). This kind of ethical thinking is stimulated by the capacity of various forceful 'things', organic and inorganic, human and nonhuman, to move and be moved by others (in both the affective and kinaesthetic sense of the verb 'to move'). Consequently, this is akin to what Bruno Latour (2004) calls 'learning to be affected'. For Haraway, co-presence is crucial for ethical relating, what she terms "response-ability" (2008: 93). In this context, being response-able is understood as being able to sense and respond to the needs of another and articulated not only through language, but also bodily movements and gestures. Indeed, Haraway argues, "caring for, being affected, and entering into responsibility are not ethical abstractions; these mundane, prosaic things are the result of having truck with each other" (2008: 36). Through value encounters there are possibilities for "making companions" (Haraway 2008: 65), based on "the face-to-face meeting of living, meaning-generating beings across species" (Haraway 2008: 63), where compassionate action is crucial to an ethics of flourishing (Cuomo 1998).

In this sense, ethics is articulated through cultivating a sensitivity towards the other in which ethical practice is premised on what Haraway (2008) terms "sharing suffering". Haraway argues that instead of referring to higher order abstract principles or rights to justify (in her example) the pain and suffering of animal subjects during experimental trial processes, the ethical response she supports is based on entangled subjectivities of "opening to shared pain and morality and learning what that living and thinking teach" (2008: 83). Thus, Haraway's particular understanding of affective shared suffering is an ethical practice of somatic responsibility, where this response-ability is based on practical tinkering to encourage 'something better', without knowing ahead of time what phenomena will require us to respond or what form that response should take (Mol 2008; Mol *et al.* 2010). In this sense, "[t]ouch, regard, looking back, becoming with – all these make us responsible in unpredictable ways for which worlds take shape" (Haraway 2008: 36).

evades definition and remains contested, frequently used in diverse ways across different literatures (Anderson 2006).

Thus, following *Precarias a la Deriva*, the logic of care “is transindividual and immanent, it does not depend on one but rather on many and is thus inseparable from the social, material, and concrete forms of organization of the tasks related to care” (2006: [fn.17]: 44). Indeed, this thesis draws upon a notion of care with multiple dimensions, highlighted in this chapter as an ethical obligation, practice, and an affective state. This demonstrates that care is an everyday practice, where multifarious expressions are grounded in various relations among the human and nonhuman inhabitants of the planet, where cooperation, curiosity, practical tinkering and experimentation are central to its (never neutral) enactment.

Within the community gardening literature, CUFGs are frequently discussed as embodying characteristics that align with the broader AFM, which places emphasis on more equitable ways of configuring our interrelationships with multiple others entangled in the food system. I now turn to explore how care has been utilised to examine diverse initiatives frequently aligned under the banner of the AFM.

3.5 Care and the ‘Alternative’ Food Movement

There has been an increasing engagement, and application of, care ethics within the alternative food literature, particularly those studies exploring ‘ethical’ food consumption practices (Goodman 2004; Kneafey *et al.* 2008), however, there is a paucity of research exploring CUFGs through a care lens (although Schmelzkopf 2002; and Staeheli 2008 engage with care ethics in relation to community gardens to some extent). Within the AFM, “care appears to be a positive force, offering opportunities for progressive political, economic and environmental actions” (Cox 2010: 113). A variety of projects, schemes, and enterprises are deemed to be ‘alternative’ to the mainstream food system as a result of their orientation towards sustainability and (in some cases) environmental and social justice. However, as Agyeman and McEntee (2014: 212) state, the current configuration of the AFM works within current capitalistic market structures and tends to neglect “social justice considerations”. Therefore, scholars aligned with food justice²⁸ highlight, “much of the AFM continues to be defined by White, middle-class individuals, organizations, and institutions and operate within a consumerist, market framework” (Agyeman and McEntee 2014: 213; Alkon and Agyeman 2011) and therefore, the AFM has recurrently been interpreted as elitist.

²⁸ Food Justice, as a concept, approach and movement, is largely focused on addressing “the *causes* of inequality in the conventional agrifood system and making justice considerations explicit” (Agyeman and McEntee 2014: 213; emphasis in original).

The AFM's prioritisation of messages such as 'vote with your fork' and 'buy local' highlights the prominence placed upon consumption-driven 'connection' and the resulting association of networks between diverse actors and a range of institutions that are deemed to exemplify 'alternative' food practices and cultures marked by a set of particular foodways (local, organic, and slow foods). Accordingly, CSA, farmers' markets, and direct-sales Internet schemes, are considered to embody 'alternative' qualities other than profit maximisation. These 'alternative' qualities embody socially and ecologically embedded practices which prioritise trusting relationships between producers and consumers (through re-connection). Significantly, the alternative food literature has claimed that ethical consumption is an example of a 'caring practice', which demonstrates the possibility of caring at a distance at multiple scales (Cox 2010; Dowler *et al.* 2009). It is asserted that food provides a particularly valuable lens to observe people acting with an ethic of care towards the environment, animals and unfamiliar "distant others" (Smith 1998: 21) by being "*morally* reflexive" (Goodman 2004: 896; emphasis in original). Notably, alternative food networks are characterised by their engagement with the "reflexive consumer" (DuPuis 2000) and routinely contrasted against the industrial agrifood system. However, despite their 'alternative' objectives, many food networks are frequently underscored by conventional consumer expectations of consumption patterns and convenience (DeLind 1999). Therefore, they "operate along similar lines of logic that fetishize the commoditization of food for profit" (Agyeman and McEntee 2014: 213), based upon the "neoliberal mantra of informed consumer choice" (Agyeman and McEntee 2014: 218). Thus, discussion of reflexive localism (DuPuis and Goodman 2005) and positioning social justice concerns at the heart of local food campaigns (Hinrichs and Allen 2008) have been positive moves to re-orientate 'alternative food' with socioecological justice.

While there has been a plethora of investigations into the care aspects of food consumption, in contrast, there has been less research conducted into the growing of food from a care perspective. An ethic of care, in relation to food production emphasises the need to care about the conditions under which food is cultivated and care for the vast array of nonhuman others implicated in the process, such as the soil and wider environment (Jarosz 2011). In her study of women farmers involved in CSA in a metropolitan region of the US, Lucy Jarosz argues that the majority of women she interviewed articulated their motivation(s) to undertake small-scale sustainable agricultural practices primarily as an ethics of care, in which they defined "their work as centered upon nourishing themselves and others" (2011: 308). Therefore,

drawing upon Foucault's notion of self-care, Jarosz (2011) argues that the middle-class farmers in her case study expressed their work as ethically embodied and politically transformative in which caring for themselves, others and the environment coalesced, by "provisioning local communities in environmentally and socially responsible ways" (Jarosz 2011: 310). Therefore, there has been an important attempt by those exploring an ethic of care in relation to food practices to highlight the messy entanglements of our lived experiences, in which relations are simultaneously ecological and social. However, there remains a paucity of investigations into the production of food from a political ecology of care perspective. Thus, focusing on the collective grassroots action of urban gardeners seeks to address this underexplored area.

3.6 Care-full Urban Political Ecologies: Exploring Collective Urban Food Gardens as Ecologies of Care

As I have discussed in this chapter, 'care' is a complex, tension-laden process and practice that is always situated and contextual. I have argued that care is multidimensional and should be understood as a radical practice of everyday life (following *Precarias a la Deriva* 2006) that is enacted both in the private and public sphere and are intimately entangled. Moreover, care occurs at a variety of levels from the most intimate personal relationships to the global (Lawson 2007). Accordingly, it is a situated "selective mode of attention" (Martin *et al.* 2015: 627), whereby care demarcates and prioritises some lives, things, or phenomena as its focus, while excluding others, therefore, it is inherently political (Tronto 1993). Care is continuously re(negotiated) in that we place importance on, and seek to intensify, particular relational connections concerning specific people and things, while endeavouring to maintain detachments with others (Ginn 2014). For Ginn (2014), inter-species ethics emerges from the space beyond relations, which creates the opportunity to recognise the detachments we seek to maintain, and therefore, connects humans with the more-than-human through those we wish to exclude. This is particularly pertinent in relation to socionatures, such as CUFGs, where it is essential to be attentive to both the relations that are nurtured and those excluded.

To elucidate the politics of care in relation to socionatures, it is crucial to distinguish between what I refer to as 'caring about' and 'caring for', to explore the care practices that are enacted in the CUFGs between a multiplicity of entities. We can 'care about' something by paying attention, being emotionally invested, and by expressing concern. We can also 'care for'

something by actively tending to an object of focus, in order to help it flourish and thrive (Milligan and Wiles 2010; Collins 2015). While the distinction between ‘caring about’ and ‘caring for’ “can be difficult to disentangle in practice”, I contend that this differentiation is helpful, where many interactions between caring about and for are present “in varying combinations in most care interactions or settings” (Milligan and Wiles 2010: 741). Thus, I focus explicitly upon what I term the ‘actually existing’ care practices that are entangled within the embodied processes of producing socionatures. I do this for two interrelated reasons. First, if care is multiple, as I argue throughout this thesis, it can manifest in various, grounded ways in relation to a multitude of objects. Second, by focusing on what gardeners do ‘care about’ and ‘care for’ highlights the complex, sometimes ‘invisible’ or overlooked care that holds the CUFGs together and also importantly, reveals what is not. For clarification, I now outline what I explicitly understand by the terms ‘care about’ and ‘care for’.

3.6.1 A Politics of Care: ‘Caring About’ and ‘Caring For’

‘Caring about’ necessitates a relation between the carer and object and can be intimate, where the carer and object can be identical (i.e. a person can ‘care about’ themselves) or global (i.e. a person can ‘care about’ climate change). In this sense, ‘caring about’ can be understood as an “attitude of *concern* that there might be a need to be met” (Collins 2015: 53; emphasis in original), however, it should not be assumed that caring attitudes originate or entail particular emotions (which I understand as both cognitive and affective components). Indeed, in Tronto’s (1993) interpretation, ‘caring about’ can be emotional or intellectual in nature, thus, while I believe it is difficult (and perhaps impossible) to distinguish between feelings and intellectual activities, I consider that caring attitudes may involve emotion, however, others may not. This clarification is particularly important given the strong emphasis placed on emotions in care ethics scholarship (Collins 2015). ‘Caring about’ as conceptualised in relation to this research, also moves beyond recognition of need-fulfilment (as outlined in various ethics of care scholarship, see Tronto 1993: 137-141)²⁹ but also includes situations where “participants in caring relations also strive to delight and empower each other” (Jaggar 1995: 180). Furthermore, a person can have caring attitudes without undertaking caring

²⁹ Tronto’s understanding of ‘caring about’ in relation to “noting the existence of a need to be met” (1993: 106) is relatively inflexible due to the fact that it is theorised as one of four phases in successful care. Therefore, it is logical that this first phase is related to recognising needs (see Collins 2015).

actions (and vice versa). Thus, ‘caring about’ can remain merely cerebral and consequently, is ubiquitous, easier and perhaps simpler than ‘caring for’ which entails action.

While ‘caring about’ orientates around having caring attitudes and therefore, we can essentially ‘care about’ anything we are not indifferent to, care is also enacted, performed and practiced and therefore, entails actions. Indeed, ‘caring for’ requires actions that respond to, or are directed towards, particular objects, therefore involves a doing. Similar to ‘caring about’, the carer can be the object of caring actions (i.e. a person can ‘care for’ themselves). Rather than evaluating the outcomes of the care gardeners enact, I focus upon the intentions of their actions, rather than purely their motivations. I suggest that it is an agent’s intention to ‘care for’ someone or entity, which they believe is in the interest of their focus of care that is crucial, even if that entity (animate and inanimate) lacks interest, such as a plant (following Collins 2015). Furthermore, drawing upon Mol *et al.* (2010), I believe that rather than prescribing whether an action was ‘good’ or ‘bad’, it is perhaps more valuable to focus on whether it sought to improve a matter (Heuts and Mol 2013). Thus, care is not only a physical action, such as watering plants, but also the affective component of immaterial labour, such as spontaneous exchanges of knowledge that seek to improve a specific situation. Consequently, I contend that while care is concerned about meeting needs, it is also much more than this; it can seek to provoke joy and enchantment between collectives. Crucially, this highlights, “a world’s degree of liveability might well depend on the caring accomplished within it”, therefore, care is a vital necessity for “sustainable and flourishing relations, not merely survivalist or instrumental ones” (Puig de la Bellacasa 2012: 198).

3.6.2 Ecologies of Care Framework

The ecologies of care framework adopted for this thesis focuses upon micro-macro political entanglements, everyday care practices, and the potential of urban interventions to foster creative and playful more-than-capitalist possibilities. Therefore, three main insights underpin this research (as discussed in Chapters 2 and 3): *i*) socionatures are produced through relational socioecological flows; *ii*) everyday life draws attention towards grounded experience; *iii*) care is a political multidimensional concept.

As outlined in Chapter 2, a hybridised and relational understanding of metabolism (Gandy 2004) highlights how urban environmental change is never neutral (Heynen *et al.* 2006),

where ‘micro’ and ‘macro’ scales are interwoven in power-laden ways. Focusing on everyday experiences emphasises the embodied ways urban environments are produced through the entanglement of the material and affective labour of humans and the liveliness of nonhumans. Therefore, it is important to explore the various flows of funding, people, agendas, practices and discussions that interweave to form particular socionatures, disrupting the tendency to treat CUFGs as static spaces where human activity unfolds. The composition and ‘structure’ of such entanglements reflect the motivations, objectives and metabolic flows that coalesce (momentarily) to stabilise particular assemblages. Therefore, focusing on the ecologies of care that are produced, maintained and sustained by, and for whom, facilitates an exploration of the possibility to nurture more-than-capitalist socioecological sustainable futures, through everyday environmentalisms which are grounded in mundane urban socionatures, rather than an imagined pristine external Nature (Loftus 2012; Milbourne 2012) that values implicit activism (Horton and Kraftl 2009) and the everyday ethical repertoires of collectives.

Furthermore, this thesis seeks to highlight how care is an integral part of a broader assemblage of feelings and emotions, patterns of socionatural relations, and bodily, material encounters that are “necessary to the fabric of biological and social existence” (Martin *et al.* 2015: 625). Conceptualising care as an expansive activity that includes, but also expands beyond intimate human relationships, signals to the ways in which care is a more-than-human relationality, where attachments and detachments are fostered (Puig de la Bellacasa 2010). As this chapter has discussed, care is always multiple, therefore in order to understand the politics of care entangled within CUFGs it is crucial to examine what is ‘cared about’ and ‘cared for’ (Milligan and Wiles 2010; Collins 2015), where focus is orientated towards the ‘actually existing’ care articulated and enacted, highlighting the imperfect, partial, and visceral ways care may manifest through various relationships. To ‘care about’ and ‘care for’ in one situation may prioritise certain goals such as food security, conviviality or knowledge exchange (or a combination of these and others), and consequently, different ecologies of care will look and feel different. The following chapter discusses the theoretical issues and practical matters of data collection, explaining the research design of the thesis in detail.

CHAPTER 4

METHODOLOGY

4.1 Introduction

This chapter describes the methodology and methods utilised in this study to address the research questions outlined in Chapter 1. A qualitative research strategy was deployed, where a situated ethnography facilitated the exploration of the linkages between the everyday practices of individuals and the collectives they form, and broader structural processes that produce the particular intimate urban ecologies of CUFGs (Hayes-Conroy and Hayes-Conroy 2013). An ethnographic approach was adopted to examine the everyday practices, multiple positions, and perspectives of gardeners in relation to the socionatures they created and maintained through entwined physical and affective labour in response to various socioecological inequalities and their entanglement with complex, multiple agendas (Pink 2012). The lived experiences and practices of gardeners are multi-layered and complex, thus their exploration required a mixed-method approach. In order to generate rich data and convey the complexity of the processes, relations and practices interwoven in establishing and sustaining CUFGs, participant observation and both semi-structured and ‘go-along’ walking interviews underpin this research. The embodied process of talking whilst walking (Anderson 2004), in addition to making, eating, and the actual ‘doing’ of gardening with participants draws attention to the “physical nature of encounters in fostering or foreclosing interaction” (Askins and Pain 2011: 804), where collectively producing the socioecological environment, enables the researcher to make sense of place through everyday, mundane engagement with others.

The ethnographic methodology utilised, recognises the situated and partial understanding of any investigatory account where “we cannot step outside the world to obtain an overall ‘view from nowhere’” (Law 2004: 8), what Haraway refers to as the “god trick” (1988: 581). Haraway’s (1988) concept of situated knowledges emphasises that all knowledge production is embodied, incomplete and accountable, in which the subjective relationship between the subject and object is inherent to research, entangled with webs of power. Indeed, the feminist critique of Enlightenment epistemology has been particularly influential, disrupting the notion of absolute knowledge claims based upon ideas of objectivity (Peake 2016), but rather “of living within limits and contradictions – of views from somewhere” (Haraway 1988: 590).

Accordingly, methodological practices and the social realities they co-produce are messy and undetermined (Law 2004). Rather than pursuing certainty, “there is a recognition that the world is so textured as to exceed our capacity to understand it” (Davies and Dwyer 2007: 258). Thus, eschewing positivist claims of impartiality and detachment, an ethnographic methodology enables the immersive examination of the depth and subtlety of material socionatural relations and social practices of specifically situated urban agents. Owing to the emergent and fluid nature of ethnography (Brewer 2002), I was able to respond to the temporalities and rhythms of the CUFGs, manoeuvring between the case study sites and various urban gardening network events. By reaching beyond the CUFG ‘boundaries’ to incorporate the voices of various other (non-gardening) stakeholders interwoven in the socionatural assemblages, facilitated a deeper understanding of the complexities of the multidimensional negotiations, agendas and practices that coalesce to form these spaces. In the following section, I begin by documenting the multiple-case study approach, which serves as the basis for this thesis, outlining a justification for this framework and the number of case study sites chosen. I then discuss the three distinct, but linked, qualitative methods I adopted for this ethnographic exploration: participant observation, semi-structured interviews and ‘go-along’ walking interviews. I then proceed to document the process I undertook in leaving the field and the emotional and affective dimensions of such a departure, and then examine the ethical and reflexive considerations in relation to the research. Finally, I outline the process I undertook for analysing the data.

4.2 A Multiple-Case Study Approach

A comparative design was deployed in the form of a multi-case study approach to gain a greater awareness and deeper understanding of the interweaving of socionatural relations and socioecological caring practices in diverse CUFG contexts. As observed by Yin (2003), contrasting two or more case studies tends to generate stronger conclusions. Therefore, the decision to focus upon three case study sites within the city of Edinburgh reflected the practical logistics of maintaining the necessary commitment needed to immerse oneself fully into each garden setting. Utilising a case study approach enabled me to critically engage, interact, and maintain contact with the urban garden assemblages, what Flyvbjerg considers “getting close to reality” (2001: 132). Notably, the case study approach is particularly apt at producing “thick” narrative, which ultimately allows complex, multi-vocal stories to unfold, where “small questions often lead to big answers” (Flyvbjerg 2001: 133). The in-depth case

study approach provided fertile ground for asking numerous “little questions” (Flyvbjerg 2001: 133), which at first may seem small or unimportant, nevertheless, cumulatively were instrumental in producing a plethora of rich data. Several critiques have been expressed in relation to case study research including a lack of rigour, issues of validity, in addition to the embedding of the researcher in the study (Yin 2003). However, Flyvbjerg argues a post-positivist approach to case study research emphasises that the “context-dependent knowledge” (2006: 224) gained from case study research which is frequently the subject of criticism, is one of the main advantages:

the most advanced form of understanding is achieved when researchers place themselves within the context being studied. Only in this way can researchers understand the viewpoints and the behavior, which characterizes social actors (Flyvbjerg 2006: 236).

Moreover, Flyvbjerg (2006) argues that rather than case study research orientated to verification bias (i.e. the researcher discovers what they expect to find) the intensity and depth of the approach is more likely to uncover nuances and complexities that lead to new considerations that disrupt or refute preconceived understandings. Furthermore, the common critiques articulated against case study research are counteracted by the depth, richness and complexity of data collected through a multiple method approach (Yin 2003).

4.3 Case Study Selection: Collective Urban Food Gardens in Edinburgh

The decision to explore CUFGs in Edinburgh, Scotland, is twofold. First, as discussed in Chapter 1, contemporary critical scholarship regarding community gardens has focused predominately on the North American context, particularly New York, shaped by a trajectory of political resistance (for example, Eizenberg 2013; Schmelzkopf 1995, 2002; Smith and Kurtz 2003) and Canada, especially Toronto (such as Baker 2004; Irvine *et al.* 1999; Kortright and Wakefield 2011). Therefore, in order to expand geographic understanding of urban food growing and highlight the socionatural dynamics within the micro-particularities of specific CUFGs, I decided to explore such practices in a city which is “largely overlooked by critical urban scholarship” (Kallin and Slater 2014: 1353). Moreover, as discussed in Chapter 1, there has also been a paucity of research exploring urban food growing in Edinburgh and therefore, I decided to situate my investigation within this city to fill this

lacuna. It is hoped, by highlighting the specificities of place that contribute towards shaping the formation of the case study gardens, that this thesis will broaden and strengthen understanding of collective urban food growing practices in the contemporary city.

Second, research to date that has been conducted within the UK has lacked a detailed, ethnographic multi-case study approach. Indeed, research has to a large extent failed to engage directly with the gardeners who actively sustain, maintain and cultivate the spaces, and instead, has frequently relied upon discussions with paid employees. Furthermore, as I explored the burgeoning body of academic literature examining urban gardening projects, it became apparent that the majority of research focused upon the activities that occur *within* these places, rather than the processes, negotiations, power relations and funding streams that coalesce to create, maintain and continually remake these entangled socionatures. The perspective of urban gardening developed in this thesis begins from a conceptualisation of space as an open, fluid process emerging through social interactions (Massey 2005). Therefore, I adopted a strategy which brought the voice of urban gardeners, grassroots activists, and local residents into conversation with a variety of other stakeholders (for example, landowners, planners, and councillors) and focused upon the everyday practices of those who are entangled within the heterogeneous relational processes that coalesce to create these socionatures.

Having chosen to locate my research in Edinburgh, I identified the three case study projects using material from the FCFCG, *Farechoice*³⁰ publications and web-based searches. It was apparent that there was a multiplicity of urban food growing projects located throughout Edinburgh with diverse organisational structures, membership formats and tactics for appropriating space. Three general manifestations were identified: 1) grassroots community activism; 2) Non-governmental or state involvement; and 3) private developer-supported or initiated projects. Therefore, focusing upon CUFGs in Edinburgh enabled me to explore the tensions and synergies between top-down and bottom-up, formal and informal approaches to garden formation and the inherent power relations embodied therein. The three gardens were selected to provide variety in terms of location, land ownership, and organisational structure.

³⁰ *Farechoice* is a newsletter produced by Community Food and Health (Scotland), which supports community based food and health related activity. The publication discusses news, recent policy developments, and highlights projects throughout Scotland.

The case study sites were chosen based on the following criteria:

- corresponded to my definition of a CUFG outlined in Chapter 1;
- placed emphasis upon communal fruit and vegetable growing, both as an activity and a wider goal to foster broader socioecological objectives;
- located within the urban area of Edinburgh (following the CEC administrative boundary), and;
- varied in origin, organisational structure, management, funding, and location within the city.

The three case study gardens selected are: Lochend Secret Garden (LSG), Granton Community Gardens (GCG) and The Grove Community Garden (TGCG) (key characteristics summarised in Table 4.1 and discussed in section 4.4). The case studies were not intended to be representative of Scottish CUFGs in general, or of various models of garden organisation, indeed they are not, but rather they are idiosyncratic expressions of socioecological entanglements that were selected to provide a diversity of CUFGs.



(Figure 4.1: Location of case study CUFGs, Edinburgh) © Crown Copyright and Database Rights 2015. Ordnance Survey (Digimap Licence)

The research is positioned within the broader ‘case’ of the city of Edinburgh in which structural processes and forces operate on, and in combination with, local contextual factors that condition urban food growing spaces. The emphasis placed upon the interaction between the broader urbanisation process and local manifestations of CUFGs does not imply that the city is understood as a bounded system. Indeed, the urban is conceptualised as a point through which interconnected flows and relationships interchange and merge. I was not familiar with the case study sites prior to research; however, having been both a student and visitor to the city, transport links and surrounding geographical areas were known, enabling me to quickly re-immense myself within the urban fabric. Landmarks, sights, sounds, and diction became instantly recognisable. During the initial stages of my fieldwork I undertook an extensive walk of the surrounding environment of each case study site, aligning with the notion that the neighbourhood is a place that is experienced by walking (Mayol 1998). These walks lasted approximately one and a half hours each and enabled me to explore the city as both a physical entity (consisting of spatial patterns and structures) and a sensuous and affective space through which multiple flows of emotions, feelings, and sensations intersect.

A typical criticism of case study research is that the findings arising from it cannot be generalised and therefore has limited external validity. Indeed, Mol states that case studies “do not lead to conclusions that are universally valid, but neither do they claim to do so” (2008: 10). Indeed, the purpose of this research was to explore the production of each CUFG in relation to the care practices and socionatural associations that emerged from particular entanglements, and not to simplify and generalise with regard to other cases. My intention, therefore, was not a rigid comparison of case studies and their characteristics, but to consider reasons for variation and similarities. As Mol states, case study research “offers points of contrast, comparison or reference for other sites and situations. It does not tell us what to expect – or do – anywhere else, but it does suggest pertinent questions” (2008: 11). Indeed, this thesis endeavours to draw various important conclusions (however, not *generalisable* conclusions) and provides only a partial account. Therefore, the use of case studies within this research is to generate an intensive examination of particular manifestations of CUFGs and experiences through the significance of context and gain a rich understanding of the motivations of gardeners, and the dynamics, relationships, and tensions that entangle to create and sustain these socionatures.

Table 4.1: Characteristics of case study CUFGs (as of September 2014)				
Name	LSG	GCG	TGCG	
			(G1)	(G2)
Location	Lochend, east of city centre	Granton, north of city centre	Fountainbridge, west of city centre	
Size (m²)	1,200	Site A: 430; Site B: 280; Site C: 320; Site D: 85; Site E: 444; Total: 1,559	800	2,485
Founded	2011	2010	2013	2014
Land ownership	Public (CEC)	Public (CEC)	Private (Grosvenor)	Public (CEC)
Tenure Status	Rolling lease (£150 per annum)	Informal operating agreement – Letter of Comfort	Temporary free lease agreement	Temporary free lease agreement
Start-up cost (first 2 years)	Approx. £130,000	Nominal	Approx. £20,000	Approx. £3,000
No. of participants	Approx. 80	Approx. 12	Approx. 180 gardeners/ 20 non-gardening members	
Physical features	Forest garden – fruit trees and bushes 65 Raised beds (52 individual and 13 communal ‘outreach’ plots) Composting system Pond with frogs Polytunnel Outdoor oven Large shed Large table and seating areas Lawn area Rainwater harvesting system Fencing to enclose the garden – unlocked gate	5 collective gardening plots located around the housing estate Strawberry mounds Composting system Small shed for storing tools and equipment Small lawn areas Low metal fencing to enclose the garden – locked gates with PIN access (given to both members and local residents)	2 containers (for tools and equipment storage and also a welfare unit fitted with toilet, sink and office space) 67 individual planters and 60 communal Seating area ‘Mud kitchen’ for children Hanging bottle wall garden Woodchip ground surface Fencing to enclose the garden – locked gates with PIN access code (available only to members – as in G2)	Container (tool and equipment storage) 50 individual planters and 78 communal Composting system/wormery Art installations Canoe – planting and play space Self-built greenhouse bothy Seating (recycled wood) Sanctuary area Campervan (meeting place/library) Astroturf/ woodchip/ hard-core surface Rainwater harvesting system

4.4 The Case Studies

This section introduces the three case studies (their location within Edinburgh is shown in Figure 4.1), where I outline their local context, development, and key characteristics.

4.4.1 *Lochend Secret Garden*



(Figure 4.2: LSG, 30/07/14)

Lochend is a mixed tenure housing estate located in East Edinburgh, which was originally built as social housing in the early 20th Century and is currently one of the most deprived areas in Scotland according to the Scottish Index of Multiple Deprivation (SIMD) with 5 of the 50 most deprived areas located within the Lochend and adjoining Restalrig area (SG 2012). The garden is situated in a secluded position surrounded by residential buildings consisting of two and three storey tenements³¹ in broken perimeter blocks, making its name particularly apt (see Figure 4.2).

³¹ In Scotland, the term ‘tenement’ “covers a wide range of property including traditional sandstone tenements, large houses converted into flats, high rise blocks and four-in-a-block”

The project was initiated by Carr Gomm Scotland, a national adult social care charity, to enable people they support and the wider community to collectively garden. The physical garden structures were completed in April 2012 using a ‘community-build’ model where local participants attended twice-weekly drop-in sessions. Guided by a facilitator, the local volunteers undertook the majority of the hard landscaping of the site, erected the polytunnel, and then constructed fifty-two individual/household raised beds, in addition to thirteen designated for community groups (see Figure 4.3 for aerial plan of garden). Raised beds were assembled for food growing as a consequence of contamination found in the soil (discussed in section 5.3). In August 2013, the lease was transferred from Carr Gomm to the ‘Lochend Community Growing Project’ (LCGP), an autonomous group of local residents who currently organise and maintain the garden. This was particularly interesting as I was able to observe the embryotic stage of an independent resident collective taking responsibility for managing and maintaining a previously organised garden project, initiated by a non-governmental organisation (NGO). I began volunteering at LSG in January 2014, where I tended to the communal forest garden and raised beds and undertook a range of tasks (i.e. weeding, watering and planting) depending on the rhythms of the garden.



(Figure 4.3: Aerial plan of LSG, Source: Mac Maps)

(SG 2015). Significantly, tenements form over a quarter of the housing stock in Scotland and the term lacks any pejorative negative (i.e. substandard) connotations (Riddoch 2013).

4.4.2 Granton Community Gardens



(Figure 4.4: GCG, 'Site B', 29/07/14)

Granton is situated to the north of Edinburgh city centre and the 2012 SIMD highlights that there are significant areas of deprivation, with high levels of unemployment and economic inequality (SG 2012). In 2010, a local resident began to cultivate a small area of CEC owned grassed land next to his flat in the area of Wardieburn to grow fruit, vegetables, and herbs. This urban intervention initiated conversation amongst residents and led to the formation of a grassroots group who began to transform underutilised areas into productive food growing spaces. Between 2010-12, the group of gardeners tended two garden sites situated on Wardieburn Road without the aid of funding.

In spring 2012, local residents formed a community group 'GCG' and adopted a constitution. At the time of research, they were responsible for five organic gardening spaces, which vary in size and location throughout the mixed tenure residential area of Granton (see Figure 4.4 for Site B). One of the gardens is located in the grounds of the Wardieburn Royston Community Centre (see Table 4.2 for site descriptions). My involvement with GCG reflected the collective, fluid nature of the group. I was a volunteer and attended communal workdays

in which we would complete tasks together, frequently moving tools and plants between sites. All gardens are grassroots urban interventions, which have transformed once neglected grassed incidental open space, into communally cultivated productive food growing gardens for everyone to share. In 2014, the Gardeners' Café was established as a pilot project within the Wardieburn Royston Community Centre, an initiative that aims to address issues pertaining to food insecurity and social isolation, where produce grown at the multiple garden sites is incorporated into the menu.



(Figure 4.5: Aerial plan of GCG, Source: Mac Maps)

Table 4.2: Site description of GCG (September 2014)	
Site	Description
A	Large rectangular corner plot, south facing, adjacent to Wardieburn Road and Boswall Parkway. Large hedge around two sides of the perimeter shielding the garden from the road. Four large growing spaces designed in a square formation, gravel paths dissect the beds. Composting area next to a small shed situated at the corner of the site.
B	Narrow rectangular corner plot, adjacent to Wardieburn Road and Wardieburn Place West, surrounded by three-storey tenements on two sides. Contains a raised strawberry mound and planted to full capacity. Low-level metal fence encloses site with a locked gate
C	Small rectangular plot located between a three-storey tenement block of flats and a paved corner area. Surrounded by a low-level metal fence with a locked gate. There is a telecommunication box positioned directly next to the fence.
D	Large rectangular corner plot adjacent to Royston Mains Road and West Granton Road. Opposite the garden on West Granton Road are commercial buildings including two supermarkets. Bus stop located nearby, large footfall, and high volume of traffic, both buses and cars.
E	Located within the grounds of Royston Wardieburn Community Centre. Dispersed spaces consisting of a raised bed, a corner planting area with repurposed tyres utilised as growing containers and a rectangular cultivated plot, surrounded by lawn. Maintained by a children's gardening club based at the community centre and ran by Joe, a member of GCG. As part of workdays, gardening activity would include this site, such as watering plants; therefore, I have included a site description.

4.4.3 *The Grove Community Garden*



(Figure 4.6: 'G1', TGCG, 27/04/14)



(Figure 4.7: 'G2', TGCG, 25/07/14)

The term ‘TGCG’ is used by members as an umbrella phrase to refer to both ‘Grove 1’ (G1) and ‘Grove 2’ (G2) temporary urban gardening projects (see Figure 4.6 and Figure 4.7), which occupy different vacant deindustrialised sites in the Fountainbridge area of Edinburgh, located to the south west of the city centre (see Figure 4.9 for relative position in relation to each other and Table 4.3 for site descriptions of G1 and G2). Originally, TGCG consisted solely of what became known as ‘G1’, established in 2013, as a result of a consensual agreement forged between a grassroots collective (consisting of local residents and community activists) and Grosvenor, a private property developer. Coinciding with the start of my fieldwork in January 2014, the gardeners were in the process of developing a second temporary garden, ‘G2’, on an adjacent vacant site, owned by the CEC, which is currently being developed by the Edinburgh Development and Investment (EDI) Group Limited, a property development and investment business established in 1988, owned solely by the CEC and is run as an ‘arms length’ operation. Initially, I was very much a visitor-researcher at G1, relying on meeting other gardeners on site and attending predetermined workshops and social events. However, I became a full member of G2 at its inception in April 2014, taking ownership of a planter, number 214 (see Figure 4.8), paying a three-pound membership contribution to satisfy liability insurance costs. Only after induction was I given the access code for the locked gates. This was crucial in affording entry to the gardens, which are not open to the general public. Furthermore, at the time of research, I was living in Tollcross (only a ten-minute walk away from the garden), enabling flexible access to my planter.



(Figure 4.8: Planter 214 at G2)



(Figure 4.9: Location of G1 and G2 in relation to each other, Source: Mac Maps)

Table 4.3: Site description of TGCG (September 2014)	
Site	Description
G1	A medium-sized (800m ²) rectangular plot located within Grosvenor's vacant brownfield Springside development site. Situated north of Fountainbridge road and adjacent to Drydale Road and the IQ student accommodation. The garden is hidden from public view. There is a metal Heras fence around the boundary of the garden while a large blue wooden fence encapsulates the wider development site. There are 67 individual and 60 communal planters.
G2	A large (2,485m ²) rectangular plot positioned within the 8.2 acre CEC owned redevelopment site positioned next to Gilmore Park and the former headquarters of the North British Rubber Company (a listed building to be renovated into a modern visual arts centre with a £5 million Heritage Lottery Fund grant). The site is contained within a metal Heras fence. There are 50 individual and 78 communal planters.

4.5 Ethnography: Definitions, Principles and Methods

Several authors capture ethnography's 'quality' as both method (data collection technique) and methodology (theoretical and philosophical framework) (Hammersley and Atkinson 2007; Atkinson and Hammersley 1998). However, various scholars resist providing a specific definition of ethnography and oppose drawing firm boundaries around its meaning. Nevertheless, Hammersley and Atkinson state that in its most typical form:

ethnography usually involves the researcher participating, overtly or covertly, in people's daily lives for an extended period of time, watching what happens, listening to what is said, and/or asking questions through informal and formal interviews, collecting documents and artefacts – in fact, gathering whatever data are available to throw light on the issues that are the emerging focus of inquiry (2007: 3).

For the purpose of this thesis, ethnography will be taken as embodying three integral characteristics: the use of multiple research methods; immersed engagement within the field; and the generation of rich data via in-depth, small-scale case studies (Hammersley and Atkinson 2007). Significantly, ethnography tends not to follow a "neat series of sequential stages", but is "better envisaged as a series of actions that are coordinated in a flexible manner" (Brewer 2002: 57). For O'Reilly, ethnography is "iterative-inductive research" (2005: 3) that evolves in design throughout the research process. Within this context, the research process is a multifaceted, fluid, messy undertaking, which allows the researcher to make adjustments in the field. Indeed, ethnography's flexible approach enabled me to respond to unanticipated events, opportunistic interviews and unplanned activities throughout my fieldwork. Ethnographers are frequently concerned with the mundane and the everyday rather than the unusual or extraordinary (Fetterman 1998; Hammersley and Atkinson 2007), focusing on "people's ordinary activities in naturally occurring settings" (Brewer 2002: 20). Thus, ethnography was a pertinent and appropriate research methodology to examine the negotiated lived experiences of gardeners, explore social meanings, observe activities and participate in the CUFG settings. Multiple data gathering methods were deployed including participant observation, in-depth semi-structured interviews and walking interviews, indeed, ethnography lends itself to triangulation. As a strategy of converging lines of enquiry, triangulation helps to "clarify meaning" (Stake 2003: 148) and "adds rigor, breadth, complexity, richness, and depth to any enquiry" (Denzin and Lincoln 2003: 8). This thesis

therefore represents an ethnographically grounded contribution to the diverse body of work that forms UPE (following, Newman 2015).

4.5.1 *Participating and Observing*

Participant observation is intimately associated with ethnography (Brewer 2002; Cook and Crang 1995; O'Reilly 2005) and as a method of data collection, entails asking questions, observing actions and participating in activities with others to discover their experiences, social meanings and interpretations (Brewer 2002). However, collecting such 'rich' and detailed data requires a vast time commitment to the field (Brewer 2002). Participant observation enabled me to study the structure, processes, behaviours, relationships, problems and attitudes of gardeners 'from the inside' by immersing myself in the field and sharing everyday experiences, where emotions, smells, sounds, and conversations all shape the "observation of an event" (O'Reilly 2008: 36; Brewer 2002). Therefore, I was able to observe gardeners' situated and embodied caring practices, indeed, as Mol *et al.* argue care "after all, is not necessarily verbal" (2010: 10).

This thesis adopted an 'open observation' model, in which the participants were aware of my identity as a researcher and the purpose of the study. The observation was primarily active and direct, which entailed a high level of involvement and commitment within each site. My role as an observer in the garden settings can be characterised as a dialectic moving between 'partial participation and observation' to 'complete participation', where I was fully immersed within particular activities. As overt participation was undertaken, access had to be negotiated and permission obtained. Entry into each setting was instigated by an email in which follow-up correspondence occurred with a key gatekeeper from each garden. They included: a founder member of GCG; a project worker and then member of the steering committee for LSG and the chairperson of TGCG. I sent subsequent emails to clarify any issues of concern before initial face-to-face meetings were arranged with each gatekeeper. Ultimately, they facilitated access to the wider group and became 'key participants' in that they introduced me to other gardeners and were helpful, informative and welcoming. Initially, being a visitor to all gardens meant that I had the experience of arriving at the site for the first time – the "newcomer's view" (O'Reilly 2005: 92), observing and asking 'outsider' questions along with not taking for granted organisational structures.

I carried out (approximately 300 hours) of intensive participant observation from January to the end of September 2014. This timeframe was sensitive to the fact that food growing is a seasonal process and therefore, this would be the most appropriate period to gather relevant information, when gardeners are most active. However, I continued to return to Edinburgh for pre-arranged events that I had agreed to attend until the end of 2014. For example, I participated in the Germination Skill Share Event hosted by LSG in November 2014, as members of each case study garden attended and as a knowledge exchange event was highly relevant to my research. Since particular “times might offer different environments and experiences than others” (Sarantakos 2005: 224-5) a range of days, weeks and months were observed. Significantly, the weather also played an integral role, frequently determining how many people were present and what activities were undertaken. Notably, the weather affected the atmosphere and mood of the garden, heightening senses and guiding conversation. For example, when we sheltered from the rain we discussed how cold we were: “*stone cold hands*” and “*blue lips*” (Judith, fieldnotes, LSG, 12/03/14) or when the glaring midday sun demanded “*extra sunscreen and physical activities became fatiguing*” (Francis, fieldnotes, GCG, 19/08/14).

The observation deployed at the particular sites was primarily unstructured and flexible, in that I responded to the everyday arrangements, events, and flows of the gardens. I attended organised ‘workdays’ at each garden throughout the fieldwork period. These ‘workdays’ usually occurred on specific days of the week for each site³². I endeavoured to attend as many organised workshops, events and social gatherings as I could, following the temporal rhythms of each garden. I made particular effort to visit the gardens on Saturdays, as they were regularly the most heavily attended days by members. At the early stages of my fieldwork there were several awkward instances where on arrival there would be no one at the garden to direct me on what tasks needed to be completed, I would therefore keep myself ‘busy’ weeding the communal beds/planters until other gardeners arrived. However, through continuous participation and hours of physical labour, the feeling of awkwardness did dissipate and as time progressed, I became in tune with the everyday patterns of each case study site and its members.

³² Communal gardening sessions (workdays) as follows: GCG, Tuesday and Saturday 11am-1pm; LSG, Wednesday and Saturday 11am-1pm; and TGCG (at both G1 and G2), Wednesday 6pm-8pm.

Building trusting relationships was particularly crucial in establishing rapport and connections with participants at each site. As O'Reilly has stated the "initial stages of participant observation are often the most difficult" (2008: 151) and this would concur with my experience. Indeed, the observer-observed relationship evolved throughout the duration of fieldwork, beginning with the participants displaying tentative curiosity and then developing into relations of mutual understanding and trust which were continually worked at, nurtured and negotiated. Significantly, the longer I was immersed in the field and became an accepted member of each garden, the more my position as a researcher became less 'visible'.

During participant observation I focused not only on particular (human) activities and communications but also on the whole setting (including the nonhuman physical milieu and affective properties of the garden). Furthermore, I observed human-environment interactions, focusing on how people reacted and interacted in particular circumstances and activities. While I was gathering information on what gardeners 'cared about' and 'cared for', I started to recognise that my most physical days in the garden (weeding, thinning, planting, digging, harvesting) afforded me the opportunity to reflect upon the socioecological entanglements that enlivened and animated the CUFGs. Thus, gaining an understanding of the attachments and detachments together with the emotions that emerge from such encounters. While working in the gardens I was able to strike up conversations regarding the active presence and work (or absence) of the nonhuman. Discussions ranged from the creative actions of earthworms to the devastating effect slugs could enact on produce intended for human consumption.

My ethnographic entanglements with nonhumans therefore centred upon the multi-sensuous interactions and encounters with a variety of 'other' species that formed the CUFGs. My primary focus concerned the relationships through which the gardens were composed, and the caring relations established and maintained between particular entities, rather than concentrating on specific flora or fauna. While I aimed to be observant and attentive in capturing the vitality of nonhuman aspects of the garden, my attention concentrated on how particular nonhuman entities were enrolled into material relations of care with the human gardeners. In this sense, I examined which nonhumans became more important, prominent, nurtured and cared for in different contexts and what were kept at a distance, disliked or even killed. My engagements with nonhumans, therefore, were based on the everyday collaborative doings between human and nonhumans in the gardens, to explore how these interactions may

cultivate an ethos of care towards a variety of companion species (Haraway 2008). Thus, while I did attempt to somewhat disrupt the human as a sovereign power in the gardens, placing emphasis on the tinkering, adjustments and negotiations that were enacted between multiple others, I did ultimately focus upon human experiences, practices, and subjectivity in relation to the nonhuman, thus reflecting my research methods.

During organised ‘workdays’, an integral activity at all sites was the sharing of food. At LSG, lunch was a collaborative undertaking, which was animated with lively conversation and became an important vehicle to explore people’s experiences of the garden. Indeed, it acted as a forum for discussions ranging from the multi-sensuous qualities of food, people’s wellbeing, and the politics of the day. Gardeners would bring a selection of food to eat together, which would be (on occasions) supplemented with produce from the garden. This communal embodied activity was a crucial aspect of the workday. Similarly, the sharing of food at GCG was experienced through the Gardeners’ Café, where produce cultivated at the various garden sites was used to create meals (free or small donation). Attending these meals enabled me to meet, interact and converse with the wider community who were not active members of the garden. Moreover, it allowed me to trace produce from its production to consumption. Notably, at both G1 and G2, food was a medium through which celebration occurred. At social gatherings, such as birthday parties, barbeques, and harvest festivals, food was enjoyed collectively, celebrating the success of the gardens. Significantly, at all sites, the sharing of food was a visceral experience. The process of ‘eating together’, as an everyday physiological requirement (to satisfy hunger) and communal experience, enabled me to explore how collectives were forged through this visceral, embodied practice.

4.5.2 Notes from the Field

I commenced data collection once entry to each site was obtained. Brief notes were recorded in a small leather-bound pocket-sized field journal to withstand the rigours of the garden and the changing elements. I wrote short concise notes consisting of mainly key words and brief sentences to act as a guide, together with small sketches documenting the physical layout. These scribbles were etched into my notebook, to be reworked and expanded upon, and reconsidered later that day. As Fetterman states, notepads “hold initial impressions, detailed conversations, and preliminary analyses” (1998: 63). As my time in the field progressed, journals became embellished with grubby soiled fingerprints and watermarks from impromptu

showers of rain. Alternatively, when openly taking notes within my field journal would be deemed obtrusive, notes were made electronically via my iPhone. After visiting the sites, I would return with the journals burgeoning with information, leaflets and new contact details.

The fieldnotes would then be expanded upon in hand written narrative form, with detailed information recorded at the end of each day within different coloured journals to facilitate identification. As Walford (2009) argues, fieldnotes are fundamental to ethnographic practice. Therefore, I endeavoured to produce copious, accurate, candid and comprehensive notes recording a description of the setting, persons, discussions, relations and activities for each site. Notes included: the time, date and location, weather, atmosphere, physical setting, people present, main activities, conversations and notable events, schedules, temporal order and routines. In addition, I made notes regarding the meals shared, produce harvested, division of labour, hierarchies, members' perspectives and meanings. Furthermore, observation was continuous in that events, activities and experiences were recorded for the entire duration of the fieldwork. While at the beginning I tended to document everything I witnessed and experienced indiscriminately, as time progressed and my knowledge of the gardens increased I gained an appreciation and understanding of how relevant occurrences, themes and activities were to the research topic and became more selective. As O'Reilly argues, the process of moving from "the strange to the familiar" (2005: 92) effects what is noticed, perceived and observed.

The journals provided a space for continual reflection and analysis. The process of constantly writing helped to clarify thoughts, ideas, and interpretations. Moreover, writing by hand with a pen on paper (rather than with a keyboard directly on to a computer screen) enabled particular emotional engagement for myself, in which the hand moved fluidly across the page assisting a deeper connection between thoughts and language in a stream of consciousness. The collection and analysis of data frequently took place simultaneously and were interwoven. References to my theoretical framework and connections to particular relevant journal articles and academics were noted. I also found it useful to document my feelings, emotions, reactions and reflections in relation to each field visit within a separate research diary. This was an invaluable tool to contextualise my research and assist reflexivity. However, the practice of writing fieldnotes was a time-consuming process, taking approximately two hours per entry. Clearly, the practicalities of everyday life and other commitments meant that this was not always possible at the end of each visit, however,

recognising the limitations of memory I endeavoured to record what I had heard and observed as soon as possible.

In addition to fieldnotes, approximately 960 photographs were also taken “documenting field observations” (Fetterman 1998: 65) and used as mnemonic support. Indeed, photographs, as a non-verbal, visual medium, can act as projective stimuli and “can bring a rush of detail that the fieldworker might not remember otherwise” (Fetterman 1998: 66). Significantly, it was not only myself who would stop to take photographs. The gardeners themselves frequently captured everyday objects and experiences including their produce (impressive artichoke heads, entwined carrot and parsnips, and heaps of freshly harvested potatoes), completed tasks (strawberry mounds, mosaics and personalised planters), and the nonhuman that took their interest and provoked curiosity (bird nests, urban foxes and tadpoles), and were often shared via social media. As the taking of photographs was an everyday occurrence, I felt comfortable documenting the socioecological experiences of the CUFGs through this medium. Photographs are utilised in the following chapters to provide visual support to the discussion.

4.5.3 Interviewing Urban Food Gardeners

The interviews undertaken with gardeners were “a face-to-face encounter” (Brewer 2002: 65) that “explain and put into a larger context what the ethnographer sees and experiences” (Fetterman 1998: 37). Hammersley and Atkinson state, interviews conducted in ethnographic research “range from spontaneous, informal conversations in the course of other activities to formally arranged meetings in bounded settings out of earshot of other people” (2007: 108). My research employed both techniques. In addition to attending weekly gardening workdays at each site, I also utilised various events, celebrations, and workshops, as well as monthly committee meetings, to promote my research and recruit possible interviewees.

Formal semi-structured in-depth interviews were organised with seventeen gardeners and unstructured informal interviews with eleven gardeners (see Appendix 1). Formal interviews were arranged with gardeners once a relationship of trust and rapport had been established through participant observation, and were organised verbally at prior gardening sessions or via email. These interviews were undertaken in a secluded corner of the garden environment. An interview guide was utilised, which enabled me to cover specific topics, however, they

were not covered in a fixed sequence. A flexible approach was adopted allowing the discussion to flow and unfold naturally. Moreover, open-ended questions were used, which provided interviewees a greater voice and took the form of a ‘conversational exchange’. Indeed, the interview is a co-produced narrative. However, as stated by Hammersley and Atkinson the fact that the interviewer “has a research agenda and must retain some control over the proceedings” (2007: 117) highlights the power dynamic between the interviewer and interviewee will be to some extent asymmetrical. Thus, the generated data are “context bound to the interviewer” (Brewer 2002: 67). Consequently, interviews must be regarded as “social events in which the interviewer (and for that matter the interviewee) is a participant observer” (Hammersley and Atkinson 2007: 120).

It must be noted, attaining and arranging interviews was at times, a difficult and time-consuming process (Brewer 2002). There were instances when having agreed to pre-arranged interviews; participants would cancel due to either work or family commitments. After multiple (failed) attempts to organise interviews with particular gardeners, I responded and adapted to align with their busy schedules, and when available, conducted informal, spontaneous interviews within the gardens settings. These interviews were frequently spontaneous manifestations that occurred while undertaking various tasks in the garden and at social events and in this sense, the interviews “extended ethnographic observation” (Mol 2008: 11). Informal interviews are valuable “in discovering what people think and how one person’s perceptions compare with another’s” (Fetterman 1998: 38) and were used throughout the period of participant observation. The familiarity of the surroundings facilitated a relaxed atmosphere and the unstructured nature of the interviews enabled the gardeners to “talk on their own terms” (Hammersley and Atkinson 2007: 110). The flow of the interview took the form of a natural conversation, which produced rich data (Brewer 2002). While the majority of the interviewees were happy to be recorded, the formalised process did foster feelings of unease for some participants, therefore in this context, notes were recorded by hand in my field journal. As Hammersley and Atkinson highlight within this context, “the dividing line between participant observation and interviewing is hard to discern” (2007: 108) and “require great interviewer skills” (Brewer 2002: 66).

During informal conversations and interviews, members of the case study sites would recommend other collective growing projects to visit (see Appendix 2), which they were associated with or had personally attended. Drawing upon these recommendations, I

proceeded to arrange visits to a variety of sites within Edinburgh. This enabled me to explore any connections or associations between various gardens and gain a wider understanding of urban food growing projects. I discovered there were numerous enthusiastic and passionate people who form an interwoven web of connections throughout the city, who I would repeatedly encounter at urban food gardening networking events.

4.5.4 ‘Go-Along’ Walking Interviews

Initial walking interviews were undertaken with six gardeners, two at each case study location, where follow up semi-structured interviews were also conducted later in the fieldwork process. The participants selected were key members of the CUFGs. As Cook and Crang state, it is “not the sheer *number*, ‘*typicality*’ or ‘*representativeness*’ of people approached which matters, but the *quality* and *positionality* of the information that they can offer” (1995: 11; emphasis in original). I found the walking interviews highly enjoyable and extremely informative, particularly in gaining a detailed history of the gardens, where various components of the spaces would trigger discussions of particular ‘milestones’ in the gardens’ development. During the interview I utilised my pocket field journal to document key phrases, emotions, and practices of the interviewee. The length of the walk was entirely determined by the participant, lasting on average between thirty minutes and one hour. Questions were limited to prompts in which the format took a conversational exchange and were unstructured, following the kinaesthetic rhythm of the route taken, pausing at various points of interest. As Anderson highlights, the process of “talking whilst walking” produces a collaborative unstructured dialogue rather than a “conventional interrogative encounter” (2004: 260). Indeed, the interviews generated abundant data regarding each gardener’s emotional attachment and in-depth knowledge of the setting. During the walking interviews the nonhuman elements of the garden were not a benign backdrop, but formed a multiplicity of ‘voices’ penetrating the conversation (Hitchings and Jones 2004; Evans and Jones 2011). As Edensor states, the “rhythm and flow of walking folds body, self, other humans and non-humans, time-space and place together” (2010: 78).

While Carpio (2009) has highlighted, the ‘go-along’ technique helps to disrupt the traditional asymmetrical power dynamics between the researcher and interviewee, it must be noted that despite its ‘empowering’ claims, the researcher initiates the encounter, asks questions and interprets the interview, therefore I am doubtful about the assertions of

empowerment. Significantly, what could be considered as informal, spontaneous walking interviews with the gardeners continued throughout the fieldwork period, blurring the ‘boundary’ between interviews and participant observation. Gardeners would frequently show me items of interest, moving between different parts of the garden, demonstrating how they ‘did things’, thus illustrating the importance of nonverbal, tactile encounters to transmit information (Kusenbach 2003). Indeed, when enquiring about what gardeners ‘cared about’ and ‘cared for’, they would frequently state, “*it’s easier if I just show you*” for example, referring to the pond full of frogspawn (Michelle, Fieldnotes, LSG, 06/05/14). Notably, the longer I was immersed in the gardens the more people would show me what they ‘cared about’ and ‘cared for’; such as favourite plants they were nurturing, pictures of the design process kept within the shed; and elements of the garden they helped to construct that held particular emotive meaning.

4.5.5 Multi-stakeholder Interviews

I conducted semi-structured interviews with twenty-five stakeholder actors including: professional staff directly affiliated with the CUFGs; people integral to the initiation of the project in terms of funding or management; and various interest-based groups such as the FCFCG to gain wider context (see Appendix 3 for full list). The participants were chosen by the means of purposive sampling, where I identified participants using relevant websites and promotional material. Furthermore, the gardeners themselves would recommend external non-gardening stakeholders to interview, thus in this instance, I deployed a snowball technique to identify those relevant to my research. The majority of interviewees were willing to suggest other potential research participants and frequently, provided numerous additional documents and recommended relevant workshops and conferences to attend.

Interviews were organised via email, to arrange a convenient date, time and location. Numerous interviews were conducted within the workplace environment of a private office at the request of various stakeholders. Where no office space was available or preference given by the interviewee, a private and quiet room was booked at the closest public library. An interview schedule was used, which consisted of both predetermined, specific questions and more general topics to be covered. However, the stream of questions asked in the interview process was fluid rather than rigid. Predominantly open questions were utilised to garner information regarding specific knowledge, circumstances and events. Interviews ranged from

1 hour to 3 hours 15 minutes. All interviews were audio-recorded with a Dictaphone and transcribed verbatim by the researcher. Pseudonyms are used throughout the thesis to refer to all participants with whom I conducted interviews and research conversations. Table 4.4 provides a summary of the data collection techniques utilised.

Table 4.4: Summary of data collection	
Ethnographic Participant Observation	▪ Participant observation at the three CUFG case study sites (300 hours)
Interviews with Urban Gardeners	▪ Semi-structured in-depth interviews with gardeners (17) ▪ Unstructured informal interviews with gardeners (11) ▪ ‘Go-along’ walking interviews with gardeners (6)
Interviews with Non-Gardening Stakeholders	▪ Semi-structured interviews with ‘non-gardening’ stakeholders (25)

4.5.6 Leaving the Field

I immersed myself in the CUFGs over a period of nine months to experience a full range of routines, rhythms, activities and behaviours in order to develop a broad understanding of them (Brewer 2002). Therefore, participant observation ceased only when theoretical saturation was reached in which participants repeatedly articulated combined similar narratives and when “tensions and commonalities between *multiple* perspectives” were explored (Cook and Crang 1995: 12; emphasis in original). Nevertheless, there were pragmatic factors that influenced the decision to leave the field, reflecting resource and time constraints. First, due to Economic Social Research Council policy, the designated timeframe for completion of the PhD was four years and therefore time in the field was restricted in order to complete my thesis in a timely manner. Second, the lease on my flat in Edinburgh terminated at the end of September 2014. Significantly, ‘leaving the field’ is an emotional process, especially when friendships had been formed and connections established between the garden spaces and myself. Specifically, relinquishing responsibility and care of my planter at G2, which I had assembled, personalised with artwork, and grown and harvested produce, was a poignant

moment marking the ‘end’ of the fieldwork process. However, as previously discussed, I did continue to return to the CUFGs for occasional social events and celebrations to which I had been invited.

4.5.7 Ethical Considerations

Ethics “pervades every stage of ethnographic work” (Fetterman 1998: 136). Indeed, Fetterman states, the “researcher must pursue each interview, observation, and analytical task with diligence” (1998: 145). Particular ethical considerations are required in relation to the interview process. Full written informed consent was obtained from all participants who were interviewed. To ensure that all participants were ‘fully informed’ an information sheet was given to each respondent before the interview process commenced, stating in non-esoteric language the key aspects of the research. All interviews were audio-recorded and transcribed by the researcher. Various measures were taken to ensure that the data was kept private and secure. During the data collection and analysis period the audio recordings were downloaded from the recording device to my laptop and were password protected. Other paper-based material such as my field journals and notebooks were securely placed in a lockable desk draw. Anonymity and confidentiality were guaranteed for all participants. It was decided that pseudonyms would be applied to all interviewees, as “a simple way to disguise the identity of individuals and protect them from potential harm” (Fetterman 1998: 142).

I did not alter the names of the case studies, as the specific historical and geographical characteristics are an important factor to the CUFGs narratives and their idiosyncratic formation processes. A particular ethical consideration raised while conducting ethnographic participant observation was related to the disclosure of highly personal information by gardeners to myself in trust, which I deemed not to be directly relevant to the research questions. Thus, these details are omitted from the thesis, as the responsibility to the participants was my foremost priority, ensuring that no distress was caused and privacy respected. Indeed, it is essential that researchers “subscribe to a code of ethics that preserves the participants’ rights, facilitates communication in the field, and leaves the door open for further research” (Fetterman 1998: 129). Therefore, I have endeavoured to provide a balance in specifying enough information to contextualise the interviewees’ comments, while not disclosing their identity. As previously delineated in section 4.3, I assigned abbreviations to each garden. To identify the specific garden each interview quotation pertains to, in Chapters

5, 6, 7, and 8, I utilise the following abbreviations, LSG, GCG, and TGCG. Notably, for the latter, I use this umbrella term when I refer to both G1 and G2 together as a collective garden. I use the abbreviations of G1 or G2 to designate which garden the participants are allocated a planter, however, frequently their activity spans both sites.

The taking of photographs highlights an additional ethical consideration. As photographs were taken throughout participant observation, verbal permission was sought from each individual in the view of the camera. Before taking photographs people were given the opportunity to remove themselves from the camera's viewpoint.

4.5.8 Reflection On a Moment in Space and Time

Data are presented in the form of verbatim extracts of in-depth interviews and conversations, and extensive notes from personal field journals and extracts from observational fieldnotes. Through 'thick description' "the voices, feelings, actions, and meanings of interacting individuals are heard. It captures and records the voices of 'lived experience'" (Denzin 1989: 83). Thus, while extensive verbatim quotations are presented within the analysis to 'give voice' to multiple perspectives and facilitate multivocality, thick description cannot be seen as a means to an end. Indeed, highly descriptive accounts, while signifying depth and richness, can never uncover a literal, complete 'reality'. Indeed, phenomena, experiences and 'reality' are constantly symbolically re(constructed) by people and the researcher throughout the research process and provide only a partial portrait (Law 2004). My account therefore, provides only one interpretation of 'reality', which is a personal, selective, and partial version (Cook and Crang 1995). Indeed, Hammersley posits that the "ethnographer's account is just as much an interpretation as those of the people that he or she is studying" (1998: 17). Following insights from poststructuralism and postmodernism there is a refutation of the prospect of a singular, true understanding of the world. Indeed, the narratives, stories, and 'findings' presented in this thesis are refracted through the researchers 'lens', contextualised by my positionality, as a female, English, university-educated researcher. As Cook and Crang argue, the "researcher's viewpoint is largely a product of social relations both within the academy and between it and the world at large" (1995: 7). Therefore, research is "always bound up in networks of power/knowledge and is, therefore, inherently political" (Cook and Crang 1995: 17).

Furthermore, data collection and analysis is situated within “the broad socio-economic and political situation at the time of the research” (Brewer 2002: 108). Notably, the fieldwork process spanned the Scottish Referendum debate and the subsequent vote on 18th September 2014, in which political engagement, activity, and media coverage was extremely high. Therefore, as an English researcher in Scotland when nationalistic sentiment was fervent, this dynamic further enlivened conversations with gardeners who were eager to garner my opinion on Scottish independence. The referendum stimulated conversations within the CUFGs regarding power and urban politics, particularly speculation over the direction of land ownership and community empowerment. However, these discussions remained speculative and they did not pertain directly to my research questions, therefore I do not discuss them in this thesis.

4.6 Data Analysis

The data collection process elicited the accumulative total of over 300 hours of participant observation notes, contained within six field journals, and 116 hours of transcribed interviews. Notably, a number of the finalised transcriptions were over 35 pages long. Analysis is a lengthy continuous process throughout ethnography and I frequently revisited and reflected on the data gathered. Upon leaving the field, in-depth analytical engagement with primary material (i.e. transcripts, fieldnotes etc.) began in a systematic manner, by reading and then rereading their contents, line by line, to reconstruct events as well as documenting themes and meanings. This iterative, reflexive engagement with data was essential to detect patterns and thus layers of analysis. Annotations were made within the margins of transcripts and field journals. The analytical process took the form of a non-computerised thematic inductive, data-led activity, in which highlighting, memo writing and analytical reflections were made by hand, rather than with computer software that aims to facilitate analysis in a pseudo-quantitative manner. Furthermore, computer software can distance the researcher from their data “as you allow the computer to make connections on your behalf” (O’Reilly 2005: 189). Thus, I decided to code by hand to enable a more nuanced and sensitive inter-textual engagement with the transcripts to identify and code themes.

I also found it helpful on multiple occasions to playback the audio-recordings to have the participant’s emotive voice re-enter the room. Moreover, I became conscious of the multiple expressions of ‘nature’ (for example, bird song, squalls of wind and rustles of leaves), which

helped “to avoid producing a cold, over-rationalised account which does not do justice to the intersubjective richness of the research encounters” (Cook and Crang 1995: 77). As advised by Cook and Crang (1995), a table of the actual names of participants and their intended pseudonym equivalents was created and referred to at all stages of analysis. However, within transcripts and fieldnotes actual names were used at all times to “avoid the constant distraction of having to translate from one to the other” (Cook and Crang 1995: 34).

Once a full cycle of analysis was completed, annotations were coded. Similar events, themes, actions and emotions were given comparable labels. The different codes were assigned various colours and abbreviations given. Codes were developed to analyse the context of remarks and observations. Material was then reread and repeatedly reviewed to confirm codes and then categorised. Commonalities were identified and similar categories were merged to form ‘higher order’ and more abstract codes. This open coding procedure was the first stage of analysis and required a high level of reflexivity in which preconceived notions and attachment to research themes were continually confronted. Connections, relationships and associations were identified and documented and theoretical notes recorded. These theoretical articulations and fieldnotes were brought together to form “cumulative chains” relating to particular ideas (Cook and Crang 1995: 82). Connections between codes were made.

The copious individual statements relating to each category were then cross-referenced to ascertain how they related to each other, which resulted in a complex series of notes that identified the associations between relevant sections of transcripts with other similar cases. Various sub-group codes were developed (for example, CARE, became CARE_HUMAN and CARE_NONHUMAN, and CARE_NONHUMAN was sub-divided into further codes such as CARE_PLANTS etc.). Patterns and linkages between sub-categories were made and linked to theoretical notes. Patterns emerging from the analysis of interview transcripts were further triangulated by participant observation fieldnotes. Furthermore, points of conflict and contradiction were documented and explored. I also reflected on consistency across cases and disparities between them (Yin 2003). However, it must be noted that the “fracturing of the field experience for interpretation constructs categories, it does not reveal ‘truths’” (Cook and Crang 1995: 91). The process was of a constant movement back and forth between the complexity of the everyday lived experiences of the gardeners and the observations of the encounters made in the field through the researcher’s ‘lens’.

A code map was created to guide further analysis and help ‘make sense of it all’ (Cook and Crang 1995). This stage was particularly important due to the large, and at times overwhelming amount of data produced. Fetterman contends visual representations and “mapmaking forces the ethnographer to abstract and reduce reality to a manageable size – a piece of paper” (1998: 101). Furthermore, the process of drawing and sketching “crystallizes images, networks, and understandings and suggests new paths to explore” (Fetterman 1998: 101). These visual aids would become constant nonhuman ‘companions’, forms of “vibrant matter and lively things” (Bennett 2010: viii). Thus, code maps were created for each interview transcript in order to visualise the emergent themes and patterns. Subsequently, accumulating key themes from all data developed a crosscutting map. This resulted in a complex, interconnected colour-coded map in which interrelated themes were visualised. The refined codes were then linked to the theoretical framework and the resulting key themes formed the structure of the thesis. Verbatim quotation extracts are presented in the following chapters to illustrate and illuminate the themes that emerged from the analytical process and used to exemplify specific points.

4.7 Chapter Summary

This chapter has sought to document the qualitative research strategy utilised in which a multi-case study approach was employed to explore socioecological caring practices in different urban food gardening contexts. A brief description of the urban gardens has been presented to lay the necessary foundation upon which to understand the context of this thesis. The multi-method approach was discussed and the various data collection techniques presented, evaluated, and tensions examined (quantity of each summarised in Table 4.4). The process of taking fieldnotes was outlined to provide a detailed account of the manner in which I ‘interpreted’ my observations. Furthermore, the embodied process of leaving the field was then discussed highlighting the emotional aspects of such a ‘departure’. The analytical process was then described in detail. This consisted of a continuous iterative process of moving between data and theory to impose a degree of order to copious ethnographic observations, fieldnotes, and interview transcripts and therefore, render the large volume of data manageable and provide coherence by generating useful and pertinent research findings. In the following three chapters, I present and analyse my empirical findings to address the research questions outlined in Chapter 1.

CHAPTER 5

THE PRODUCTION OF SOCIONATURES: POWER RELATIONS, POLITICAL PROCESSES AND URBAN AGENTS

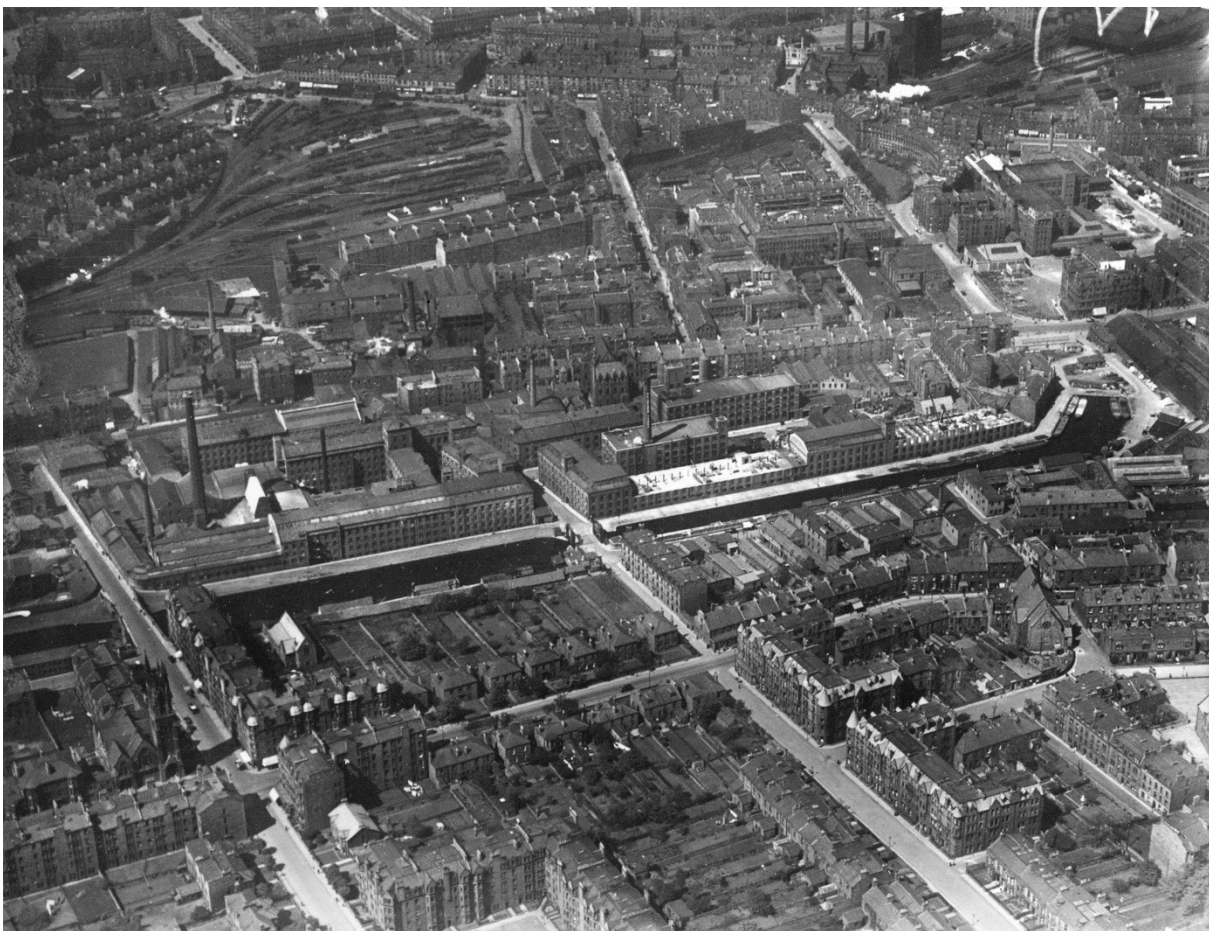
5.1 Introduction

This chapter provides a detailed account of how constellations of key agents and power relations embedded in metabolic circulatory flows were integral to the formation of each CUFG. Focusing on the dynamics through which socionatures are co-produced, I unpack the various tensions, negotiations, and arrangements that transpired, in addition to the dexterous manoeuvres deployed by urban gardeners in the initial stages of the creation processes. Paying particular attention to the multiple agendas that were instrumental to the establishment of the CUFGs, I investigate the convergence and divergence of grassroots activists, business and institutional interests, value systems, and priorities that led to the diverse socionatural manifestations. Emerging in response to particular socioecological inequalities, I demonstrate how urban gardeners actively attempt to transform these socio-material conditions and assert the legitimacy of urban food growing as a vital quality and practice of the urban experience in a complex matrix of power relations and competing agendas. Furthermore, examining who cares, what for and how they care, in relation to the process of micro-political urban environmental transformation, renders visible the everyday corporeal and emotional experiences that are interwoven within socioecological configurations. I do not amalgamate the historically and geographically situated practices and actions that led to the formation and initial stages of the development of each CUFG, but rather unpack the socionatural dynamics that manifest within the micro-particularities of specific CUFGs. In the chapter summary, I identify similarities and differences in their development.

5.2 THE GROVE COMMUNITY GARDEN

5.2.1 *Industrial Heritage, Vacant Land and Grassroots Activism*

To understand how and why the socionatural hybrid, which became known as TGCG emerged, one must first examine the actions and practices of a grassroots community association, the Fountainbridge Canalside Initiative (FCI), which consists of a coalition of community activists, residents and local groups. FCI emerged following resistance to various waves of proposed (and in some instances, implemented) mixed-use development along the 19th century Union Canal, which terminates at the Lochrin Basin. The Lochrin Basin became the terminus of the Union Canal following a process of truncation to the east waterway in 1922 when Port Hopetoun and Port Hamilton were in-filled and built upon. The canal, as a thirty-two mile socioecological architectural linkage, has a long industrial heritage (Mullay 2002), both as a source of water for production processes and the transportation of various materials such as coal and grain into the city and to export waste (see Figure 5.1).



(**Figure 5.1:** Fountain Brewery and Union Canal, 1929) © Historic Environment Scotland (Aerofilms Collection)

The canal basin formed the focus of the Edinburgh Quay regeneration project³³, where up until that point Edinburgh had “made little of its canal heritage, compared to such cities as London or Birmingham” (Mullay 2002: 167). As a member of the FCI steering group and G1, since its inception, Jack, a passionate community activist, spoke at great length of his vision for the Fountainbridge area. He explained how local residents had challenged the design, scale and layout of the proposed Edinburgh Quay development, which they thought was “*too monolithic, far too high, and it didn’t make the best out of the canal basin*” (Jack Interview, G1). Fundamentally, for Jack, the development had failed to be attentive to the diverse needs, experiences and interests of local residents, who articulated a desire for more participatory urban planning processes. FCI argued that it was profoundly orientated toward capital accumulation and did not provide adequate space for community use and affordable housing. In this sense, it was an alienating landscape of assembled glass and steel, comprising of architectural structures dedicated to capitalism and economic growth.

FCI was established in August 2011 at a public meeting and became a constituted body in January 2012. Their aims are:

- To create a viable and sustainable new local community in Fountainbridge recognising the needs of local people by ensuring that community consultation and input is included in any and all development plans, and;
- To work with developers and others with a view to acquiring a space for a canal community hub, led, driven and managed by the community (FCI 2012: 1).

Thus, the grassroots practices and efforts of FCI are geographically and historically rooted, recognising the rich industrial heritage of the area while also campaigning for the creation of a “sustainable new local community” following the de-industrialisation process (FCI 2012: 1). Notably, in this context ‘sustainable’ refers to the envisaging of new socio-environmental trajectories that place local residents above profit. As Till argues, “multiple pasts and futures are resources for residents, providing the possibilities to imagine more socially just cities through place-based practices of care” (2012: 7). Indeed, FCI’s commitment to promoting the history and future potential of the currently vacant site was evident at the ‘Canal Festival’ I

³³ Edinburgh Quay is a 260,000 square foot, £60 million mixed-use “multi-award winning” canalside regeneration project undertaken by Miller Developments in partnership with British Waterways which “transformed the Edinburgh terminus of the Union Canal into a thriving cosmopolitan environment” (Miller Developments 2015).

attended in June 2014 (see Figure 5.2), a cultural event which celebrates the “*unique character of the area, particularly the canal and its history*” (Bella, FCI member and gardener, G1, fieldnotes, 21/06/14), where their promotional stand included information leaflets regarding the grassroots association and TGCG. Bella relayed to me that FCI members regularly attended ‘Sounding Board’ meetings with councillors, developers, housing professionals and various other stakeholders to “*exchange ideas*”. Furthermore, Bella articulated how the group were keen to create “*a sense that the area was a neighbourhood*”, rather than a blank canvas that could be planned and assembled, ignoring local resident’s visions and aspirations. Thus, they sought to assert their right to be heard and reimagine and influence what the urban area could become (Jack Interview, G1).



(Figure 5.2: Fountainbridge Canal Festival, 21/06/14)

At the Canal Festival there were multiple posters capturing the historical timeline of the area, where members of FCI were keen to discuss its rich industrial past. Indeed, before the arrival of large-scale industrial manufacturing which dominated Fountainbridge in the latter half of the 19th century, a variety of artisan and craftspeople’s lived and worked in the area from 1800, including shoemakers, weavers, tailors, milliners and printmakers. In 1857, the North

British Rubber Company (NBRC) purchased a 5.5 acre site at the corner of Fountainbridge and Gilmore Park to develop a rubber factory and by 1951, had expanded to encompass the 22 acre Castle Mills site which formed the largest manufacturing complex in Edinburgh, employing 4,400 people (Mullay 2002). During the same period, breweries and distilleries increasingly dominated the area with William McEwan establishing the ‘Fountain Brewery’ in 1856. The Fountainbridge site was selected due to the ample supply of fresh water that could be readily sourced from the Pentland Hills through the Union Canal. Following subsequent mergers, the then Scottish and Newcastle Brewery expanded their facilities between 1971-73 on the former Castle Mills site (where NBRC had ceased manufacturing in 1969 following a fire), located adjacent to the Union Canal and next to the original brewery, becoming one of the world’s largest automated brewing complexes. This development contradicts the pervasive myth of Edinburgh as being a city without an industrial past, and consequently, a working class (Madgin and Rodger 2013).



(Figure 5.3: Fountain Brewery and surrounding development site, 11/06/08) © Crown Copyright: Historic Environment Scotland

Production continued at the Fountainbridge site until 2004, when the company decided to relocate its manufacturing facilities and distribution functions after a rationalisation period (see Figure 5.3 for vacant Fountain Brewery premises). In 2008, all buildings were demolished, apart from the ‘Castle Mills Works’ structure due to its category C listed building status, designated in 1998. Subsequently, the site was cleared and placed on the market³⁴. In 2010, following sustained campaigning from FCI and various preservation bodies, the CEC withdrew an application to demolish the remaining ‘Castle Mills Works’ building. The closure of the brewery marked the demise of large-scale industrial manufacturing within the central city area “*along with all the smells, the big high walls, and noise*” (Mary Interview, G1) and signalled the commencement of a (stalled) regeneration process that resulted in swathes of brownfield land permeating the urban fabric. In order to have greater influence over the content of future development, FCI decided they would:

make a community plan for the area, what we want, and what we think would be good for this city and for the immediate area [...] what we want to do is see that Fountainbridge is developed into an area that is conducive to human development and not simply for profit (Jack Interview, G1).

Jack’s sentiment embodies Brenner *et al.*’s demand for “cities for people, not for profit” which emphasises “the urgent political priority of constructing cities that correspond to human social needs rather than to the capitalist imperative of profit-making” (2009: 176). The formation of FCI highlights the on-going struggle to democratise urban politics, aid transparency in the planning process and the determination of local residents to participate in reshaping the urban fabric around them.

Notably, FCI located their activism within their commitment to, and connections within, the Fountainbridge area and the people living within it, expressing a strong ethos of care (rather than universal ethics) in relation to the local environment. Indeed, as Barnes argues, ‘caring for’ the environment “is one of the familiar, everyday ways in which the concept of care is invoked” (2012: 125). Indeed, community activists placed great importance on being able to ‘care for’ their environment, both in terms of having a voice in public discussions, particularly

³⁴ The former brewery site (22 acres) consists of a patchwork of land titles. It is currently owned by the Royal Bank of Scotland to the east; CEC to the west (purchased from Lloyds TSB in November 2011); and Grosvenor, a privately owned (by the Duke of Westminster) international property development company, to the north of Fountainbridge.

making decisions about how their immediate environment is designed and maintained and also being able to actively and collectively shape their neighbourhood through embodied practical activity (Jack Interview, G1). A notion of care emerges out of a sense of responsibility towards the environment and others, acknowledging, “places are both deeply personal as well as socially shared” (Till 2012: 11). Indeed, Fisher and Tronto (1991) argue that care involves reaching out towards something other than the self, and identify ‘care for’ the environment as crucial to the life sustaining web of care to human and nonhuman flourishing.

Community activists, therefore, ‘care about’ their environment by recognising that where people live is crucial to both individual and the collectives’ emotional and social wellbeing. Fundamentally, caring for place is intensified in its cultivation and enactment in relation to the everyday, banal socioecological injustice (Whitehead 2009) of the prevalence of vacant land in close proximity to where people live, where demolitions provoked feelings of abandonment and neglect. As Nicola, a former resident of Fountainbridge and employee of Edinburgh Garden Partners, a gardening land-share charity, stated, “*I used to live on Upper Grove Place, where the neighbourhood was changing so much, I mean when the brewery went that was when I decided to leave because there was just nothing, it was just dead space everywhere, it was horrendous*” (Nicola Interview). Thus, for the remaining residents, a place-based ethos of care seeks to collectively improve the physical and affective environment based on an inherently relational understanding of the spatial. Indeed, for Jack, together with the FCI collective, it is a politicised spatiality that seeks to enact more care-full spaces, where both emotional and practical orientations towards ‘caring for’ and ‘caring about’ the socioecological environment and others are intertwined.

5.2.2 The Development of Grove 1: Encounters, Tensions and Finding “Common Ground”

Urban ‘vacant’ land for local residents represented abandonment (marked by an absence of *human* activity), epitomised neglect, and a post-industrial *terrain vague* (wasteland or ambiguous space) (Mariani and Barron 2013; de Solà-Morales 1996). The vacant land (see Figure 5.4) reinforced residents lack of power to influence development in addition to appropriate and shape space in ways that were engaging, meaningful and creatively experimental (Jack Interview, G1; Kate Interview, G2; Claire Interview, G2). Therefore, on 18th February 2012, FCI organised a public consultation ‘Vision Day’ entitled ‘Brewing New

Life: Creating a Canalside Community’. The event was attended by eighty people, thirty-six of whom were new to the group, and provided the opportunity for local residents to express how they could influence the direction of proposed development in practice. This aligns with Barnes who argues that residents should be able to “demonstrate their care for their environment by contributing to shaping it” (2012: 136). As a form of community-driven, citizen-led engagement, the event sought to mobilise residents, routinely excluded from the decision-making process, to create a ‘bottom-up’ vision for sustainable city life. Moreover, it empowered residents to demonstrate their ‘care for’ the environment by exploring how they could contribute to its transformation by nurturing positive relationships between residents in addition to exchanging and building knowledge that generates the capacity to influence the development of their neighbourhood.



(**Figure 5.4:** Vacant Fountain Brewery site, G1, and Fountain Park Leisure Centre, 29/10/13)

© Crown Copyright: Historic Environment Scotland.

Notably, the possibility of establishing a temporary use³⁵ within the privatised land holding was proposed. Particular importance was placed upon the ‘greening of the site’ on a

³⁵ Bishop and Williams state that temporary use cannot be “based on the nature of the use, or whether rent is paid, or whether a use is formal or informal, or even on the scale, endurance or

temporary basis, in which food growing projects such as community gardens, allotments, and orchards were suggested. Greenspaces were advocated in stark contrast to the “*landscapes of abandonment*” (Alex Interview, G2), which permeate the area. As Jack explains:

We were sitting looking at some of the plans of the site, and I said well obviously they [Grosvenor] are not going to develop that site for a while, we could put a garden on there (Jack Interview, G1).

It was during this event that contact between Grosvenor (the developer and landowner) and local residents was first established. This initial interaction consisted of a tension-laden exchange, as Ben, Planning and Development Director for Grosvenor described:

I went along one snowy February Saturday morning to the local community centre and kind of listened from the side lines, and at the end of one part, I introduced myself to a guy called Jack, who was heading it up and running it, and Jack took a good 15 or 20 minutes to explain why development, or developers were bad, why we should accept 5 per cent profit not 25 per cent profit, why we should get more involved with the community and less concentrated on counting our money, so we had an interesting chat for 4 or 5 minutes where I set him straight on a couple of things that he got fundamentally wrong, and it's one of those conversations whereby you can either agree to fall out and go your separate ways and nothing ever happens, or you can actually find a common ground (Ben Interview).

This initial conversation highlights the friction between the priorities and agendas of the developer and local residents, in which community activists were somewhat suspicious and critical of the developer's objectives. However, Ben's attendance at the event provided an approachable 'face' to the impersonal international property development company.

Furthermore, Ben's aspiration to find “*common ground*” can be seen as an attempt to placate local activists who felt that the urban development process had both excluded their voices and prioritised profit over community engagement and design collaboration. Therefore, Grosvenor

longevity of a temporary use, but rather the intention of the user, developer or planner that the use should be temporary” (2012: 5). Thus, the development of both G1 and G2 are ‘temporary’, in that they are explicitly and intentionally time-limited in nature.

was keen to enrol and incorporate FCI within their place-making agenda to work with, rather than against them, as Ben articulated:

I explained to him [Jack] that one of the reasons I was there was that the background to some of the market research we had done in the area for selling apartments had fed back that there was a perception that there is no real community there, that it was a bit lifeless, a bit barren, and there was nothing happening, so I went along to this community day to find out a) what the community were doing and b) to see if there were any way we might engage. So after Jack and I had our initial discussion, I flipped it on its head and said we have got 3 acres there, untold hoarding and so on, can we not have a more positive chat about what we might agree on to work together (Ben Interview).

Temporary initiatives are becoming increasingly appealing from the developer's perspective, particularly in times of economic downturn where development becomes stalled (Bishop and Williams 2012). Indeed, Grosvenor capitalised upon the fallow status of the site as an opportunity to change the perception of the area as “lifeless” and “barren” by engaging with the local community to determine a project that had the potential to reactivate and animate the site during the interim phases of planned development, as Mike, Development Worker for the Community Land Advisory Service (CLAS), explains:

They [Grosvenor] did some market research and that research came back with findings that Fountainbridge was a soulless place, a derelict place, with no sense of community [...] because they had a big site [...] they knew they would have a medium term relationship with the area, and with the planning applications they made at the start, they knew that inevitably that planning applications would have to get changed over time [...] So Grosvenor have gone into this with their eyes open that they are going to have to negotiate with the community over possible changes to how the site goes forward over the years and so it was very important for them to build a working relationship with the community (Mike Interview).

The initial (and at times antagonistic) interactions and negotiations between Grosvenor and the local residents laid the foundation for a consensual agreement for the creation of G1 and the temporary appropriation and occupation of privatised, enclosed space by urban gardeners. For Grosvenor, it was not only an opportunity to bolster the image and brand identity of the

area as part of their on-going ‘Fountainbridge Comes Alive’ advertising campaign in relation to their Springside Development³⁶, but also a chance to foster community buy-in, into their long-term regeneration project. Thus, the garden provided an opportunity for local residents to actively engage and experiment on land which had been an object of their concern for some time, while simultaneously satisfying Grosvenor’s public relations (PR) campaign to create a ‘buzz’ within Fountainbridge. Ben however, was keen to articulate a strong sense of corporate social responsibility and as Mike states “*they see themselves as being engaging with the neighbourhood as they create it*” (Mike Interview).

5.2.3 Negotiations and Consensual Agreement

Reflecting on the garden’s development, Jack emphasised that the negotiations between the developer and FCI were an integral element of the local residents gaining access to the site. However, as Mike explains:

Between landowners and community groups there is rarely any quality of bargaining power, the community groups have very little to bargain with, so you are really looking towards a certain amount of goodwill from the landowner, albeit there are cases where there is a tangible benefit to the landowner that they can see, and the Grove presents an example of that (Mike Interview).

FCI committed to support the development of a “*mobile garden*” (Jack Interview, G1) whereby all physical elements are removable and not permanently attached to the surface, as Ben explains:

We [Grosvenor] set out the parameters of what they can and can’t do, basically they can occupy the site but they can’t site anything into the ground, they can’t dig, they can’t make anything permanent, they are not allowed to put up any permanent structures and so on (Ben Interview).

For some participants, although creatively stimulating, the idea of an ephemeral garden which did not permit growing directly in the earth, was initially “*counter-intuitive in some respects,*

³⁶ See www.springside.co.uk for information regarding Grosvenor’s Springside Development, consisting of residential apartments, in Fountainbridge.

no digging in the soil, no roots in the ground” (Claire Interview, G2). Furthermore, the existence of a solid perimeter boundary, locked gates, and consequently, restricted public access, raises issues of exclusion (Kurtz 2001). However, it must be noted that the creation of the garden did not seek to enclose public space, but instead opened up a private land holding. Grosvenor agreed to discuss the proposal with Sow and Grow Everywhere (SAGE)³⁷ if FCI undertook further public consultation with the local community. Indeed, Ben recognised and harnessed FCI’s ability to engage with the wider public, drawing upon their established community and activist networks. Significantly, Ben perceived FCI as a legitimate, competent, and therefore acceptable partner in creating the CUFG:

Jack and his cohorts were clearly very organised because they had done events like this [‘Brewing New Life’] before, you know, they weren’t an immature organisation that didn’t know which direction of travel they wanted to follow (Ben Interview).

In March 2012, twenty-two volunteers confirmed support for the development of a temporary CUFG and a steering group was formed, consisting of a number of determined, passionate people, whose objective was to create a space for collective food growing, interaction, and learning. Notably, the everyday urban environment became the focus of grounded activism to reconfigure socionatural relations, as Kate, an engaging and enthusiastic member of the garden, committee member, and practicing permaculturist, states:

There are some strong elements of activism, which is what’s needed to get something like this going, this is not done by hobbyists, it’s done by people who are willing to put something into it (Kate Interview, G2).

Indeed, many members of the CUFG distinguished their actions from recreational or leisure gardeners and instead used various ‘identifiers’ such as “*community activist*” (Jack Interview, G1), “*permaculturist*” (Kate Interview, G2), and “*environmentalist*” (Charlotte Interview, G2) to describe themselves. Notably, Paul was critical of the dominant narrative of the contemporary environmental movement and believed community gardening was a grounded and more hopeful expression of a sustainable urban future, as he explains:

³⁷ SAGE was a “3-year initiative to generate a change in community food growing in the Glasgow and Clyde Valley area” that “transformed derelict and vacant land into vibrant, stimulating and visually attractive spaces” (NVA 2015).

It's sometimes unhelpful in the ways that the environmental movement frames things, so impending doom [...] it's too late, we've ruined the planet and we can't do anything to change that [...] that's just not helpful for people who want to actually do something, and not feel like it won't change a thing [...] so let's try and do something positive about that (Paul Interview, G2).

Paul's sentiment encapsulates the destructive notion of apocalypse fatigue, where the focus on an inexorable and inescapable grim future in the face of climate change, paradoxically creates a situation where people may "have fewer incentives to do the hard work of socioecological transformation – whereas the immediacy of an enchanted, living, strange planet demands attention" (Buck 2015: 372). Therefore, for gardeners such as Paul, CUFGs were playful and enjoyable interventions that have the potential to ignite debate about socioecological issues without reinforcing or reproducing "apocalyptic imaginaries" (Swyngedouw 2010: 216). Paul articulated his involvement in explicitly political terms, and was prompted to develop a forum and "*living, breathing classroom*" (Paul Interview, G2) to facilitate collective learning, where people can share skills and knowledge (discussed in Chapter 7).

For many gardeners, however, they described their motivation to become involved with the garden in outwardly apolitical terms, demonstrated by Liz who stated, "*I joined the garden to make friends and do a bit of gardening*" (fieldnotes, G2, 06/06/14). For Claire, the core appeal for participating was the "*experimental nature of the project*" and the "*creative freedom*" the garden offered members (fieldnotes, G2, 21/07/14). Diana, a recently retired local resident, reiterated this sentiment. An experienced gardener, who "*loves to get her hands dirty*" (Diana Interview, G1), she became a member of G1 while waiting for an allotment to become available. Diana described how she was "*interested in the whole idea of using the land*" and expressed her frustration at the long-term vacancy of the site, suggesting, "*it could have been used a long time ago, somebody should have had the foresight really*" (Diana Interview, G1). Gardeners frequently articulated that they became involved with the project because it presented an opportunity to gain access to a central city location to experiment with urban food growing, as Kate explains:

I got sick of not having any land and I was growing off my windowsills and carrying seed packets around with me and just planting anywhere and exploring a lot of different options, I ended up growing all over Scotland (Kate Interview, G2).

For Kate, reclaiming (however, momentarily) a vacant brownfield site for community growing activities was a powerful statement, where she wanted to replicate a “*pop-up garden in the sense people could just come and grow*” (Kate Interview, G2). Incorporating a space of ‘nature’ within the ‘vacant’ site therefore would enable tactile encounters and new associations.

However, the development of G1 was not a smooth process. In autumn 2012, SAGE’s funding was terminated, which led to a period of stagnation, confusion and frustration for prospective gardeners. The withdrawal of SAGE’s funding highlights the precarious position NGO’s occupy within the “non-profit industrial complex”³⁸ (Rodriguez 2007: 21). In the absence of SAGE, FCI agreed to take on the project together with Grosvenor and utilised their social networks to foster interest and drive the project forward. As Jack describes:

In September [2012], I’m phoning them [local residents] up saying why hasn’t nobody been to any meetings? Where are the public meetings? Where are the plans? When is the garden opening? And then I realised that the organisation [SAGE] had run out of funding, so they had stopped without telling us, they just stopped [...] so FCI then had to make a decision, well let’s forget that or take it on, so I took it back on again (Jack Interview, G1).

Jack, as a particular urban agent, played a crucial role in the ‘gestation period’ of the garden’s development. Informed by his time as a Community Learning and Development Officer for over thirty years, the work of Brazilian adult educationist Paulo Freire (2000 [1968]) was a significant influence for Jack envisaging the garden as a place to nurture embodied collective learning. Indeed, Freire (2000 [1968]) accentuates the co-production of learning and knowledge, therefore, Jack’s main motivation was to create a site for “*collective, productive, social activity*” (Jack Interview, G1) to foster exchanges and encounters between urban actors and their socionatural environment creating a place of possibility. For Jack, a CUFG would provide a pertinent vehicle for community mobilisation based upon mutual support, knowledge exchange and creative learning, in addition to an accessible forum to debate and

³⁸ This term refers to the process by which activists and campaigners for social change have become subsumed within the ‘non-profit’ system consisting of salaries and heavy reliance upon funding streams, whereby the non-profit structure frequently obstructs radical movement building (Rodriguez 2007).

discuss socioecological inequalities and issues where people can “*learn how to be a collective*” (Jack Interview, G1).

Indeed, FCI were resolute in encouraging a newly formed autonomous body to take on leadership roles within the garden, enabling prominent members of FCI to step back, while nurturing the capacity of others. In January 2013, the gardeners became an ‘Unincorporated Association’, formed a committee, and adopted a constitution, maintaining affiliation to FCI as a parent body. Notably, however, a number of individuals have continued to be both member’s of FCI and TGCG with the garden attracting a large number of professionals from a variety of backgrounds (such as teachers, lawyers, community development workers, and architects) as well as students. Therefore, at the initial stage of development, members of G1 were a very articulate, predominately middle-class collective, reflecting Mayer’s notion of “first world urban activism”, which aligns austerity urbanism with creative city politics, where the “recent austerity cuts have been hitting not only the already disadvantaged, but increasingly youth, students and more segments of the middle class” (2013: 10-11).

At formation (21st January 2013) there were twenty-nine members, of which only a small proportion were experienced gardeners, therefore, the committee organised collective learning workshops including, ‘Starting a Garden Plot’, ‘Tool Use and Maintenance’, and ‘Seed Sharing’. Furthermore, the Edible Gardening Project³⁹ hosted a learning exchange event to informally discuss the practicalities of developing and growing within a temporary CUFG. Landscape Architects, *HarrisonStevens* in association with the steering group and Grosvenor, agreed that a ‘movable’ garden consisting of recycled industrial wooden pallets would replace the SAGE system of grow boxes and bags. Notably, the design and planning process cannot be characterised as a collaborative community undertaking in which extensive consultation took place. As Tim, a Landscape Architect explains, his team translated Grosvenor’s specification into a temporary urban design embracing a modular approach:

They [Grosvenor] set down some fairly rigid parameters to there being no permanence to the scheme, so it could be uplifted [...] we had never really worked on anything like that before, most of the projects we work on are of commercial scale [...] obviously it

³⁹ The Edible Gardening Project is based at the Royal Botanic Garden Edinburgh (RBGE) and aims to develop people’s skills and knowledge in relation to food growing and offers free weekly drop-in sessions and seasonal gardening advice. The project is run jointly with the Scottish Allotments and Garden Society and funded by the People’s Postcode Lottery.

was quite a tight budget that was available to spend so we had to come up with some ideas which were cheap and temporary (Tim Interview).

HarrisonStevens were allocated an overall budget of approximately £20,000 by Grosvenor to implement the project. Notably, the placement of two shipping containers and wooden pallet freight boxes within the design, act both as material and symbolic reminders of capitalism's flexibility and the garden's entanglement within the logic of capital. The transient nature of the garden is exemplified through the utilisation of these 'nomadic' elements. As Tim, states: *"I think you could probably clear it all away in a day really"* (Tim Interview). The precise delineation of the garden boundary highlights that certain interactions were enabled and others restricted, particularly contact with the wider site (see Figure 5.5). As Tim explains, *"its got to be contained because Grosvenor were a bit concerned for their insurance purposes and things, it's quite a dangerous environment [...] so they wanted to keep anyone associated with the Grove within this space"* (Tim Interview).



(Figure 5.5: Heras fencing demarcates the boundary of G1)

The explicit temporary nature of the garden did create some tension amongst potential gardeners. As Kate explains:

At one of the first meetings, we were discussing the garden and some people were like, I don't know whether I want to be involved because you say it's going to be temporary. I remember one or two women [...] were really challenging the idea in a way that was going to stop the conversation [...] So I said but if we don't do it, we have nothing, but if we do it, we have got three years of experience and we can go somewhere else, we will be empowered, we will have all that knowledge and then be able to teach kids how to grow [...] I can understand the defeatist argument, like why bother if you won't be able to keep it, but I am saying there is so much positive to come from it and that's what we are going to focus on (Kate Interview, G2).

In this sense, gardeners such as Kate, articulated a different conceptualisation of routinised 'clock time', and instead emphasised temporality from the perspective of lived, embodied, socially situated immersed experience. Thus, 'time' is made through sensuous experiences, rather than an abstract category. Significantly, the ephemeral quality of the garden appealed to, and attracted, certain individuals while simultaneously repelling others. Indeed, when discussing the eventual displacement of the garden, the majority of the members I spoke with were rather philosophical, highlighting the fact that those who eventually became involved were individuals who were accepting of its temporary nature. As Diana states, "*you just have to think positively about it, because if you didn't, you wouldn't bother at all*" (Diana Interview, G1). Notably, the optimistic, and at times, nonchalant sentiment articulated by participants was juxtaposed with multiple references to the garden's fragility, frequently laced with concern. Indeed, Claire explained, "*it's all so fragile, there is no future security at all, there is always, well next year could be our last, I think it will be incredibly upsetting when we have to leave*" (Claire Interview, G2). However, Claire also articulated, "*appreciating it here and now, for what it is*" (Claire Interview, G2) fostered an experimental and spontaneous creativity that emanates from the garden's temporality, characterised by shifting arrangements of humans and nonhumans and therefore, this relational fragility is both a strength and weakness. For Claire, the tenuous nature of this fragile moment in space-time acts as a gathering place to envisage and cultivate better attunements with multiple others (Tronto 2013).

For Kate, the positive aspects of the garden concerned rendering visible the role of local residents as co-authors of space, for however temporary, and empower people to collectively organise and explore further socioecological possibilities that transcend the garden ‘boundary’. Notwithstanding its explicit and problematic temporary nature (which does nothing to disrupt the structural forces that reproduce socio-spatial inequalities), Kate’s sentiment aligns with Lefebvre’s notion of the “right to the city” (Lefebvre 1996). For Lefebvre, that ‘right’ was a “cry and a demand” to reinvigorate and enliven everyday life in the city, which was alienated and without meaning or playful creativity (1996: 158). Thus, in the case of the development of the CUFG, the right to the city, not only refers to the right to occupy space within the urban fabric, but also (following FCI’s broader aims) the “right to shape, intervene and participate in the unfolding idea of the city” (Chatterton 2010: 235) to decide how it is appropriated, developed, managed, and used. In these terms, it is the right not only to consume sustainably (through experimental localised food production), but also to produce and ‘feel’ it through citizen involvement in decision-making and collective action.

The organic energy of the (awaiting) gardeners contrasted somewhat against the controlled, measured approach of the developer, who prioritised taking precautions against unauthorised occupation. Public liability insurance was arranged (on the 22nd March 2013) and the committee and Grosvenor signed a lease, in the form of a “*straightforward licence agreement*” (Ben Interview), which had no set duration and stated that Grosvenor can terminate the lease at two months’ written notice, as outlined in their ‘Licence to Occupy’ document. Gardeners articulated that Lindsay, a lawyer and member of the garden, played a crucial role in navigating the legal process, “*which was extremely helpful when writing the constitution and signing the lease*” (Robert, fieldnotes, Meanwhile Land Use Event, 19/02/14). Grosvenor originally agreed to allocate 600m² of their brownfield site to the urban gardening collective, which was adjacent to their recently constructed ‘Springside Development’. However, after subsequent negotiations between the garden committee and Grosvenor the following year, the boundary of the garden was extended by a further 200m² to accommodate additional growing space, as a burgeoning membership exceeded the planters available. For both the developer and the local residents the ‘success’ of the garden was based upon trust and eventually mutual respect. As summarised by Ben:

[...] very early on we established that we could trust them, it could be a positive working relationship, and I would like to think they thought similar about us, and once

you have that, I think probably stems from having a difficult conversation with Jack in the first place, having that very candid discussion about what his perceptions of us were and dare I suggest our perceptions of them, but once you get through that it has actually been pretty good (Ben Interview).

For both Grosvenor and the urban gardeners, relations of trust were crucial to the development and maintenance of the garden. Indeed, the group's occupation of the private land holding was mediated through particular members of the garden sustaining a constructive working relationship with Ben. Consequently, the creation of the garden was based on the careful cultivation of allies through negotiated spatial strategies that corresponded to the agendas of both the urban gardeners and landowner.

5.2.4 Temporary Urban Interventions: Agendas, Co-option and the Right to the City

This is a recession that has been bad for developers, terrible for many architects and terminal for some, but something of a mixed bag for more activist urbanists – some of whom at least have had a reasonably 'good' crisis, given the spatial cracks that have opened up in what had been a fairly unbroken field of accelerated development (Tonkiss 2013: 312-313).

The explicit consensual agreement between local resident-activists and Grosvenor that lay at the heart of the development of G1 renders the accusations of compromise and co-option resolutely apparent. As Tonkiss has argued, temporary urban interventions are frequently "integrated into an austerity agenda so as to keep vacant sites warm while development capital is cool" (2013: 318). In this sense, the CUFG is complicit with the "roll-with-it" neoliberal strategy (Keil 2009) that supports and encourages urban activities and practices that are self-managed, low expenditure, and attractively 'creative' or environmentally-orientated, and can be conveniently absorbed into the developer's PR machine (see Figure 5.6), as Ben emphasises:

It wasn't cheap from our perspective, you know, it was £20,000, something like that, which is a significant investment but if at the start of the process a PR company, or whatever, had come to me and said for £20,000 I will put you in touch with 6 of the most influential people in the area and you can get unlimited access and find out what

they want and at the end of it they will all think that Grosvenor is fantastic [...] it's actually been very worthwhile (Ben Interview).



(Figure 5.6: Advertisement board promoting TGCG)

The garden served multiple PR purposes for Grosvenor, as Mike states, “*Grosvenor were just looking after their own commercial interests, but it was actually in their commercial interests to agree to a meanwhile community use*” (Mike Interview). The developer seized upon the energy, passion and presence of FCI, a highly organised group, and through dialogue was able to enrol local activists to ‘work with’ them. Significantly, Ben was able to form constructive connections with the core group of “*influential people in the area*” and establish amenable relationships. Ultimately, it facilitated Grosvenor to harness local residents as place-specific assets. The strongest interpretation of this reading, signals the danger of pacification, in which a vocal community activist group, who are determined to oppose (elements of) the gentrification process and influence future developments in the area, were essentially offered

a marginal temporary project as a concession to neutralise dissent through co-option. This was a criticism frequently verbalised by urban gardeners involved with other growing projects throughout the city who I met at various community gardening networking events, who felt that G1 was a “*token gesture to keep them happy [...] and does nothing to legitimise food growing as a valid land use*” (Clive Interview). In this sense, the temporary nature of the garden reinforced rather than subverted the notion that food growing spaces are considered appropriate only when occupying otherwise ‘vacant’ land, which is (currently) neglected by the market or land banked (Drake and Lawson 2014). Furthermore, this “*token gesture*” favourably corresponded with Grosvenor’s ‘Living Cities’ strapline and aligned with a global trend which utilises urban gardens as vehicles for “corporate self-promotion” (Quastel 2009: 696). Indeed, the ‘Fountainbridge Comes Alive’ tagline was stencilled onto multiple physical elements of the garden, creating a succession of (subliminal) messages within the garden space (see Figure 5.7).



(Figure 5.7: ‘Fountainbridge Comes Alive’ tagline stencilled on a wooden pallet container)

Notably, the creation of a temporary CUFG gestured towards, and supportively symbolised, a ‘sustainable’ urban lifestyle to which Grosvenor Developments aims to promote. Indeed, the

CUFG (publicised on their website as a ‘community allotment’) is advertised as one of their ‘sustainability achievements’ and as Ben explained, “*has won awards internally*” (Ben Interview). The fact the garden received accolades within the company highlights that Grosvenor deemed the project a success, particularly bolstering their sustainability and corporate social responsibility objectives.

Moreover, as an imaginative temporary urban intervention based upon organic food growing practices, G1 fosters an image that is attractive to ‘creative’ segments of the middle-class and environmentally conscious to aid the gentrification process (see Mayer 2013). The formation of the garden, therefore, assisted Grosvenor to portray an image in which the existing residents were not being displaced or silenced, but enrolled and incorporated into, the appearance of a ‘community’ the developer wanted to depict. While there was no (direct) displacement of a low-income community or the renovation of old houses, the lack of affordable housing and truly public space being incorporated into the new planned development, aligns with Neil Smith’s discussion of gentrification as a broad phenomenon⁴⁰. As Smith argued two decades ago, it is “no longer about a narrow and quixotic oddity in the housing market but has become the leading residential edge of a much larger endeavour: the class remake of the central urban landscape” (1996: 39). Therefore, for activists, displacement *does* take place, albeit in an indirect form, in addition to producing a generic gentrified landscape aesthetic, as Charlotte describes, “*it all looks the same*” (Charlotte Interview, G2). Indeed, as I walked around the Fountainbridge area into the Exchange District dedicated to financial services during a ‘Scandalous Edinburgh PLC Walking Tour’ organised by the World Development Movement (presently Global Justice Now), it was easy to appreciate the concerns of local residents regarding the soulless aesthetic that has been propagated by global capital, with the urban area dedicated to office space (more than 92,000m²), where there was a conspicuous absence of activity and hence, convivial encounters (fieldnotes, Walking Tour, 26/06/14; Kate Interview, G2).

Herein lies a significant socioecological contradiction. While community activists were concerned with resisting (certain elements of) the imposed gentrification of the area, they have become entangled within the process, where the garden itself has become a visual

⁴⁰ A combination of luxury apartments, student accommodation and commercial development were either built, or in the process of gaining planning permission to be constructed on the reclaimed industrial land of Fountainbridge, creating a complex process of ‘new-build’ and ‘commercial’ gentrification.

manifestation of Grosvenor's sustainability strapline. However, activists were well aware of the utilisation of the garden as a platform for positive community relations:

Some people just sit on land for years, land banks, so there is no necessity for the Duke of Westminster to develop it, it's just another piece of the 500,000 acres he owns, it's just another little corner of the world he owns [...] so Ben liked the idea [the garden], because he knew, next to that site he was building luxury flats, they were going to look over a derelict piece of land, he knew that wasn't a good selling point, so he actually engaged us as his PR machine, he didn't tell us that, but we knew what was happening, we are not daft, so, we started this community garden and we've got stuff in the newspapers and on STV and BBC... Grosvenor Developments alongside the local community create a beautiful community garden. I mean I really have to commend Ben because most development managers don't think like that, they think the community is the enemy and they have got to be dragged kicking and screaming into community consultations (Jack Interview, G1).

From the gardeners' perspective, it was an achievement, however small, to 'persuade' an international property developer to allow temporary activity on their site. However, as Mike states, the group were:

actually pushing an open door because Grosvenor had already decided, on this development site, we need to do some community engagement, and the idea of the community garden fitted pretty well with what they wanted (Mike Interview).

This 'tactical collaboration' involved immense discrepancies in scale between the multinational property developer and urban activists and residents. As Jack alluded to in the above quote, the Duke of Westminster, the 9th wealthiest person in Britain according to 'The Sunday Times Rich List 2015'⁴¹ (£8.56 billion), owns Grosvenor Developments. Moreover, in 2012, Westminster Estates⁴² had the 7th largest private landholdings in Scotland totalling 94,817 acres (Wightman 2013: 154). The immense asymmetrical power dynamics that exist

⁴¹ The Sunday Times Rich List 2015 is the 27th annual survey of the wealthiest people resident in the UK, published by The Sunday Times on 26 April 2015.

⁴² At time of fieldwork, owned by the trustees of Hugh R. A. Grosvenor, trustees of Gerald H. Grosvenor, fourth Duke of Westminster, and Gerald C. Grosvenor, sixth Duke of Westminster (Wightman 2013: 154).

between those whom own land and those of whom do not, has led some urban residents to strategically develop politically possible (albeit ultimately imperfect) locally grounded temporary urban interventions and tactically choose to accept the co-option of their project (to some extent) for corporate economic gain. The fact that the CUFG was utilised by Grosvenor as part of their PR campaign, was merely one component of a strategic exchange in which the gardeners grasped at the opportunity to appropriate space that would be ordinarily restricted. However, as the gardeners recognised, the CUFG did nothing to disrupt property dynamics which are about “power, control, and the right to exclude” (Lees *et al.* 2008: 83). Therefore, various gardeners articulated that they were “*looking for constitutional change*” (Jack Interview, G1; Paul Interview, G2; Charlotte Interview, G2) to enact structural reform in relation to land ownership and control. Indeed, Jack was rather candid about the outcome of cooperative agreement:

I reckon we got between 15 and 20 grand’s worth of stuff out of Grosvenor and they got certainly a lot more than 15 grand’s worth of PR for it, it’s business you know. I mean there is no altruism going on here, we get something from him and we are giving something considerable back (Jack Interview, G1).

When I asked Jack to clarify what he meant by “*something considerable*” he stated, “*PR, good community relationships, lots of positive publicity, lots of warm cuddly stuff, we are supplying that*” (Jack Interview, G1).

Temporary interventions into the urban landscape have become increasingly valorised by property developers attentive to the potential urban activists have in transforming, animating and imbuing space with cultural capital that investors can subsequently convert into economic capital. The temporary nature of the CUFG highlights an innate tension that exists within ephemeral projects. They can be seen positively in their ability to facilitate urban activists to manoeuvre flexibly within the “cracks of the city” (Loukaitou-Sideris 1996: 92) to create spaces of everyday socioecological interaction and experimentation. However, in more negative terms, also illuminate how these interim urban interventions ultimately are facilitative of development priorities and agendas, which reproduce current neoliberal capitalist property relations and interests that promote redevelopment (or the more politicised term, gentrification) on land toward ‘higher’ and ‘better’ capitalistic uses. Ominously, the trend for the ‘temporary’ fits neatly with the punitive neoliberal capitalist corporate ethic

(exacerbated further by austerity measures) that promotes temporary contracts, insecure working arrangements, workfare programmes and unpaid internships, all in the name of ‘flexibility’.

5.2.5 The Development of Grove 2: Further Negotiations and Expansion

Multiple stakeholders have been supportive of the development of G1, in particular local politicians, highlighted by Callum, a CEC Councillor, who stated, *“my job has been very much a cheerleader [...] I have put supportive comments on funding applications and I have gone along to a couple of their events, and tried to be as encouraging as possible for the main organisers”* (Callum Interview). Furthermore, gardeners attributed the popularity of the garden during its first growing season to its ability to *“attract a range of people with multiple desires, interests and focus”* (Mary Interview, G1).

Due to its sustained popularity, the CUFG continued to expand and in spring 2014, G2 was established on land held for development by the EDI Group Ltd⁴³. EDI’s mission statement is to “maximise the positive impact of land and buildings in Edinburgh by creating inspirational spaces for workers, residents and global visitors” (EDI 2014). The development site was purchased by the CEC to construct Boroughmuir High School and a planned wider regeneration project (see Figure 5.8), as Emily, Development Manager for EDI explains, it will consist of *“350 residential units, all mixed tenure [...] we want family houses in the centre, that is crucial [...] 80,000 square feet of office space, a 130-bedroom hotel, and a 20,000 square feet food store and then 20,000 square feet in terms of shops and restaurants”* (Emily Interview).

⁴³ The overall development site is 8.2 acres and is situated to the north of Union Canal and south of Fountainbridge. At the time of fieldwork, G2 occupied a proportion of the site located adjacent to Gilmore Park, between the Union Canal and the former ‘Castle Mills Works’ listed building.



(Figure 5.8: Advertisement for the Fountainbridge master plan led by the EDI Group)

Contact initially took place between EDI and members of G1 at a ‘Master Plan Public Consultation Event’. Particular members of both FCI and the CUFG, place great importance on attending manifold stakeholder consultation events and undertake multiple efforts to promote the project (Ellen, fieldnotes, Sunday Assembly, 27/04/14) and are open to dialogue with various city elites. As Mary states, *“It’s about getting your voice heard, essentially if you don’t ask, you don’t get”* (Mary Interview, G1). Duncan, a gardener, reiterated this sentiment, *“the fact that the land was just sitting here doing nothing [...] meant that there was always the potential to do something [...] it really did give us a window of opportunity”* (Duncan Interview, G1).

Emily recalled her initial conversation with Robert, a retired local resident and member of TGCG who is eager to attend various events to promote the project, and pertinently highlights this attitude: *“Robert was there and he approached me and said ‘what would you think about having a huge garden?’ And I was like, I am delighted”* (Emily Interview). Emily’s ‘delight’ at TGCG’s suggestion of a further temporary garden aligned with EDI’s objective to encourage meanwhile land uses on the stalled site. Furthermore, Emily articulated at some

length the organised nature of FCI and highlighted their enthusiasm and eagerness to influence and contribute to the design and composition of the neighbourhood:

They are a very well established, very well organised, very intelligent community organisation, we've really enjoyed working with them, they have been great, they did a lot even before we came along, before EDI were instructed to act, they had already had community consultations, presentations, and the Glass-House⁴⁴ event [...] In lots of other places you are almost pulling teeth to bring a community together because it's not established [...] whereas this is the opposite (Emily Interview).

The sentiment expressed by Emily that FCI are a “*very well established, very well organised, very intelligent community organisation*” was reiterated by multiple city elites and third sector employees I spoke to (Callum Interview; Ben Interview; Nicola Interview). This raises the question of whose voice is heard at public consultation events, which tends to favour the more articulate, confident and organised members of society, to the detriment of more marginalised groups. There was broad public support for FCI and their campaigning in Fountainbridge for a “sustainable new local community” (FCI 2012: 1) in which they endeavoured to enrol as many local residents as possible by organising grassroots public consultation events. However, it must be noted that FCI promotes the specific interests of a particular group of passionate, motivated community activists and local residents, therefore, are not representative of the entire ‘community’ that Emily refers to.

EDI utilised the ‘Master Plan Public Consultation Event’ to explicitly initiate discussion regarding potential temporary uses on their stalled development site. The enthusiasm in which EDI practitioners overtly sought the application of temporary activities to suppress discord over what local residents considered to be “*dead space*” (Claire Interview, G2; see Figure 5.9) and create vibrancy, demonstrates how developers have become cognisant to the potential temporary interventions have in fostering positive PR, as Simon, a gardener stated, “*EDI was delighted to get the buzz going here and that is certainly very exciting*” (Simon Interview, G2).

⁴⁴ The Glass-House is an “independent national charity supporting and promoting public participation and leadership in the design of the built environment” (www.theglasshouse.org.uk).



(Figure 5.9: Initial transition stage from ‘dead space’ to G2 temporary urban garden)

From a developer’s perspective, land that had laid ‘dormant’ for a significant period of time, ran contrary to the desired image of a prosperous and thriving capital city, as Emily explains:

[...] for marketing purposes, if you are taking investors from all overseas, and come and just see a derelict site that is one thing, to come and see us playing around with all sorts of fun, engaging with the owners and the other potential sponsors, it’s all good press to be frank, it’s really important (Emily Interview).

EDI recognised the importance of meanwhile land uses insomuch that one of their team was made responsible for researching and facilitating temporary use. As Emily, explains:

I was tasked with having to come up with ideas of getting more people to come along to the consultation event, and one of the things I came up with was a board of temporary uses. What can you have? What can you do? We had just been down to Kings Cross and saw the Skip Garden, and all that cool stuff (Emily Interview).

Clearly, EDI were keen to implement temporary land uses on their stalled development site and had visited the Skip Garden in Kings Cross, London, which has become a somewhat

emblematic project to emulate, due to its sustained positive media coverage. Interim uses of vacant space (particularly urban food growing activities) have become increasingly common features of the urban landscape throughout the Global North (Follmann and Viehoff 2015) that helpfully corresponds to the urban sustainability discourse promoted by city elites:

Robert was telling me about the Grosvenor one across the road, which I was kind of aware of [...] so I went over and had a look at it with them and it was brilliant because it was all on pallets and it's easily movable, because our problem is we have a contaminated derelict site, you're not digging, I'm not giving a licence that will allow you to touch this soil, because there is no liability for it, but the idea that you can shuttle them about just as the site is built, it ticks all the boxes and we tried to work on it straight away (Emily Interview).

The above quote highlights two crucial points regarding the creation of G2. First, as Emily explains, the garden occupies a “*contaminated derelict site*”, however, during our discussion Emily was unable to clarify what forms of contaminants were present, and stated there would be future testing on the brownfield site. The (potential) presence of contaminants (due to over 150 years of industrial activity), within the urban soil beneath the compressed rubble, therefore became ‘unknown’ active agents. The generality in which they were discussed obfuscated their presence, however, were still integral to the design of the garden. Indeed, preventing gardeners from delving below the surface due to contamination corresponded to the parameters set by the developer that the garden should be mobile and temporary. For Emily, interaction (i.e. digging) in the ground was forbidden in terms of the risk to potential receptors⁴⁵. This could be interpreted as an act of care by the developer towards the growers, however, is shrouded in self-protectionist sentiment to eliminate possible liability and accentuated the interim nature of the gardeners’ appropriation of land.

Second, EDI were happy to replicate the ‘tried and tested’ formula and success of G1 on the CEC owned site. However, throughout our discussion Emily was somewhat reserved and did not want to elaborate on whether G1 had been an influential factor regarding the development of G2 for EDI. Nevertheless, Emily’s observations at G1 had confirmed the possibilities of creating a temporary CUFG that was well maintained by a group of enthusiastic gardeners in

⁴⁵ In June 2015, the G2 site was temporarily closed when traces of underground asbestos was found via contamination test drilling, thus affecting the everyday rhythms of the garden.

which the goodwill, positive PR and design method could be easily transferred to their site. For Ben the influence was somewhat more apparent:

I think they are doing Grove 2 off the back of the success of the first one. I would never want to be as presumptuous or egotistical to suggest that the only reason the council are doing what they are doing across the road is because that we kind of set the scene, but I think on both parts, on the developer's side, but also the community side, I think the template of what we did, demonstrated that there is far more good to come from this than not (Ben Interview).

For the development of G2, start-up costs were approximately £3,000, met by EDI in partnership with ELGT. While EDI were extremely keen to encourage temporary interventions on the stalled site in order to create visual intrigue, they were less willing or unable to fund such projects⁴⁶. Both Grosvenor and EDI do not charge rent to occupy their respective sites, however, there are other commercial ventures that are located on the land EDI are developing. The most notable (at the time of fieldwork) is the 'Snoozebox'⁴⁷ Portable Hotel that occupies an adjacent site during the Edinburgh Fringe Festival in August (see Figure 5.10). Notably, the presence of the mobile hotel divided opinion amongst the gardeners. For some, it provoked consternation, and was considered "*ostentatious*" and "*resembling Lego®*" (Claire interview, G2), symbolising "*conspicuous consumption*" (Charlotte Interview, G2). However, for others the hotel "*enlivened*" (Robert, fieldnotes, G2, 21/07/14) the site further and increased footfall and interest in the garden. Significantly, many of its members distinguished the garden (as a creative urban intervention for community use based upon non-market social cooperation) and the hotel (a privatised space and vehicle for economic gain). Thus, the fact that both ventures were 'temporary' did not mean that there were meaningful commonalities between the two from the gardeners' perspectives. Indeed, Bishop and Williams argue, there has been a "'discovery' of temporary use as a profitable arena by the development industry itself" (2012: 7), where capital markets are created as an interim between permanent projects in which landowners can 'capture' economic capital while their land awaits development. As Nicola argues in relation to the Snoozebox Hotel on

⁴⁶ In 2010, the EDI Group offloaded approximately 90% of its portfolio of investment properties to the CEC totalling £62 million, to repay loans it had taken out to fund expansion during the property boom (Herald Scotland 2011: n.p.).

⁴⁷ Snoozebox describes itself as "a unique and innovative portable hotel providing luxury 'on-site' accommodation at major events and festivals across the UK and Europe" (<http://snoozeboxhotel.co.uk/about/>).

CEC owned land, *“it’s essentially a way of creating revenue while land-banking prime space”* (Nicola Interview).



(Figure 5.10: Assembling the Snoozebox Portable Hotel, 21/07/14)

Temporary uses have become an integral tool in the Fountainbridge area in the conversion of the site from industrial to mixed commercial use (including housing, retail and a hotel), creating new networks that “generate interest amongst prospective permanent tenants” (Urban Pioneers 2007: 40). Both the urban gardeners and property developers ‘cared about’ and ‘cared for’ the Fountainbridge area, however, in very distinct ways. Significantly, in the form of CUFGs a *“common ground”* (Ben Interview) was cultivated where diverse agendas coalesced, which ultimately imbued the micro-practices of developing the gardens with power relations. For the local residents and community activists, the creation of the two CUFGs was a form of attentive and deeply personal caring for place, where feelings of responsibility to others and their neighbourhood were enacted, based on attachments and a sense of belonging to the area. This sharply contrasted to both Grosvenor and EDI who instrumentally ‘cared about’ reactivating the area to enliven the neighbourhood to imbue vacant space with creative vitality conducive to commercial development. Moreover, both developers fostered an image

of ‘caring about’ the local community, while simultaneously facilitating the gentrification process of capitalist accumulation, as Jack bluntly stated, “*there is no altruism going on here*” (Jack Interview, G1).

This is particularly pertinent as EDI identifies five key values which underpins their business ethos: namely, *caring*, sustainable, prudent, positive and creative. Significantly, EDI outline in relation to their ‘caring’ value that: “We care about Edinburgh and work closely with its communities to understand how our work can benefit them” (EDI Group 2015). For various gardeners such as Kate, they articulated the importance of fostering and maintaining a positive working relationship with EDI and the council in order for G2 to become a reality (fieldnotes, G2, 21/08/14). However, some gardeners expressed that EDI were motivated by corporate self-promotion, not attentively meeting the needs of the local community, as Claire stated in relation to G2, “*we are well aware of their intentions, it’s all self-promotion*” (Claire Interview, G2). EDI was an elusive oddity for many gardeners (Duncan Interview, G1), who initially were unaware of their position within the urban governance structure of Edinburgh.

As gardeners became more conscious of EDI’s role in urban development, particularly the complexity of a local authority owned private development company, some participants questioned this somewhat unaccountable dynamic of urban politics, as Mary stated, “*the council’s there to serve the people, but EDI is there to make a profit for the council*” (Mary Interview, G1). As Eizenberg highlights, involvement with CUFGs can enable gardeners to “realize their own position within the urban power structure and processes of (uneven) development” (2012: 776). Emily encapsulated the ambiguity that surrounds EDI stating, “*[s]ome people think we are terrible commercial developers, and some people hate us because we are the council*” (Emily Interview). Thus, for some gardeners, EDI’s claim of caring about Edinburgh (to presumably differentiate themselves from other development companies) is complicated by their interests in generating profit. Indeed, EDI state in their 2014 Financial Statements that the “principal activities of the group are property development and investment” (EDI Group 2014: 1). However, as an ‘arms-length’ business owned solely by the CEC, with councillors acting on the Board of Directors, their involvement in large-scale gentrification projects throughout the city (Kallin and Slater 2014) obscures a form of regeneration that entangles state agency with commercial interests that seeks to reinforce a veneer of separation.

As TGCG developed to encompass two sites, gardeners sought to expand its membership beyond the predominately white, European, environmentally conscious participants, and encouraged involvement from different cultural, ethnic, and economic backgrounds. TGCG explicitly established various initiatives such as the Positive Health Project, which sought to attract diverse groups to participate in the garden to improve health and wellbeing. One such group included a woman's collective from *Nari Kallyan Shangho*; a health and welfare organisation working for South Asian women and their families living in Edinburgh, which began to cultivate communal planters at G2 to grow a selection of culturally appropriate produce, such as daikon, coriander, Indian mustard (*Brassica Juncea*) and spinach. This group of eight women and six children played a crucial role during the filming of the BBC programme '*Glorious Gardens from Above*'⁴⁸, in which TGCG was featured as an example of a temporary collective garden (fieldnotes, G2, [BBC Filming], 07/09/14). Notably, the garden's involvement in the television series highlights the importance TGCG placed on promoting the CUFG to a wide audience.

However, while attempting to be an inclusive space, the 'gardening' aspect did not appeal to all local residents. The presence of a group of (non-member) teenagers utilising G2 as a meeting place, particularly within the bothy, provoked a specific illuminating tension. For some, the presence of what they considered to be "*disadvantaged youths*" in the garden (Charlotte Interview, G2), highlighted the divisions that can permeate CUFGs, where the creation of new socionatures are not independent from class power struggles (Heynen *et al.* 2006), as this extract from my fieldnotes highlights:

This evening, when Claire and I were watering our planters, three young males visited the garden. Claire enquired whether they were interested in joining, but they said that they just wanted to 'hang about', highlighting how although wanting to use the space, they were not interested in becoming members (fieldnotes, G2, 11/07/14).

Claire articulated that the periodic presence of groups of young people helped to disrupt certain assumptions held by specific gardeners "*who don't really get it, that there are people, over there [gesturing to housing in the distance] that are not having a good time at the moment*" (Claire Interview, G2). The presence of *terrain vague* or undetermined space can

⁴⁸ Episode nine of fifteen entitled 'Scottish Borders', presented by horticulturalist Christine Walkden (originally aired: 20th November 2014).

provide opportunities for alternative uses in an over-regulated urban milieu, however, the creation of a CUFG, highlights the limited appeal for those not interested in such activity. Consequently, this problematises the ‘collective’ aspect of the garden which may neglect “the needs of the most deprived and marginalised groups in the neoliberal city” (Follmann and Viehoff 2015: 1166). Therefore, it is crucial that the entire concept of ‘community gardens’ is not gentrified where “small but highly educated and well connected groups manage to articulate their own interests” to “change the city *more after their hearts’ desire*” (Follmann and Viehoff 2015: 1166; emphasis in original).

5.2.6 Summary. Constraints and Possibilities within Temporary Urban Gardens: Co-operative Commons or Co-option?

Both G1 and G2 were developed under the conditions of “austerity urbanism” (Peck 2012; Tonkiss 2013), where grassroots organising intertwined with private developer agendas. Significantly, urban activists situated themselves on the side of opportunity; prising open cracks within private property holdings, generating ephemeral excitement and enthusiasm about the collective production of space (Lefebvre 1991) and potential alternative futures within the present. Fundamentally, as Claire stated, “*the area has been essentially land banked*” (Claire Interview, G2), however, for local residents their care for the neighbourhood transcended property regimes. The endeavour to make ‘public’ the urban enclosures of privatised land entailed a series of negotiations, agreements and tactics to navigate the market logic and systems of control that govern land access to develop the CUFGs. This is significant given that cities worldwide, including Edinburgh, have been increasingly privatised and sanitised for the purposes of consumerism (Mayer 2013) in order to compete for a combination of affluent residents, skilled workers, global investors, and tourists, where the quality “of urban life has become a commodity for those with money” (Harvey 2012: 14). The creation of highly orchestrated spaces is prioritised in an attempt to capture the imagination of the “creative classes” encapsulating a new politics of consumptive lifestyle (Florida 2004). As Swyngedouw provocatively argues, “for capitalism, the ‘creative class’ is the revolutionary subject that sustains its creatively destructive transformations” (2010: 224). Significantly, the temporary urban intervention and the vernacular creativity (Edensor *et al.* 2010) of gardeners are to some extent entangled with the creative city politics of urban development logic.

In the context of neoliberal urbanism, public spaces have become gradually restricted, enclosed and monitored in which the “right to the city” (Lefebvre 1996) has become increasingly subverted and redefined as the right of the *consumer*-citizen to privatised urban ‘public’ space and a cornucopia of commodities to fulfil incessant capitalistic desires. Within this neoliberal framework, the economic exchange value of a space is prioritised over its use value. Thus, access to scarce space in the city for creative experimentation and collaborative endeavour has been progressively stifled, however, “it is important to emphasize not only that enclosures happen all the time, but also that there is constant commoning” (de Angelis 2010: 4). The process of assembling the gardens in the fissures of urban (capitalistic) space around the sharing and construction of a “temporal commons” (Gibson-Graham, Cameron and Healy 2013: 155), where groups can congregate and interact, illustrates that the act of ‘commoning’ (Linebaugh 2008) and the entanglements that are produced are constantly created and re-created between a multiplicity of agents. Significantly, urban gardeners were well aware of the co-option of their energy and labour by the developers, which transformed the vacant sites into spaces of insurgent creative, cultural expression and conviviality. Indeed, Jack helpfully draws upon the notion of “*shared benefits*” (Jack Interview, G1) where the gardeners and developers both gain from the tactical arrangements. Therefore, while relations of trust were cultivated and negotiated between developers and urban growers, both Grosvenor and EDI did not selflessly offer their land to local residents to develop CUFGs. They were calculated decisions which sought to utilise these embryotic “actually existing commons” (Eizenberg 2013) within a “new modality of capital accumulation” (de Angelis 2003: 8).

However, the gardeners were fervent in articulating that the entanglement of private property in assembling the CUFGs did not limit the scope and power of the collective. While the strict guidelines both developers delineated regarding the mobile planting arrangements were realities the gardeners had to abide by and navigate, the developers did not define the context and the nature of their interactions and relationships with each other and nonhumans (discussed in Chapter 6 and 7). The practices of sharing knowledge, resources, and cooperating together resisted capital appropriation. Indeed, the everyday care practices which sustain and enliven the spaces provide a multiplicity of enabling opportunities where capitalist and non-capitalist processes are entwined. The gardeners positioned the active continual doing of maintaining the CUFG entanglements as a non-commodified means to satisfy socioecological needs held in tension within a highly commodified urban matrix. Indeed, there are multiple claims to land as property, where for Grosvenor and EDI, land is a

commodity to be bought, developed and sold, however, for local residents, personal attachments are forged to land through history and imbued with symbolic meaning and possibilities regardless of ownership (see Wekerle and Classens 2015). By prising open privatised ‘vacant’ land, where access was previously prohibited, and negotiating sanctioned occupation for community use, the CUFGs disrupt the perceived duality and stability of public-private boundaries by creating new socioecological assemblages of multiple entities that activate and maintain micro-scale urban ecologies of care. Having examined the material and affective production of the intimate urban ecologies of both G1 and G2, I now proceed to explore the specific entanglements that led to the development of LSG, a top-down, NGO-led urban gardening project.

5.3 LOCHEND SECRET GARDEN

5.3.1 *The Seeds of a Garden: Potential Sites, Funding and Multiple Agendas*

The development of LSG is intimately linked to the diversification strategy of Carr Gomm Scotland, a national adult social care charity. In 2007, they reoriented their organisation, expanding the range of services they provide, from supported living and visiting support, to also include community development work. Carr Gomm developed the LCGP, a community growing and social inclusion initiative in 2011. Subsequently, LSG (a name chosen by local residents at the Launch Event on 1st October 2011) was the first CUFG developed under the auspices of the LCGP. Carr Gomm was motivated to create a collective growing space when they opened 24-hour supported living accommodation in the Lochend area, for ten people with enduring complex mental health problems. This development is a direct result of a transition process away from delivering support and care within institutionalised settings to care in the community. In particular, the Royal Edinburgh Hospital⁴⁹, which specialises in caring for people with mental health problems, is currently being restructured and redesigned to reduce the number of bed spaces and increase community care⁵⁰. This reorganisation takes the form of external supported living arrangements following the decision in 2005, by NHS (National Health Service) Lothian, to redevelop the site. As Milligan and Wiles explain, the “concept of ‘care-in-place’ through the advancement of deinstitutionalized (or community) care services has developed since the mid-1970s” (2010: 746). The notion of community care “never really meant care *by* local communities; rather, it referred to the development of new spaces of care-giving located outside traditional institutional environments” (Milligan and Wiles 2010: 746). As Adam, Tendering and Development Manager of Carr Gomm Scotland explains:

So in Lochend we bid for a contract with the council to provide support to ten individuals who were leaving the Royal Edinburgh Hospital, who had been inpatients for various lengths of time, the longest I think was 27 years, so it gives you an idea of [pause] not so much their mental health problem being the significant issue, but institutionalisation being a really big issue (Adam Interview).

⁴⁹ Located in Morningside, South Edinburgh.

⁵⁰ ‘Community care’ is a term used to designate the numerous services available to support people to manage their physical and mental health problems in the community, such as supported accommodation. In 2013, the Scottish Parliament approved the *Social Care (Self-Directed Support) (Scotland) Act 2013*, which “allows people to be in charge of their support so they can live the life they choose” (<http://www.carrgomm.org/self-directed-support>).

Indeed, Adam's main role was to identify and bid for contracts with the CEC to provide care services for those with complex disabilities, however, as he states:

they [CEC] want the cheapest [contract], that is actually the sole driver, to the point that in the contract we are in, we are not making any money, we are losing money on it. We are trying to bring down our costs [...] that is our objective, it's not to make money, it's to break even (Adam Interview).

In the context of state austerity and fiscal retrenchment, the CEC has undergone considerable restructuring and consequently Adam believed there is “*a real drive for them [the CEC] to cut costs, go to the cheapest provider when times get tough, protect their own staff and cut their external provision costs*” (Adam Interview). He reflected on the competitive bidding process Carr Gomm were entangled within, where they experienced “*really big adjustments, I mean when I started working for Carr Gomm [2007] we had services that would have an hourly rate of £22 an hour, same service being provided today, same local authority, same service user, is closer to £15*” (Adam Interview). Carr Gomm's contract demonstrates how formalised care is commoditised and governed by market temporalities and demand. As part of their diversification strategy to remain ‘competitive’, Carr Gomm identified the potential of growing projects as a vehicle to undertake community development work, where their ‘caring for’ was structured within a commoditised framework, “contributing to a changing topography of care” (Milligan and Wiles 2010: 745). Crucially however, as many care scholars have highlighted, the role of informal care by family, friends and neighbours, remains a large proportion of the provision of care (Tronto 1993). Nevertheless, broader political-economic developments have influenced “the redistribution of responsibility for care between statutory, voluntary and private bodies” where the “neoliberal drive toward welfare pluralism in many advanced capitalist countries has resulted in an increased role for third- and private-sector care providers alongside that of the state” (Milligan and Wiles 2010: 745).

Indeed, Ruth, a Scotland Development Worker for the FCFCG, highlighted the increased interest from third sector organisations utilising urban food gardening as a low-threshold activity to deliver a range of objectives, as she explains:

Across the board and even within bigger organisations, there is an interest in community growing projects [...] And traditionally there was also a lot less emphasis on food and a lot more on community cohesion, socialising, therapeutic purposes, which there still is, but there is much more acknowledgment of healthier good food, it's good for your mental health and physical health (Ruth Interview).

However, it must be noted, the professionalisation of food growing initiatives can be particularly problematic when paid employees, who are frequently not based in the area in which the project is being implemented, facilitate and organise the project in line with funders' objectives, which can therefore, fail to build capacity from within and not reflect the needs of the local community (Nicola Interview).

The Carr Gomm Community Development Team identified a need for a project in Lochend that would create opportunities for people they support to socially interact with the wider community:

We wanted to do more community development type projects [...] how do we help people relate to their communities and how can we create opportunities for people to socially interact, literally do you take someone to a neighbour [...] they receive 24-hour support and they have just left hospital, do you want to be their friend? That doesn't work, and you can't start there, but how can you create opportunities for people to mix and bump into each other, and do things, and that's where community growing was used as that kind of model (Adam Interview).

As residents of the supported-living accommodation had experienced the services of Art-Link, a charity that focuses upon food growing and art within the Royal Edinburgh Hospital, which also contained a temporary community garden⁵¹ within its grounds, interaction with greenspaces and creative activity were valued amongst the group. Therefore, residents were interested in participating in a CUFG within the wider community. Significantly, the fact that residents were keen to participate in food growing activities conveniently aligned with Carr Gomm's strategic interests of utilising garden projects to deliver community development.

⁵¹ The Royal Edinburgh Community Gardens, at the time of fieldwork, had been running for just over three years. The gardens are a NHS Lothian initiative managed by the Cyrenians (an NGO) promoting mental health and wellbeing, healthy eating, social inclusion and biodiversity.

The Community Development Officer “*identified that there wasn’t much going on in the growing sphere in Lochend*” (Adam Interview) and therefore, contacted Edinburgh Community Backgreen Association (ECBA)⁵² to discuss the possibility of developing a shared garden space within the backgreen of the accommodation building. Following various conversations a “*gem of an idea emerged*” (Adam Interview), which was based upon a communal growing space that would be created and utilised by the people Carr Gomm supported and the residents of Lochend and Restalrig “*to provide the opportunity for very natural relationship building*” (Adam Interview).

However, as Hinchliffe argues, “[f]inancial resources are often needed in order to make things happen” (2007: 167). Thus, Carr Gomm applied for funding to explore the possibility of creating a community food growing project in Lochend through a development study and land survey. They received £9,200 from Scottish Natural Heritage (SNH) through the Central Scotland Green Network (CSGN), to work in partnership with ECBA and subsequently, Re:Solution, a social enterprise established by Matthew, a social entrepreneur and member of ECBA. Specifically, Matthew explained how his decision to move away from creating urban food growing projects in communal ‘backgreens’, to focus upon land owned by the CEC and in areas of multiple deprivation, were primarily motivated by gaining access to funding streams and gave two main reasons:

One, it’s easier to get funding for council estates [...] which are very low [sic] down on the SIMD and quite a few of the government funds now tend to be directed towards the 15 percentile and below, and there are certain funds that if you are not 15 or below, you are not eligible. So you’ll find a lot of the grants now, they’ll ask for your postcode when you are proposing a project [...]. Now the other thing was, a lot of greenspace project funding was directed towards... they had to be publically accessible and the previous projects I had done in tenement backgreens are not, so that made things really difficult, so that’s why I ended up setting up a community growing project, or promoting community growing initiatives in council estates (Matthew Interview).

This process of ‘chasing the funding’, particularly in areas of multiple deprivation that Matthew describes, pertinently highlights how targeted funding can result in the uneven

⁵² ECBA is a community organisation that supports tenement dwellers to work with their neighbours to regenerate backgreens into community greenspaces.

coverage of growing projects throughout the urban fabric, where areas that do not quite fall within the arbitrary boundary, do not qualify for capital investment, despite the presence of socioecological inequalities.

The resulting report created by Matthew identified nine potential plots of land and assessed the feasibility of developing a growing project, with ‘Lochend Quadrant’ chosen as the strongest candidate, which is a ten-minute walk away from the supported living accommodation and owned by the CEC’s Housing Department. Walking throughout the urban fabric of Lochend and adjoining Restalrig area it became apparent that there were a multitude of pockets of grassed land that are encapsulated with low metal fences, isolated and rarely used (fieldnotes, LSG, 21/01/14). These residual, under-utilised spaces provided local residents in conjunction with Carr Gomm the opportunity to change and control their own environment by developing a CUFG. The residential area of ‘Lochend Quadrant’ is designed in “*a typical East Edinburgh fashion, similar to other social housing schemes*” (Adam Interview), consisting of clusters of tenement housing of various heights, facing onto individual gardens and communal backgreen areas, encircling large pieces of public land.

Negotiations took place between the CEC and Carr Gomm to gain access to the site, in which it was subsequently agreed that the land would be leased at a peppercorn rent, approximately £150 per annum. As Eric, a local resident described, it had previously “*been a play park*” (Eric, fieldnotes, LSG, 12/02/14), however, at the time of the report it was simply a grassed area and did not have a specific use. Indeed, as Hilary, Ripple Project⁵³ Manager, stated, the garden is “*making good use of land that before people would be going to see their councillor about the mess, noise, or dog dirt, people hanging about in it, disturbing others*” (Hilary Interview). Cath, a local resident and enthusiastic gardener, who is a constant presence in the garden described how:

It was a dump for furniture and all their old garden rubbish [...] there was not a lump of ground here that wasn't just full up with rubbish, because people would back down here [access road to electricity substation] and dump it, well in this corner here it was up as high as the fence and it came all the way down to here [gesturing where we were sitting] [...] there were old beds just flung over the fence (Cath Interview, LSG).

⁵³ The Ripple Project is a ‘Restalrig and Lochend Community Hub’ community centre that offers a range of activities to enhance the health and wellbeing of all ages.

Notably, Richard, a participant who has become an integral member of the garden, comments that he had “*been digging up a lot of springs and realised that was why*” while preparing foundations for the outdoor oven (Richard Interview, LSG). Thus, the creation of a CUFG was articulated by Carr Gomm, as a practical, embodied way to address “banal forms of disadvantage” (Whitehead 2009: 668), where identifying areas that were infused with a lack of care, provided impetus “to act on these spaces in new and enlivening ways” (Whitehead 2009: 676). As Adam explained, social, economic and environmental inequalities often interact and find expression in the urban fabric, where Lochend is considered to be a ‘spatial concentration’ of low-income households (SG 2012). The political economy of Edinburgh has shaped the local environment and the distribution of various socio-economic groups, whereby elevated house prices and gentrification (Bondi 1999) has resulted in low-income groups increasingly being forced to move to areas with limited investment and amenities.

Indeed, local residents compared the highly maintained manicured lawns and planted raised beds found in the city centre, which they perceived were targeted towards tourists and professionals, to the sporadically cut, bland, greenspaces of the surrounding peripheral areas in which they live (fieldnotes, LSG, 31/05/14). Lochend is characterised as an area of multiple deprivation (SG 2012) which is utilised as a crucial factor to attract multiple streams of funding. This is pertinently highlighted by the funding application to The Robinson Trust, in which a selection of statistics (in particular, a high proportion of people pensionable age, income deprived and employment deprived) was utilised to support the submission. Within the application form the creation of the garden was deemed to address multiple complex issues, stating that the LCGP would:

[...] have a positive impact on the environment, health and social fabric of a community, achieving benefits at the individual and community level. It will benefit participant’s health and wellbeing, including mental health. It will encourage physical activity and improve access to affordable, nutritious food [...] The Lochend Community Growing Project will improve the physical appearance of local green spaces, increase local biodiversity and help to address the challenges of climate change (The Robertson Trust Funding Application, 2011: 4).

The extract highlights how in order to qualify for capital investment, food growing projects can become framed in such a way as to promise to deliver an array of multidimensional benefits, somewhat encumbering the project with a complex set of multiscale objectives (Hinchliffe *et al.* 2007). In particular, the creation of the garden was seen by Carr Gomm as a tangible way to address various social and environmental inequalities, empowering the local community and preventing the illegal dumping of assorted rubbish (Adam Interview). Thus, it was asserted that the development of the garden provided the opportunity for marginalised residents, including those living on low incomes and people experiencing complex drug, alcohol and mental health problems, to create a shared space.

In addition to the development study report, a member of Carr Gomm's team undertook "*a kind of people survey, so knocked on doors and asked other organisations*" (Adam Interview), however, as Adam elucidates:

I have my doubts about its true validity as a piece of research because I think some of the questions were a little bit laden, about we are thinking of doing this, are you with us, or not? [...] there is a bit of me that says whose agenda was being pushed, and we are meant to be following a community development approach which says we should be listening and empowering and responding (Adam Interview).

The development study report and the "*people survey*" (Adam Interview) formed the basis of Carr Gomm's application for funding to develop the LCGP. On the 15th March 2010, the CEC voted and pledged to support the creation of a community garden, through the Area Board⁵⁴, subsequently offering to fund a significant proportion (£42,000) of the cost in the first year and then a further £20,000 in the second year (for a detailed breakdown of funding see Table 5.1).

⁵⁴ As part of a process of decentralised and devolved governance and drawing on the concept of the 'Neighbourhood Management Model', Edinburgh has been divided into twelve 'Neighbourhood Partnerships', where each have an 'Area Board'. Within the Craighentiny and Duddingston Neighbourhood Partnership (in which Lochend is situated), the Area Board consists of elected members, local residents, and members of the East Housing and Regeneration Team. The board's main role is to "decide on where improvements to the neighbourhood are most needed and allocate the budget accordingly" (see: <http://www.edinburghnp.org.uk/neighbourhood-partnerships/craighentiny-and-duddingston/our-sub-groups/area-board/>).

Table 5.1: Funding summary for LSG	
<i>Development Study (Up to July 2011)</i>	
Carr Gomm	£7,000
Scottish Natural Heritage – Central Scotland Green Network	£9,200
<i>Year 1 (August 2011-August 2012)</i>	
CEC Craighentenny and Duddingston Neighbourhood Partnership (2011 Budget)	£42,000
The Robertson Trust	£14,000
Scottish Natural Heritage – Central Scotland Green Network	£17,300
<i>Year 2 (August 2012-August 2013)</i>	
The Robertson Trust	£14,000
CEC Craighentenny and Duddingston Neighbourhood Partnership (2012 Budget)	£20,000
NHS Lothian – Small Steps Big Difference	£2,523
NHS Lothian	£6,000
Total Project Cost	£132,023

Notably, the decision was unprecedented, as the funds had been allocated through the Neighbourhood Environment Programme, which historically had never been used to fund NGO or community-led initiatives. As Neil, CEC Property Team Leader explains, “*this was new to me, normally we do projects like fencing and pathways and things like that. So had never really done anything like this and on this level*” (Neil Interview). Furthermore, Neil described how during a period of “*deep austerity*” funding is currently restricted and controlled within the CEC. Indeed, in 2013/14, the CEC was in debt by £1.614 billion, representing a rise of 106.7% over a ten-year period (Carrell 2015: n.p.), as Neil explains:

Edinburgh went through a big procurement exercise so if that project came right now, we wouldn't be able to fund it, so it happened at the right time for them [...] if they came to us right now, we would probably give them a bit of ground and maybe support them and do a bit of work, fencing or getting ready, we couldn't give them money as we have done before, it's just as I say money is tight, we still have an Area Board project and still have money to spend but we can't just hand it over to an agency now, so it's a lot tighter (Neil Interview).

Both SNH (£17,300) and The Robertson Trust (£14,000) agreed to provide further funding to establish the garden (see Table 5.1). Significantly, the various organisations placed emphasis on different ecological or social aspects of the project, as Adam describes:

CSGN were concerned with the transformation of greenspace, so they were interested in paying for items for the garden such as the shed and a person to do garden work. The council were very flexible, they wanted to achieve change in the community, they wanted to see tenants who lived in council properties a bit more engaged in the community, they wanted to see a more enlivened community, and The Robertson Trust bought our [Carr Gomm] vision which was about trying to include people who might ordinarily find it really difficult to engage with a middle-class gardening project and so that paid for an outreach worker to try and pull people in, so there were multiple agendas, multiple funders (Adam Interview).

Thus, a complex multi-layered network of funding materialised in which the diverse agendas of multiple agents were reflected in specific elements of the garden being financed.

Consequently, the project embodied “collective decisions about resource allocation, design and ‘what sort of people’ are prioritised” (Barnes 2012: 128). Furthermore, the CUFG was envisaged as a vehicle for addressing multiple issues including reducing social isolation and improving the health of participants and in the process increase their access to open greenspaces. Indeed, the substantial investment of £62,000 by the CEC (through the Craightinny and Duddingston Neighbourhood Partnership) was deemed by Stuart, a local Councillor, who chaired the garden’s Annual General Meeting (AGM) on 12th July 2014, to be:

money definitely well spent and invested [...] You can’t underestimate it, people just think oh that’s great, they are growing vegetables but there is a whole series of benefits as well, social interactions, people’s mental stimulation, education, friendship growing out of it, so yeah there are all these benefits, you can’t put a price on that (Stuart Interview).

Indeed, numerous CEC employees and elected officials I interviewed reiterated Stuart’s sentiment regarding the perceived benefits of urban food gardening as a vehicle of early

intervention to reduce health and social inequalities. Notably, purposely bringing individuals together through a third sector organised initiative in a collective space of ‘nature’ to achieve a ‘positive’ personal transformation, aligns with neoliberal rationalities of personal responsibility, empowerment and self-care. In this sense, gardening is a personal process “to achieve a desired transformation of individuals in place of collective resistance and/or mobilization” (Pudup 2008: 1230). From the CEC’s perspective CUFGs were cost-effective interventions, which could be implemented in specific localities to address multiple issues, as Sophie, CEC Partnership and Information Manager states:

It’s so beneficial for health, mental health and inclusion, healthy eating, it ticks all those boxes. Because under the Edinburgh Partnership, they are asking all the big partners, all the big service providers and public service agencies to move to a much more preventative and early intervention approach, and this [the garden] would seem like a good model, it’s quite different (Sophie Interview).

Furthermore, Ruth explained, “NHS Lothian are really on-board with the idea of preventative medicine, a community garden is seen as that” (Ruth Interview). In addition to conceptualising community gardens as a preventative or early intervention approach to address a plethora of health and social inequalities and thus theoretically reducing NHS costs, a range of actors also attributed the ‘benefits’ of LSG in direct relation to the space being a site of ‘nature’ and therefore inherently ‘good’. Indeed, Angela, a Community Development Health Worker, articulated that LSG was a “safe and healing space” and “an escape” (Angela Interview), juxtaposed against the surrounding ‘urban’ fabric of Lochend. A prominent narrative emerged whereby CUFGs were deemed beneficial and positive because they inserted ‘nature’ in areas of neglect, which effaces the complex ways in which people experience CUFGs, and as gardeners themselves reflected on, “popping to a garden for an afternoon a week” (Luke Interview, LSG) does not magically address deeply multifaceted problems.

Significantly, Carr Gomm decided that funding would only be secured for two years, where three members of staff would support participants and establish the growing space, and then transfer responsibility to the gardeners, as Beth, Community Project Worker for Carr Gomm, at the time of the garden’s development, clarifies:

We got funding for two years to set up the community garden with the sole purpose of at the end of the two years it would be an autonomous self-sustaining group of people which would be their own organisation (Beth Interview, LCGP).

The “*autonomous self-sustaining group*” Beth refers to in the above quote, however, needed to be assembled, fashioned, supported and nurtured. Indeed, the formation of LSG was not inevitable, multiple relations needed to be cultivated. Beth’s role was to identify, support and facilitate various individuals and groups to be included in the garden, gaining people’s interest, enrolling them within the project, and nurturing the embryonic steering group (Beth Interview, LCGP). However, as Adam explains this was not a straightforward process:

There were a number of people who didn’t have telephones, and their only method of communication was post, there were people with literacy problems so post didn’t even work, we had to go and find them to communicate with them (Adam Interview).

The principle process of creating this ‘grouping’ was through multiple collective workshops that focused initially upon the design of the garden and then subsequently, its construction.

5.3.2 Transforming Space: Designing a Collective Urban Food Garden

The project began in late August 2011 with the aim to: “create a community greenspace where people from the neighbourhood could come together to grow food, learn, share and make new friends” (LCGP 2012: 2). Once funding was secured, a community design consultation process was instigated, however, this was to become a contentious issue, in which the ethos of Carr Gomm and the project worker they had contracted to undertake a sequence of collaborative design workshops, conflicted. Matthew reflects upon the design process:

We tried to develop them as participative design workshops, but I very much had an agenda [...] It was a method for me to explain my ideas based on the experience I had, in a way they could visualise (Matthew Interview).

For Adam, Matthew’s approach fundamentally undermined the community empowerment goals of the project, which were based upon “*listening and empowering and responding*”

(Adam Interview) and therefore reinforced the asymmetrical power relations between the ‘expert’ and the ‘community’. Indeed, for Adam, there was an overemphasis placed upon aesthetic appearance, where ‘nature’ was conceptualised as something to be manipulated and controlled for human consumption both materially and visually. The finalised design of LSG strongly resembled Matthew’s previous projects and the initial design he had created for funders. Adam, however, did acknowledge that the ability to produce, and then present, artistically pleasing visuals to potential funders at the initial stages of projects was an important facet to navigating the funding system, which exists in tension with a ‘bottom-up’ design approach:

Even at an early stage there is quite finished looking, polished looking visuals and I would have preferred a model where we had done it on a more grassroots engagement [...] but you need to get a funder to give you money and you have to show them you have a solid plan (Adam Interview).

Despite the tensions between Matthew and Adam regarding the design process, many of the participants were not only happy with the consultation process they experienced, but were also pleased with the attention to detail in particular instances, as illustrated by Hazel, a gardener, who uses a motorised mobility scooter to visit the garden. While tending her raised bed, she explains:

Matthew made this fabulous bed for me, he designed it, he planned it, he measured it, it’s made to measure to my specifications and requirements [...] we planned the garden, it wasn’t just Carr Gomm, I mean yes, they had the funding and they had a person working on it, so it meant that it kept going, but I don’t feel that they did it and I had input, I feel like we did it and they supported us (Hazel Interview, LSG).

The attentive practical tinkering (Mol *et al.* 2010) and attention to detail in assembling Hazel’s raised bed aligns with the conception of care as “shared work” where people “are held and supported by their relationships with humans and non-humans” (Winance 2010: 112). However, the contestation over the design process and eventual plan of the garden highlights the complex relations that contribute to the formation of CUFGs.

5.3.3 Contamination and Setbacks

Despite undertaking a development study of potential sites prior to the implementation of the garden, key agents from both Carr Gomm and Re:Solution were unclear whether they needed to seek planning permission in order to create the CUFG, as Adam explains:

What's the planning consent for transforming a piece of land into a community garden? Nobody knew [...] The reason we needed planning consent was we were putting a shed up, so you are constructing a building (Adam Interview).

Adam stated that applying for planning permission itself in the form of a 'change of use' (i.e. the completion of multiple documents), was not particularly arduous, rather it was the long process of uncertainty that it initiated, which "*led to a number of challenges, it delayed our project, so instead of doing stuff through the autumn and early spring we were doing stuff in the spring into the growing season, so nature's timing doesn't really meet planning council timing rules*" (Adam Interview). Significantly, the CEC asked the group to undertake a Contaminated Land Study because of an electricity substation situated directly adjacent to the site (see Figure 5.11). The principal concern surrounded Polychlorinated Biphenyls (PCB) contaminants found in a specific mineral oil that is used in transformers and is highly toxic and carcinogenic, as Adam explains:

In some electricity substations they use fairly nasty things that are now banned, but did exist, and the energy companies did have a habit of just tipping them out into the ground water next to their buildings, so the council were anxious, so Scottish Power came out and helped us identify lots of issues, none of them actually significant (Adam Interview).



(Figure 5.11: Electricity substation located adjacent to LSG)

The main issue Scottish Power identified with the site was not the presence of contamination, but the existence of a 35,000-volt cable buried beneath the surface, directly where the shed was planned to be located. Adam therefore reflected:

So things I have learned about community gardening projects is you need to look above, so what cables run above and you need to look underground, what's running underneath, and these are not things I ever considered (Adam Interview).

After the project team had engaged with Scottish Power, the CEC remained resolute in requiring the group to undertake a Contaminated Land Survey and therefore, contracted environmental consultants to start specialised testing, whose services were to cost approximately £6,000, as Adam explains:

We spent a small fortune commissioning a desktop survey, a site survey, digging up test pits and taking of samples and sending them to a laboratory, all of which discover that

we have PAHs [Polycyclic Aromatic Hydrocarbons]⁵⁵ in the soil, which is the sort of thing you might find in petrol or diesel, it's carcinogenic, it's not good for you to eat it, and there was a certain level found (Adam Interview).

In addition, 'higher than recommended' levels of lead were also found in the soil. The lack of official guidance from the Scottish Environment Protection Agency (SEPA) and "*almost unhelpfulness from public agencies*" (Adam Interview) regarding contamination and urban food growing was both frustrating and confusing for the project team. Furthermore, having "*asked other growing projects, no one had ever been asked to do it we knew, so we were a bit stumped*" (Adam Interview)⁵⁶. Ultimately, the environmental consultants utilised the guidelines for housing construction:

because it considers that you can grow stuff in your garden, so it takes some of those risks and it assumes you have an allotment size plot and you consume everything from that plot as your only diet, therefore how much can the plants take up from the contaminated soil? What can you ingest? And therefore what the risk factor is (Adam Interview).

The carcinogenic properties of PAHs were a particular matter of concern since their presence in the soil provided a significant obstacle to the urban food growing priorities and objectives of the proposed garden. Following the process of contamination testing "*a very small number, very slightly over the line that says contaminated, but really not enough to cause harm according to the model*" (Adam Interview) were discovered within the soil. Significantly, localised sources of contamination were identified not from the electricity substation, but as a consequence of periodic bonfires held on the site and airborne sources from the burning of fossil fuels off-site. As Matthew explains:

⁵⁵ PAHs are "ubiquitous in air, soils, and water as a result of both direct and indirect emissions. PAHs are discharged into the environment as byproducts of the combustion of fossil fuels used for transportation and generation of electricity. Other sources of PAH emissions include industrial processes, biomass burning, waste incineration, oil spills, and cigarette smoke" (Coleman 2004: 245).

⁵⁶ The 'Guide for Growing on Land Which May Be Contaminated' (GYOWG 2014) was an outcome of the recommendations made by the GYOWG, in response to the NFDP (SG 2009). Within the document, LSG is used as a case study example of how to overcome barriers associated with growing on contaminated land.

PAHs are prevalent in urban centres because that's where the coal was burnt in homes and in power stations and it's in the particulates that fall down, so they are not just there in Lochend (Matthew Interview).

Indeed, the magnitude of the degradation and pollution of urban soils globally, highlights the extent to which soils are influenced by anthropogenic activities and subsequently, poses a potential threat to human health and ecological systems, a topic which has remained under-researched within broader community garden literature. As Clive, a vocal community gardener, explains:

We do need to temper a lot of the excitement surrounding urban food growing with an understanding of the potential risks [...] growing in urban soil, you have to really take into account previous land uses, all the human activity that has occurred on the site, and what might be in the soil (Clive Interview).

The gardeners were required to take mitigation steps to break the 'source-pathway-receptor'⁵⁷ linkage in order for the CEC to approve planning permission for the creation of a food growing space on the contaminated site, as Adam explains, "*the council didn't want to approve planning without a remedial action plan in place that says how you deal with the contaminated land*" (Adam Interview). Therefore, in this instance, PAH's and lead had the power to disrupt the design and envisaged development process of the garden. Rather than remediate the soil, raised beds were constructed of kiln dried untreated wood, with a hundred tonnes of 'clean' topsoil imported and manually transferred by wheelbarrow. In addition, geo-textile landscaping fabric was placed over the entire site, affixing an additional layer underneath each constructed raised bed "*a spade and a half deep, so in normal circumstances you wouldn't be hitting the geo-textile, so you won't damage it*" (Matthew Interview). According to Matthew, the time constraints placed upon the garden's 'completion' and the lack of knowledge of how to remediate the soil, led to the problem being 'buried' beneath the geo-textile. Therefore, 'care for' the human in terms of reducing the health risk of ingesting contaminants in a swift manner that aligned with funders' expectations and Carr Gomm's

⁵⁷ The 'source-pathway-receptor' linkage refers to the process by which the *source* of contamination (such as lead) is transferred through the *pathway* (for example, eating raw, unwashed, root vegetables grown in contaminated land) to the *receptor* (anything that can be harmed or damaged by the contaminant, such as humans, material properties or the environment) (GYOWG 2014).

timeframe (two years), was prioritised over long-term ‘care for’ the soil in terms of repairing and nurturing the lively matter through remediation.

The garden was assembled using a ‘community-build’ model where local participants came for twice weekly drop-in sessions to translate the ‘collaborative design’ into practice:

So when it came to building the garden we didn’t have a plan for using builders, the process was, use these keen people in the community, and use the build as the process by forming and norming and storming a group (Adam Interview).

Guided by a facilitator the local volunteers undertook all the hard landscaping of the site, assembled the polytunnel, and then constructed fifty-two individual and household raised beds in addition to thirteen growing spaces for community groups⁵⁸. For the gardeners involved in the initial planning stages of the CUFG, the physical, embodied labouring process of transferring soil into the raised beds heightened the importance of the lively matter. The physical exertion – the lifting, carrying, bending, dragging, walking – needed to construct the raised beds and transfer the soil into them, was recollected by the gardeners with a sense of achievement, however, as Judith described to me while walking around the garden, it was a “*backbreaking job*” (fieldnotes, LSG, 23/01/14). However, due to the size and scale of the garden shed, which resembles more of a “*summer house*” (Michelle, fieldnotes, LSG, 11/06/14) with an accompanying veranda, professionals were hired to undertake the construction at a location that avoided the buried 35,000-volt electricity cable. Notably, the large shed was purposively designed to be a communal focal point (see Figure 5.12), as both an outdoor ‘classroom’ and meeting place, “*where people come for a chat*” (Cath, fieldnotes, LSG, 19/03/14). All physical garden structures were completed in April 2012. Notably, the more layers added to the garden (funders, people, soil, plants, trees, for example), the more the garden took shape and the more entangled with others it became (Hinchliffe 2007).

⁵⁸ The thirteen ‘outreach beds’ were allocated to various community groups including, Seasons, a CEC managed mental health service; Prospect Bank School; Hermitage Park Primary School; and Marionville Court Care Home.



(Figure 5.12: The communal shed acts as a meeting place and outdoor classroom)

5.3.4 Multiple Motivations and Emotional Investment

Participants articulated a range of motivations for joining the project. For Hazel, the CUFG enabled her to continue to garden now her mobility was restricted and she had moved into a flat that had no outside space:

I could go weeks, when I first moved into the flat I thought I could just sit here and not do anything and not talk to people, so it was the gardening that brought me here because I want to be able to continue to garden, here is a chance [...] but it was the

people that kept me coming back, it was a place where I could come and share, just to be able to sit here and look at all of this, and it's my garden and your garden (Hazel Interview, LSG).

Cath, who “*didn't know anyone*” at the initial stages of the garden's development, stated, “*I joined because my flowers were alright and my bushes and that, but my vegetables are a disaster*” and stated that “*I have to be doing something or I get bored*” (Cath Interview, LSG). Cath articulated how a group of eight gardeners:

have become the substantial hard-core backbone of the garden and now everybody just comes when it suits them [...] some people came here totally enthusiastic and then disappeared [...] people come and help with what needs doing or just have a cup of tea and a bit of cake, and it's good, it's good to come up and talk (Cath Interview, LSG).

Thus, the CUFG has become a source of emotional support for various members, “*where I can drop in and have a blether*” (Jenny Interview, LSG). Many of the gardeners explained how the practicalities of living in a high-rise flat reduced their capacity to grow food, as Richard explains: “*I used to have a house and a garden and I liked to do a bit of landscaping and [...] used to grow my own vegetables*”. However, when he moved into a flat he “*got involved with doing gardening in the grounds, because they were looking for volunteers to help and improve the environment around there*”. Richard explained how he joined the CUFG “*about half way through the first year [...] by luck [...] I came up one time and there was people here and I went oh what's happening? What is this all about? [...] so then I just got involved from there, asked if there was a bed available*” (Richard Interview, LSG). Notably, Richard describes how he was drawn to the collective aspect of growing in a communal garden and the shared decision-making process:

This is run along democratic lines because that's what they [Carr Gomm] started off on, that we should all be equal, although some assume they are not, but you'll get politics in any situation, but the fact is that everybody is equal here and everybody has their say, so I enjoy it here, plus I get involved with more than just the gardening (Richard Interview, LSG).

The majority of the gardeners' expressed multidimensional reasons for participating in the urban food growing project, however, all voiced a desire to make connections with other people. Indeed, Judith, an experienced gardener, described how when moving to Edinburgh the garden provided an opportunity to meet other local residents (Judith, fieldnotes, LSG, 23/01/14). Notably, Carol explained how the garden attracted a large proportion of women, where at the initial design stage a small dedicated group became key members, "*we were all single, looking for something, a purpose for ourselves really, and care for people, because I think when you get to a certain age you realise that you need people*" (Carol Interview, LSG). In this sense, friendship "can be an important source of support or care" (Bowlby 2011: 607). Before joining LSG, Carol, was already an avid gardener and a member of her Resident's Association where she helps tend the communal areas located around the high-rise building in which she lives. While weeding her raised bed, she proudly articulated that her Resident's Association had won awards with the 'It's Your Neighbourhood' Keep Scotland Beautiful gardening scheme (Carol, fieldnotes, LSG, 30/07/14).

As a member of LSG since its inception, Carol was involved in the design and construction process where she states, "*I love coming here, it's like my baby*" (Carol Interview, LSG). The garden provides the opportunity for those who do not have access to space for growing food and facilitates positive emotional connections, as demonstrated by Carol referring to the garden as her 'baby'. The use of such metaphors, as Singh highlights, "shows that intimate relations between non-humans (nature) and humans emerge from the same kind of intersubjective communication that characterizes human-to-human relations" (2015: 58). Carol cares deeply about LSG investing emotive, bodily labour, while taking care of the socionatural assemblage, placing particular importance on overcoming social isolation, thus highlighting how "places are both deeply personal and as well as socially shared" (Till 2012: 11). Indeed, Carol epitomises the attitude of many of the most active gardeners, who see the CUFG as a social venue to eat together, share stories, and celebrate the seasons allowing convivial "forms of sociality to emerge" (Singh 2015: 58). The CUFG was a caring space for many, where emotional support through listening to people's concerns was deemed an important component of "reaching out toward something other than the self" (Till 2012: 8). However, this is not to romanticise the role of CUFGs, as several members relayed that since its inception, some participants "*had lived off the garden*" (fieldnotes, LSG, 04/06/14) supplementing their diet with produce in times of food insecurity.

5.3.5 From Organised Project to Autonomous Self-Sustaining Collective Urban Food Garden

In August 2012, a ‘Community Visioning Day’ was held entitled ‘Seeds of Tomorrow’ where community members were able to express their ideas on how the garden should be maintained and developed in the long-term. From the outset Carr Gomm’s strategy was to work with the local community over a two-year period to develop participant’s capacity to self-manage the garden. Subsequently, a steering group was elected in September 2012 during the inaugural AGM. Notably, through Beth’s nurturing, many female members of the garden have gained confidence and subsequently, taken on roles within the steering group. Indeed, the group remains overwhelming led by female members (fieldnotes, LSG, 12/07/14). In April 2013, the garden applied for Scottish Charitable Incorporated Organisation (SCIO) status that was subsequently granted in May 2013, enabling the garden to apply for funding. In August 2013, the lease was transferred to the LCGP permitting the garden to be organised and maintained by its members.

The project was deemed a success enabling Carr Gomm to ‘walk away’ once all of their objectives had been fulfilled; indeed, the garden was well attended by the local residents, the raised beds were productive, participants reported a beneficial effect on self-perceived health improvements, the garden had become a venue for social events and friendships had been established (Beth Interview, LCGP). However, gardens require the continuous maintenance of complex entanglements and are a matter of process and not an end state (Hinchliffe *et al.* 2007). This ‘messiness’ is exemplified by Beth’s continuing involvement, support and care for the garden and its members, once her contract had terminated with Carr Gomm and she proceeded to be self-employed within a Community Interest Company (CIC) she established:

Whereas in the last two and a half years I was really heavily involved introducing them to each other and supporting them to work out what they wanted to do, and helping to order everything, and create the garden. Now I just turn up whenever they want me to, and help them with things they want extra help with [...] it’s not part of their expertise to navigate the system of funding and all of this kind of bureaucracy whereas that was my job. So they look to me to do that for them which is kind of okay as an interim thing but really the ideal would be if somebody from the garden was wanting to take that on,

which would put me out of a job but at the same time we need these spaces to become autonomous and not to rely on outside help (Beth Interview, LCGP).

Significantly, Beth was uncomfortable placing a monetary value upon her caring practices. It was a pragmatic decision to balance the tension between caring for the self, with practical consideration of earning a living, and caring for the garden assemblage to which she had formed a deep emotional attachment:

Although it is a really difficult decision for me to make, I do charge them for my time [...] I definitely charge them less than the hours I do for them [...] because I just don't think it's feasible otherwise for them to pay someone to do these things (Beth Interview, LCGP).

As illustrated by Beth, the garden and its members require entanglements to continue, which are rarely factored into the funding bodies desire to create a self-sufficient grouping beyond the timeframe selected (in this case two years). While associations, networks and reciprocities were created during the formation period managed by Carr Gomm, additional time, money and support are still needed to sustain the garden. The relations of care described by Beth highlight both the strength and fragility of CUFGs and the integral role care, as both material and affective, plays in their formation and continuation. Notably, care is involved in the greeting of a resident visiting the garden for the first time, care is enacted when planting a tree, the watering of seeds, or pinching of shoots. It is also involved when project workers sustain multifaceted relationships with gardeners well beyond their employment contract.

Gardeners would relay to me on many occasions how the administrative tasks needed to maintain and sustain the garden were at times overwhelming and “*a lot of work*” (Judith, fieldnotes, LSG, 12/07/14). Although Beth continued to help the gardeners through the transition period, the steering group recognised that they would need to enrol other gardeners to share the responsibility of maintaining the garden in all its complexity, enabling them to become a fully autonomous group. Indeed, Amy (a new member) volunteered to assist Judith offering her graphic design skills to help promote the garden and communicate with members to which Judith was extremely receptive “*as she stated ‘there is was always lots to do’ and would appreciate the assistance*” (fieldnotes, LSG, 09/04/14). The development of LSG highlights how practices of care are certainly not the only relation enacted in the formation of

CUFGs, however, are crucial to the collective's flourishing, entangling both human and nonhuman others within the materiality of the garden (explored further in Chapter 6). Indeed, care is concomitant to life and therefore, while "not all relations can be defined as caring, none could subsist without care" (Puig de la Bellacasa 2012: 198).

It must be noted that many of the residents who live in the immediate proximity of the garden are not members and do not attend the organised social events, much to the committee's frustration. Nevertheless, while harvesting gooseberries adjacent to a curved wooden bench located at the boundary of the 'forest garden', Cath described how there were many instances of people "*dipping in and out, and described how the bench was constructed in just one afternoon, by a carpenter who attended the first AGM, however, rarely returned*" (fieldnotes, LSG, 09/07/14). I argue, through the sensuous labour of transforming wood into a bench, there was more than "a simple change in the form of matter" (Smith 2010 [1984]: 54), but also a simultaneous effect on the labourer and those who use this socionatural hybrid. Indeed, the bench was an integral part of 'caring for' people in the garden. In particular, a women's group would utilise the bench as a place for reflection, support and mutual care during their weekly visits (fieldnotes, LSG, 13/08/14). Indeed, after their initial visit, the group brought a gift of a decorated box full of speciality tea, with the wording "thank you Secret Garden" written on the lid, and inside "one act of kindness, changes worlds" in response to the endless cups of tea supplied during their time at the garden (fieldnotes, LSG, 20/08/14; see Figure 5.13). The bench was also a favoured place to sit for many gardeners and fostered an "intense kind of solitude" (Alexander *et al.* 1977: 817) where people and various lively others could "sit alone, undisturbed, near growing things" (Alexander *et al.* 1977: 816). Therefore, I posit the creation of the bench can be interpreted as an act of care, a gift "beyond exchange" without expecting anything in return (Skeggs 2014: 13).



(Figure 5.13: A gift of speciality tea)

The inclusive ethos that Carr Gomm promoted in relation to garden membership resonated with many local residents who felt that it was important to create a space which embraced difference and diversity, as Richard states:

[...] it's a way for people to integrate, well at least for the people here, and it's a safe place to come which is the whole ethos of the place, I thought that was great, we are all equal, we are all here to benefit others (Richard Interview, LSG).

When reflecting upon Carr Gomm's involvement in the first two years of the garden's formation, members were generally positive towards their contribution. While Cath stated that they were “*extraordinarily supportive*” (Cath Interview, LSG), she perceived the withdrawal of Carr Gomm employed support workers as an attempt to relocate responsibility for social welfare away from professional organisations, locating care in the community. Indeed, Cath stated that “*they didn't say this at the time of course, this was eased in subliminally*” (Cath Interview, LSG). Significantly, Cath was uncomfortable with any thought of imposing or forcing caring relationships within the garden and preferred a more ‘organic’ manifestation of

informal caring relations between various others through the practices of diverse activities, conversations and gatherings where “these shared experiences are then used as part of the material through which the friendship is continued” (Bowlby 2011: 612).

5.3.6 Summary. Transitional Collective Urban Food Gardens: Organisational Structures, Top-Down Processes, and Funding Entanglements

The creation of LSG highlights how complex, multiple agendas of various actors coalesce with heterogeneous practices and funding streams to form CUFGs. The development of the garden is intimately entwined with the motivations of Carr Gomm, however, as Adam explains, the charity did not necessarily care about the development of a CUFG in and of itself, but as a model to deliver their community development service objectives. This expansion was in relation to a diversification strategy to keep them competitive in the context of the community care agenda in Scotland and the state’s retrenchment in the form of roll-back neoliberalism (Peck and Tickell 2002). As a top-down project, although participation was voluntary, the role of a Development Worker was crucial in providing the necessary support for those who required such assistance, however, when I enquired whether the people Carr Gomm support have continued to use the space once they had ‘stepped back’ Adam explained, “*a couple of people have individual raised beds so it will feature as part of their support plan, that is something they do, and so their support staff will try and encourage them to keep up with the activities that they say they are interested in*” (Adam Interview). However, during my time volunteering at the garden I was aware of only one person who had continued to actively engage with the project.

In reality, Carr Gomm acted as a conduit bringing together local residents that already expressed interest in gardening and concern in relation to shaping their immediate environment (Barnes 2012). As a result of Beth’s nurturance, a small group of predominately retired, passionate local residents emerged as key figures in the garden’s transformation into an autonomous self-sustaining project. Through their everyday participation in workshops, learning exchanges, and eventually taking on roles of responsibility within the committee, these gardeners gained confidence. Indeed, listening and engaging with others, “enhancing one’s own sense of self-worth, and crafting new social shells” enabled participants to care for the CUFG, as a “means to take care of each other” (Till 2012: 11). As a collective of people

who had previously never met, the garden has led them to develop meaningful social relationships, and ultimately, friendships based on ‘informal’ care (Bowlby 2011).

The development of LSG relied upon substantial financial resources, implicating the project in an intricate matrix of funding (see Table 5.1). While some gardeners articulated their perplexity at the amount of funding allocated to the project (Cath, fieldnotes, LSG, 09/07/14), professional employees were rather blasé, with Adam remarking, “*it was absolutely fascinating in what can be achieved with not a lot of money*” (Adam Interview). Significantly, the reliance upon diverse funding streams meant that Beth needed to demonstrate quantifiable outcomes and ‘satisfy’ the funders who supplied the capital:

because of our funding, we had certain things that we were going to measure [...] There were things like people feeling happier, and more confident, and having learnt things, and healthier [...] if more people were composting, well it ended up being this really weird questionnaire that we had to ask people (Beth Interview, LCGP).

Thus, the garden became ‘framed’ in particular ways that emphasised certain aspects of the project adapting to, and translating, the terms of the funding bodies into ‘outputs’, highlighting how modes of practice and priorities are outlined by funders (rather than those in need) and accountability is unilateral (or one-sided), determined by funders (Smith 2007). This process embeds particular materialities, temporalities and relations into the garden (Hinchliffe *et al.* 2007), which are then circulated via evaluation forms and media coverage, such as newspaper articles. Notably, however, the intangible aspects of the garden are suppressed, such as the less ‘visible’ care practices and relations that sustain these entanglements (as discussed at length in Chapter 6).

For Adam, the complexities of actually developing and constructing the garden indicated that Carr Gomm in the future would possibly limit their involvement with community food growing to facilitating workshops with marginalised people in already established gardens, as he explains:

It’s all about us trying to think about what our place is in community growing, because the bit that was most successful was the participation of others in the space, so a model for the future could be [...] maybe we could do some facilitating in your space because

that's our expertise and separate out the not having to make the beds and do all shenanigans (Adam Interview).

For Carr Gomm, micro-managing and orchestrating the project was, in this instance, too arduous and time-consuming. For the CEC, who provided a significant proportion of the garden's capital investment, a similar urban gardening project would not be replicated in the near future due to implemented austerity measures within the local governance context. The production of socionature is a deeply political process, where competing visions and agendas collide, highlighted by the tensions discussed regarding the 'participatory design' of the garden. Furthermore, the process of assembling the garden, gaining interest and enrolling participants and eventually forming a steering group, focused upon forging relations between the gardeners and the space, and in the process transforming an underused, polluted grassed area into a productive food growing garden. The development of LSG illuminates the multifaceted ecologies of care that can become entangled in CUFG projects where care "is part of many different kinds of social relationship" (Bowlby 2011: 606) creating a complex relationality of formalised and informal, paid and unpaid care. Having examined the complex motivations, relations and diverse agendas that coalesced to form LSG, I now explore the development of a grassroots urban food gardening collective, which established several growing spaces in a residential area with no funding or paid employees.

5.4 GRANTON COMMUNITY GARDENS

5.4.1 “Start from Where You Are”: Grassroots Activism and Urban Food Growing

Historically, North Edinburgh was predominantly farmland until the development of Granton Harbour in the 1830s, which became the catalyst for future industry including shipbuilding, fishing, and timber yards. As a consequence of slum clearances within the city centre and a rising urban population, by 1940, Edinburgh Corporation had constructed 4,000 houses for rent in the area. The construction of large-scale residential developments took place in Granton, Wardieburn, and Royston Mains between 1931-1935 (NESHG [North Edinburgh Social History Group] 2011: 6). However, across North Edinburgh, local residents formed Tenant’s Associations, in response to concerns over the quality of the housing, particularly damp and its subsequent detrimental impact upon health. Through subsequent decades a distinctly working-class, grassroots activism emerged in relation to diverse social injustices including racism, the implementation of the ‘poll tax’ in 1989 (an informal term for the Community Charge) and the continual disinvestment of local services in the area (NESHG 2011). Throughout the 1970s a substantial number of local people continued to be employed in the various industries, where trade union activity was high and many of the larger factories were known “as a hotbed of political activism” (NESHG 2011: 20). North Edinburgh has since experienced a process of deindustrialisation, however, the area continues to be a site of fervent community activism. As Madgin and Rodger have argued, the persistent myth of Edinburgh as a non-industrial city was a consequence of the “relative invisibility of deindustrialization in Edinburgh” where the “socio-economic problems of industrial decline were masked both by the continued creation of jobs in the professional and service sectors, and by unemployment that was spatially constrained to particular localities” (2013: 526).

As Alex Wood⁵⁹ states in the Foreword of *Never Give Up* (NESHG 2011), a document tracing the historical trajectory of community activism in North Edinburgh (over seventy years) and its struggle for social justice: “Edinburgh is a truly divided city. It was then and it is now. That division was not accidental but the deliberate result of the actions of the building companies and the City’s planners” (2011: 3). Indeed, Edinburgh has been described as a “dual city” where persistent “areas of multiple deprivation exist” (CEC 2014: 2). While drawing attention to the inequalities that permeate Edinburgh, which is segregated by class,

⁵⁹ Former Labour leader of the CEC, current member of the Scottish National Party, and retired head-teacher.

the dual city metaphor is perhaps too simplistic, obfuscating the shifting, multiple, intersecting, porous spaces of poverty that are historically and geographically produced through socio-economic processes. Residents of peripheral areas of the city have continued to vigorously campaign for basic facilities and services which statutory bodies have failed to provide, as John, a community activist and member of the North Edinburgh Fights Back campaign explains, “*there is a history in this area that most things had to be struggled for*” (John Interview), undertaken “usually against entrenched privilege or uncaring bureaucracy” (Wood 2011: 3).

Significantly, the implementation of the Neighbourhood Partnership model of community engagement (based on consensus politics) was seen as an arrangement that actually contributed to a relative decline in grassroots activism in the area, which resulted in community activists experiencing a loss of autonomy, political resistance, and independence (McCabe 2011). Thus, signifying what has been termed the postpolitical condition, where the political arena is “evacuated of radical dissent, critique and fundamental conflict” (Swyngedouw 2009: 608). Consequently, the ‘partnership’ agenda divided opinion between activists, where particular people felt required to ‘work within’ this new system and others who argued that their participation would co-opt their energy, depoliticise activity, and legitimise “a process that was working against the community’s interests” (McCabe 2011: 144). In this sense, the “parameters of democratic governing itself are being shifted, announcing new forms of governmentality” (Swyngedouw 2009: 608). The North Edinburgh Fights Back campaign emerged from the publication of *Never Give Up* (NESHG 2011) and as John explains, it has sought to reinvigorate increasingly disheartened activists:

We launched North Edinburgh Fights Back [...] to give all the activists who were all tired and demoralised and who were in organisations, where they were toiling to enthuse people, who wanted change, to come together, so if you were a Tenants Association or a community group or whatever [...] our job is to strengthen what’s there and create what isn’t (John Interview).

Never Give Up (NESHG 2011) sought to ‘give voice’ and render ‘visible’ the activists’ experiences and indicated “the ways that past forms of injustice constitute the present and imagined possible future” (Till 2012: 8). The power of collective action has, therefore, a long

history in North Edinburgh and in recent years has developed around particular socioecological issues as Ross, a CEC Partnership Development Officer explains:

there is a resurgence of activity here but I think historically this has always been an area of high level community activism, but previously it was quite organised activism, a lot of Tenants' Association activities and so on, there is less of that now, so you do have some formalised activity around Community Councils⁶⁰, there are still some Tenants' Associations but there is far more specific interest organisations setting up, like people interested in food, people interested in gardening, there is quite a lot of activity going on (Ross Interview).

GCG are one such example of grassroots activism orientated around urban food production. Within Granton there is an abundance of underused grassed 'liminal' spaces, devoid of any clearly demarcated function, located at the end of each residential street, acting as spatial cracks in the neighbourhood. There are approximately thirty-eight in total within a five-minute walk of each other in the residential Wardieburn area, which equates to almost a hectare of land. These sites are used predominantly for dog fouling and (haphazardly) maintained by the CEC who are responsible for their upkeep (fieldnotes, GCG, 25/02/14). Numerous grassed corner plots have progressively been paved over with concrete slabs, converting them into unsightly, impermeable, grey spaces (see Figure 5.14). In design terms, a patchwork of turfed and paved 'leftover' spaces permeate the area and reflects the cultural and social marginalisation of the residents of Granton as an area of multiple deprivation (SG 2012). However, the presence of underutilised grassed plots provided local residents with a plethora of accessible spaces that could be transformed into productive urban food growing areas, a form of un-realised urban commons, affording local people the opportunity to reshape their neighbourhood. Specifically, it enabled the revaluing and redefining of unused urban land for collective food growing purposes, to "contribute to a positive view of public space as a source of possibilities of care" (Barnes 2012: 138).

⁶⁰ Community Councils "represent the views of local people on Neighbourhood Partnerships and convey these views to the Council and other organisations" (see http://www.edinburgh.gov.uk/info/20133/community_planning/730/community_councils).



(Figure 5.14: Paved over corner plot in the residential area of Granton)

The garden spaces evolved solely through grassroots collective action emerging through a process of dialogue and collaboration between self-organised residents by spatially enacting their right to transform and control the function of local space. Joe, a local resident of nearly ten years, who had previously trained as a geography teacher and is now a youth worker, was one of the growers I spent most of my time gardening with. An enthusiastic gardener, he has ambitions to “*one day live in the country and have a big garden or live on a farm*”, however, until this was possible, he thought, “*you might as well start from where you are*” (Joe Interview, GCG). For Joe, following Gibson-Graham’s orientation of “start where you are” entails recognising “not only the potential fruitfulness of any particular location and moment, but the requirement to treat obstacles and local deficiencies as resources rather than (merely) as barriers” (2006: 194). In this sense, under-utilised land, time between employment, and a long history of community activism in North Edinburgh, provided the opportunity for “ethical and political engagement” (Gibson-Graham 2006: 195) to experiment, explore, connect and collaborate to develop a CUFG.

Joe's presence was a constant within the gardens and there were numerous occasions when he provided me with a detailed history of their development. He describes how he became involved:

So I grew a few tatties⁶¹ out the front of my block [Site C], and loads of people stopped by to tell me it wouldn't work as it happens, I didn't have any tools either, so I borrowed all the tools off neighbours, so through doing that I kind of realised I got to know more neighbours in a few days than I had in like a few years of living there, because everyone kind of kept themselves to themselves, so then I started to think about the wee corner at the end of the street at the bottom of Wardieburn Road [Site A] and chatted to a few neighbours about starting a community garden, and I met a friendly community worker who suggested I did a survey of all the blocks around as a way of [pause] then I would have something to take to the council to ask for permission, thought I might as well ask for permission in case they said yes (Joe Interview, GCG).

Joe's main motivation for helping to establish the CUFG was his personal interest in food growing and his desire to forge relationships between residents. While there were many local residents who believed that the growing space would be vandalised, encouraged by the support he received while informally cultivating the land immediately adjacent to his flat, Joe decided to obtain permission from the CEC, who owned the land, to develop further food growing spaces within the area. Consequently, Joe undertook a verbal consultation with all households in the vicinity of the proposed garden, as he explained, *"I had quite a lot of time on my hands so I did it really properly, and I could go at different times of the day and catch people in the street and I made sure I spoke to everybody"* (Joe Interview, GCG). While residents supported the idea of community food growing spaces, they also expressed their reservations about potential vandalism:

Most people said it's a great idea but it won't work around here because the kids will trash it, people will steal it all, like it's not worth putting in the effort, but I thought well it is probably worth doing anyway even if it does get trashed, I am prepared to take the hit. And also from doing youth work, I kind of had a fairly clear idea of... if it did get trashed who would be the specific people who would be trashing it, so I kind of made a point of chatting to them about it, getting them on side a wee bit (Joe Interview, GCG).

⁶¹ Defined in *The Chambers Dictionary* (2011: 1596) as a Scots form of potato.

To increase awareness, he distributed leaflets advertising a community gardening day to transform a neglected grassed site into a productive food growing garden for everyone to share. Thirty people of various ages attended the event, facilitating community engagement between neighbours, providing an opportunity for people to interact and collaborate:

Basically that day was brilliant, it was teenagers and old people, kids, and next-door neighbours who had never really had a conversation were chatting to each other (Joe Interview, GCG).

For Joe, the event was particularly important as it brought together many previously unacquainted residents. Furthermore, the presence of people of all age ranges and backgrounds enabled a multigenerational, multicultural exchange of ideas, energy and enthusiasm. The process of forming a CUFG, therefore, was a way to provoke conversations and initiate relationships between residents.

No formal opposition was articulated towards developing the gardens from residents and subsequently, a 'Letter of Comfort' was issued by the CEC, as Joe explains "*which is basically a letter saying you have got the nod, you are allowed to do it, but you've got no long-term legal right to it or anything, but you can show the neighbours that you have spoken to the council and they are okay with it*" (Joe Interview, GCG). The letter outlined that gardeners had no legal right to the land, however, was ambiguous enough to allow the development of additional food growing sites within the residential estate. It was written "*just saying anywhere in Wardieburn Road, so we have taken that literally*" (Joe Interview, GCG). In addition to the Letter of Comfort, the gardeners have also received an email from the Forth Neighbourhood Manager of the area supporting the development of CUFGs. There is, however, no formal legal 'permission' approved for the gardens by the CEC, thus leaving the gardeners in a relatively precarious position for longer-term sustainability. Nevertheless, gardeners were keen to stress that gaining formalised legal consent was not a main priority for the group:

We don't have a lease, we are sort of in the official system, like I was asked probably about a year ago about the details of the plots we were using and the ones we wanted to

use, which I sent off, just to kind of jump through the hoops but yeah they [the CEC] have never come back to us (Joe Interview, GCG).

For the gardeners, their ‘security’ originates from popular support and backing from various councillors, other projects located in Edinburgh, and increasingly positive local and social media coverage. Therefore, GCG believe that their ‘visibility’, along with the connections they have nurtured with other garden projects, provides a sense of relative security from being displaced. Despite general support for establishing the gardens, enrolling local residents to participate was not a straightforward process. Overcoming feelings of disempowerment and internalised stigma in the area, resulted in many of the residents expressing initial caution towards the project:

I think people were just interested in something positive happening, because the area used to be a lot more, well I don’t know whether it’s just my experience of it, but lots of people say it used to be a lot rougher, like five years ago, and there where loads of smashed windows, burned out cars more often, like stuff did get broken a lot more, so I think people were kind of cautious but interested, but not willing to put in too much effort, well some people just wanted to watch and see what would happen, and then later got involved when they saw it was fine, some people just got it straight away and were like aye lets do this, it’s a great idea! (Joe Interview, GCG).

The CUFGs evolved through the passion of individuals, developing organically, adapting to the rhythms of the various residents. The group began with a few raised beds and “*for a couple of years that was just how it was, very informal, nothing really organised [...] most of the time it was quite random*” (Joe Interview, GCG). Interactions were fluid and the maintenance of the garden spaces was ad hoc. Between 2010-12, the gardeners tended the two established CUFGs situated on Wardieburn Road, with no funding. Indeed, the gardens were developed and maintained utilising networks of reciprocity and exchange of tools, equipment and seeds with local residents and other community gardens.

Notably, the only monetary investment consisted of a £10 donation from an elderly local female resident and an additional 32p that had been dug up while turning the soil, countering the “fatal error made by many activists” that presume “that one needs money to organize” (Smith 2007: 11). The absence of funding afforded enormous freedom to design, create and

develop the gardens in the direction the group wanted, without any obligation to satisfy funder's stipulations. Significantly, it meant that the gardeners did not have to continually quantify and qualify the group's actions as 'demarcated outcomes', as experienced by LSG in the first two years of their development. The sustenance of the gardens relied solely upon grassroots voluntary activities, which enabled the gardens to be developed at the pace of the local residents as capacity was built from within the group. However, this is not to romanticise the strain that can be placed upon a small number of skilled gardeners who ensure the survival of the CUEGs. Indeed, volunteer participation in the gardens has fluctuated over time, with key individuals being severely missed when they move to another area (Joe, fieldnotes, GCG, 11/03/14).

5.4.2 Consolidation of the Group: Formalisation and Funding Dilemmas

In spring 2012, the local residents formed a community group, GCG, and adopted a constitution. A committee was established consisting of twelve local people who meet each month to discuss funding, planting, and future projects. The garden membership is diverse in terms of age and ethnicity reflecting the broader composition of Granton. Two key members of the committee, Sonia, originally from Bangladesh, and Grace, originally from Kenya, were regular attendees of the garden workdays. For Grace, GCG was a vehicle to foster a sense of community, ensuring "*people are well fed and can support each other*" (Grace, fieldnotes, GCG, 29/07/14). The organisational structure of the group is informal and fluid, however, there is one key person assigned to each garden that allocates tasks during workdays, if required, and holds a 'plan' of which seasonal activities need to be undertaken. This 'horizontal leadership' model embraces a collective and distributed notion of management where "*responsibility is shared*" (Sonia, fieldnotes, GCG, 01/07/14). Indeed, Lilley and her family, originally from Nepal, hold a fluid 'plan' and tend to a garden (Site B), developed in February 2014, following the success of Site A. I first met Al, a local resident and a member of the Nepalese community at the end of February when they were in the process of developing the garden. The ground had been prepared and they had just begun to decide on how best to use the large expanse of land and what to plant. Al compared the visibility and openness of the new garden space with that of his backgreen, which had limited access (fieldnotes, GCG, 25/02/14). The garden provides additional space to plant culturally appropriate food in abundance including an array of brassicas such as mustard greens, and a large proportion of potatoes (fieldnotes, GCG, 29/07/14).

Membership of the garden is free, thus participation is decommodified. Indeed, several new members joined during my fieldwork. Robbie, a long-term resident who wanted to improve his health and wellbeing became a key member of GCG over the subsequent months. For Robbie, the convenience of having CUFGs located in close proximity to where he lived provided an opportunity to meet other local residents and grow and consume organic produce (fieldnotes, GCG, 22/07/14). Furthermore, James, a long-term resident for over thirty years, had recently retired and expressed a desire to spend more time outdoors and undertake physical activity (fieldnotes, GCG, 19/08/14). Moreover, Judy and Dennis and their grandchildren, wanted to improve their knowledge of food growing. Due to the fluid nature of garden membership, passionate gardeners were keen to enrol as many local residents as possible.

The gardens are locked (with a four-digit code), solely to deter dog walkers. Indeed, this was the only conflict the gardeners discussed in relation to the use of space, however, “*by being really friendly and not being confrontational and explaining what the group were trying to do, people have accepted it*” (Joe, fieldnotes, GCG, 13/05/14). Notably, the code is shared with all gardeners, residents and visitors and thus, there is ‘semi-public’ access at all times. Having cultivated the gardens for two years with no funding (apart from the £10.32 donation), once constituted, the gardeners then made the decision to apply for small-scale grants. In 2012, the CEC (in conjunction with NHS Lothian) announced a *Growing Communities for Health Grants Scheme* administrated through the ELGT, which was established to provide small grants to support community gardening projects, particularly those located in areas of multiple deprivation. The grant scheme complemented the ELGT appointment of a dedicated Community Gardening Development Officer, Ryan, whose main role is to assist developing and supporting collective gardening projects which seek to tackle health and social inequalities (Ryan Interview). GCG received their first grant totalling £750 from ELGT to hire equipment including a turf cutter and to purchase tools and seeds. Subsequently, they received small amounts of funding from a variety of streams including the Awards for All Scotland: Big Lottery Fund, to finance a ‘grow your own’ workshop for local residents which attracted new members to the project; the Voluntary Action Fund to run volunteer capacity training; and the CSGN and the Forth Neighbourhood Partnership, to purchase various equipment including a secure shed and tools and meet community event costs. However, funding was a particularly contentious issue for the gardeners, who stressed that the

uncertainty, variability and fleeting nature of funding was not constructive to the stability of the garden and its long-term sustainability, as Joe describes:

I sort of have this tension between whether our group should use funding while we've got it but make sure we are never dependent on it, so if all our funding was cut it wouldn't really make much difference, which is one way of being sustainable, or whether to do stuff that is a bit more organised but is a bit more dependent on funding, I feel we are in a sort of middle, it could go either way at this point (Joe Interview, GCG).

Therefore, while they were comfortable applying for and receiving small-scale funds the pressure of fulfilling funder's objectives while the possibility of simultaneously changing the dynamic of the garden was a major concern. As Joe explains:

We were in the running for Climate Challenge Funding, but [...] we decided not to do it because they might well of give us 150 grand but it would have had to be spent in one year, so we could of created jobs and employed people and all that, but at the end of that year, we would be stuck at either having to somehow raise the same amount of money to keep going or all those people's jobs ending and I think it would just totally distort our group and what we are trying to do [...] it would be hard for the group to survive that I think (Joe Interview, GCG).

Gardeners ultimately did not want to compromise the grassroots ethos of the CUFGs. Moreover, while large-scale funding would enable the creation of (time-limited) paid positions, this process was envisaged as distorting the 'horizontal' configuration of the gardening group, which is based upon voluntary grassroots collective action. Consequently, the gardeners were apprehensive of introducing a 'professionalisation' process, thus creating divisions between employed organisers and volunteer participants. Furthermore, their critical stance towards the funding complex stems from the fact that it explicitly engenders a competitive relation to the 'other' – whether groups, gardens, or collectives. Indeed, when I asked Joe what he thought the benefits of CUFGs were, he stated “*I have got to be careful I don't start thinking in funding application language, because it can warp your head if you start*” (Joe Interview, GCG), which invariably entails being forced to frame everything as a 'success', which not only inhibits collaborative dialogue between groups regarding

accomplishments and failures, but also impedes flexibility and fluidity “which is what a movement for social transformation really requires” (Smith 2007: 10). However, the group did decide to seek funding to enable Joe to be paid a nominal amount to undertake administrative tasks “*a couple of hours a week*” that no one else wanted to do (Joe Interview, GCG). Therefore, Joe emerged as key agent in sustaining the everyday continuance of the CUFGs.

Funding was not the only concern for the gardening collective. Indeed, as the number of garden spaces expanded, the project became more ‘real’. Thus, the CUFGs are “an ephemeral and precarious outcome, whose achievement – both symbolically and materially – is constructed and negotiated through the interaction of different actors” (Hitchings 2003: 102). As Joe explains, the maintenance of the gardens relies on an entanglement of various human and nonhuman relationships, and consequently, there is a fragility to the CUFGs, “*sometimes it all feels quite fragile, like it would take one major falling out in the group or something major to get trashed or whatever, and it would like massively knock the whole thing*” (Joe Interview, GCG). There is an inherent delicacy to the gardens where maintaining relations is a complex process. However, as GCG have become more organised and ‘visible’ they have now been incorporated within the broader community food network in Edinburgh. For example, they are now included within the Pilton Community Health Project (PCHP)⁶² Map, which as Sara, a Food Development Worker explains, is a tool based on “*networking and partnership*” (Sara Interview) that documents food related activity in North Edinburgh. As Sara describes:

we are trying to put them all together, to publicise, so there is a Gardeners’ Café, there’s a family gardening session, and activities in North Edinburgh Arts, we have organised a picnic [...] family barbeques, so anything related to food in terms of lunch clubs, community cafes, gardens is on our food map (Sara Interview).

As Sara explains, within North Edinburgh, there is a concerted effort to form an interconnected web of projects and activities around the production and consumption of healthy food.

⁶² Pilton Community Health Project was initiated in 1984 making it the oldest community health project in Scotland. It works across North Edinburgh, including Granton, Muirhouse, and Drylaw and uses a community development approach to tackle ill health.

5.4.3 Encounters with the (Local) Authority: Tensions, Inflexibility and Ambivalence

As previously explained, GCG have a Letter of Comfort, which acts as an assurance that they can develop and maintain CUFGs in the Wardieburn area of Granton. Significantly, the letter creates a morally binding assurance, however, does not provide a legal right to the land. The gardeners therefore do not have a lease or pay any form of rent to the CEC. Notably, GCG together with Pilton Community Garden (PCG), were enrolled in a contestation with the CEC, when they sought to charge local community groups in North Edinburgh for occupying ‘their’ land, which resulted in a submission of a deputation based on two main points:

- Reinstating ‘Concessionary Lets’⁶³ for community groups wishing to grow food on council land, particularly in less affluent areas high on the index of multiple deprivation, and;
- Rental valuation of council land used for urban food growing set at a fair commercial level, ‘fit for the purpose of food growing’, for example, 1p per m² on low quality amenity grassland.

GCG strongly objected to any form of monetary exchange between themselves and the CEC in order for them to cultivate pockets of neglected greenspace:

Our story about our interactions with the council was long and a bit tedious [...] I have had to spend quite a lot of hours and days on sort of trying to assert our groups right to existence or whatever, but it's just because for the council we are a total anomaly, we don't fit in with their way of doing things [...] so we have just worked off the Letter of Comfort, until some other Council Officer's tried to charge us rent which our group kicked off about because it was like, we already pay for this to be maintained, it's maintained really badly, so we are doing it ourselves, there is no way we are paying extra for the privilege of cleaning up our own street [...] as long as they leave us alone, we will leave them alone, and that's kind of the deal (Joe Interview, GCG).

⁶³ Council property let to the third sector, where a reduced rent is involved. On 29th March 2011, the Finance and Resources Committee agreed that no new concessionary lets should be granted without a sponsoring Council Department (see http://www.edinburgh.gov.uk/downloads/id/3394/presentation_23_june_2014.pdf).

The deputation was a strategy to resist the commodification of land in which the CEC sought to extract capital ‘value’ from gardening groups in areas of multiple deprivation. As Mike explains, his role at CLAS involves providing impartial advice about community use of land to both civic groups and landowners, where he was approached by Edith from PCG for guidance in relation to the contested dynamic of Concessionary Lets, as he states:

[T]he council are not being realistic because they are trying to apply a notional rental value to sites, for which there is no market, the concept for market rent does depend on there being a market rent for the property [...] with land like Edith’s and Joe’s, particularly Joe’s areas, the quadrant on the blocks, there simply is no market for those bits of ground, so it’s artificial to say there is a rental for them [...] The council seem to be quite bad at getting any sense of proportionality and keeping things simple for small-scale and small value things (Mike Interview).

As Mike states, however, the outcome of the deputation has been ambiguous:

Where that stands at the moment, is that the Finance and Resource Committee which the deputation went to, agreed to a temporary measure to let exceptions be made for groups like GCG and PCG [...] so potentially we could look at other areas of the city which are in the same boat that could benefit from that as well. More generally, that temporary decision was taken pending an overall review of the Concessionary Lets policy, and although I asked the council to keep me in the picture of that, they have not really done so (Mike Interview).

There was an explicit disjuncture between the aspirations and visions of grassroots gardeners and planners at the CEC in relation to the importance of allocating space for food growing. Indeed, Philippa, a CEC Planner stated, “*as there are so many requirements of us as planners already, nobody has the luxury of having the time to really think long-term, where do we want to be in fifty years’ time in terms of food production?*” (Philippa Interview). Furthermore, the occupation of land owned by the CEC for urban food growing purposes by self-organising groups was an area of ambiguity for local authority employees. For example, in contrast to allotment sites where the CEC have a statutory duty to provide land for cultivators (the CEC

manages 1333 allotment plots, spread over 26 sites)⁶⁴, there is no such equivalent procedure for community gardens, as Sean, CEC Allotment Officer explains:

The new thing on the horizon is community gardens, which has popped up in probably the past five, six years [...] they are used for food growing, but they are separate, because allotments are bound by certain laws, whereas with community gardens, well we don't quite know what to do with them yet. I mean I know our Estates Team, they don't want to class community gardens as allotments because of that, yeah? They would rather keep them community gardens [...] I think what happened, basically, everybody who wants to do a community garden will have to come through the Estates section because, they have made it very clear they don't want to call it allotments, because it's going to get stuck in their laws, so it will be like an agreement rather than a lease (Sean Interview).

Furthermore, there is no transparent system for determining how much a community group should pay to utilise or lease land for urban food growing purposes, as Lauren, Estates Surveyor for the CEC states, “*we don't have a specific strategy right now [...] because it's relatively new*”. At present, rent is calculated by taking the amenity value of the land at market value and subtracting the (theoretical) maintenance cost for the CEC to cut the grass and keep to a standard, “*so then you can take your discounted valuation to make it more reasonable*” (Lauren Interview). However, as Lauren explains community groups have contested this procedure:

[...] they didn't feel they should be paying anything for this, that it should be free for the community to use, so I think at the moment, things are bit in limbo and we are being told look at it on a case-by-case basis and see. So some of the rents we have agreed will probably be waived, all be it they were quite nominal anyway, we are talking about £100, £150 per annum for land that would be used by quite a number of people (Lauren Interview).

⁶⁴ There is a burgeoning demand for allotment plots in Edinburgh, rising from 417 in 1998 to 2367 in 2010 (CEC 2010) to over 2500 in summer 2014, with a waiting time of two to nine years, depending on the area of the city. Significantly, however, due to such over-subscription and length of waiting time, it is thought that latent demand is considerably higher (Sean Interview).

While Lauren characterises £100 or £150 per annum as a “*nominal*” amount, Edith, a member of PCG, a frequent visitor to GCG and the driving force behind the deputation, articulated that it was actually a substantial amount of money for grassroots community groups with minimal funding and represented their “*full budget for the year*” (fieldnotes, PCG, 16/05/14). When I asked Ross, whether the CEC supports the development of community garden spaces on land they owned, he replied:

By negotiation, certainly more than it was before. People are already doing it [guerrilla gardening]. I suppose it would depend, my colleagues are aware it's going on [...] say it's taking a patch of land that is totally overgrown and then now it's under control and somebody is taking responsibility for just cutting the grass and then caring about an area that they want to grow plants or food, then I don't think that's a big issue (Ross Interview).

While Ross was aware of what he characterised as ‘guerrilla gardening’ (i.e. no formal permission from the local state) was taking place in North Edinburgh, he believed that the CEC were amenable to grassroots gardening activities and thus could be enacted in a legal manner, however, qualified this by stating that liability issues were a major concern:

I think the council and the team in here are approachable, so I think most of it can be accommodated by discussion, negotiation and agreement and stop short of people having to sign up [...] one of the things that stops a lot going is insurance issues, because if the council know formally about it, then if somebody is hurt while they are doing it and it's on council land, then the council have liability [...] Within reason there is a willingness, within this office anyway [...] we have a problem maintaining all the land we have got, if people are prepared to do all this (Ross Interview).

There is a notable tension between the promotion and recognition of the ‘value’ of community gardens within both national (SG 2009) and local policy documents and initiatives in Edinburgh (see Witheridge and Morris 2016), and a lack of clear guidelines and procedures for local government to account for (or support) their development. Significantly, from my interviews with local authority employees, it became clear that community gardens were frequently ‘tolerated’ or ‘overlooked’ if residents transformed neglected, unsightly CEC owned land, beautifying them and consequently, taking over responsibility for their

maintenance and thus relinquishing the CEC's duty of care and (theoretically) reduce their costs. Indeed, local authority employees emphasised the 'proactive' role of the 'community' in taking responsibility for improving the appearance of the neighbourhood as a significant reason the local state should support CUFG development in the area, however, satisfying particular aesthetic specifications of urban natures, where they should be well maintained (Ross Interview).

In this instance, CUFGs were perceived as 'beautifying' projects where visual attractiveness was privileged over other socioecological objectives such as food production, which enables gardeners to relate to the nonhuman world in a direct, embodied way by creating and consuming particular socionatures (Degen *et al.* 2009). In this sense, the role of urban food growing as a matter of social reproduction is neglected. Furthermore, gardeners found it rather ironic that the aesthetic characteristics of CUFGs provoked feelings of unease for local authority employees, given that throughout the city, gardens tended to emerge on land that was either neglected or poorly maintained in the first instance. The concern over the idiosyncratic and spontaneous aesthetics of CUFGs reflects the dislocation between spaces of food production and the highly designed landscapes of capitalist urbanisation such as municipal parks (for example, Princes Street Gardens), which exemplifies a regularised form of urban nature, with intensified control of weeds, landscape design, and greater degrees of control in terms of activities and use of space. Furthermore, the very 'visible' location of community gardens in the interstices or cracks of the urban fabric, in addition to their frequently 'spontaneous' emergence and vernacular appearance (see Figure 5.15), contrast markedly against the ecological imagination of conventional elements of urban nature such as municipal parks embroiled in the "organizational logic of modernity" (Gandy 2013: 1311) predicated on order and a separation of 'nature' and 'society' within modernist urban planning.



(**Figure 5.15:** Communal food growing spaces emerging within the fissures of the urban fabric)

The enrolment of local residents in the maintenance of CEC land was emphasised as a positive outcome by local authority employees (Ross Interview). This aligns with Rosol's observations that the voluntary maintenance of public greenspaces is "part of a distinct political rationality which aims at passing on state responsibilities to civil society" (2012: 240). In the context of state austerity and fiscal retrenchment, local authorities are progressively reducing or withdrawing socioecological services, in which responsibility is shifted onto non-state actors (Swyngedouw 2005; Rosol 2010, 2012). Consequently, collective grassroots activism can become co-opted within the neoliberal framework, whereby citizens are utilised to readdress public cutbacks to socio-environmental service provision. Indeed, Jessop argues that a new political ethos has emerged which "tends to promote 'community' (or a plurality of self-organizing communities) as a flanking, compensatory mechanism for the inadequacies of the market mechanism" (2002: 454-455). In this sense, the actions of the autonomously organised GCG can be considered a form of 'self-help' governmentality in which civic engagement and responsibility for making sure people are adequately fed and greenspace is maintained, falls upon the 'community', following

neoliberal restructuring. However, this is a complex and contradictory process: while the gardens evidently serve a (fragmented) neoliberal agenda, following the downloading of responsibility onto the ‘community’, they simultaneously continue to foster an emancipatory agenda based upon the collective transformation of space in creative and productive ways.

5.4.4 *From Seed to Soup*

In 2014, the group of local residents were tending to four organic communally maintained CUFGs (as well as food growing spaces located in the grounds of the community centre). These creative and ‘autonomous’ spaces are a practice-based critique of mainstream spatial arrangements that assume food growing is not an urban activity. Notably, the food grown at the CUFGs is not only consumed by local residents on a regular basis but also used for community meals, events and celebrations (Sonia, fieldnotes, GCG, 01/07/14), which are extremely popular and attract a large number of residents from the wider community (discussed in section 6.4.2). The group did not characterise urban food production in general as a panacea to eradicate the complex inequalities embedded within the food system, however, in the context of rising food prices and welfare cuts they can be seen as a grassroots component to address community food insecurity. Taking the situated, but always relational experience of food insecurity, GCG envisage “food systems that are decentralised, environmentally-sound over a long-time frame, supportive of collective rather than only individual needs, effective in assuring equitable food access, and created by democratic decision-making” (Anderson and Cook 1999: 141). In this sense, urban gardening is a politically informed praxis, based on re-localisation and an ethic of care in relation to collective self-reliance and support.

The Gardeners’ Café was established as a pilot project in spring 2014, where funding was secured for Polly, a member of the CUFG, to prepare meals, utilising produce from the collectively cultivated gardens, items from FareShare⁶⁵, and additional food donations using the kitchen facilities of the Royston Wardieburn Community Centre. The current community centre⁶⁶, an ambitious £3.75 million project was opened in 2012, following a ten-year

⁶⁵ A charity that redirects and redistributes food that would otherwise be considered ‘waste’ to community groups and partner charities who utilise and transform it into meals for vulnerable people.

⁶⁶ The centre includes a computer suite, sports hall, shower facilities, a café, arts and crafts, games and training rooms, and five meeting areas.

campaign by local activists to replace the old deteriorating building, which was built in 1965, itself a result of sustained activism. For John, in order to care in the present and the future, past (and continuing) injustices must not be forgotten, as he explains:

some people are sitting in the community centre and they don't know how that came about, they just assume that it was always there, but it was done by people doing something, we had nothing in this area, we had no community centres [...] these were all creations of people having to fight for the funds [...] they don't understand the struggle there was to create it (John Interview).

At the time of research, the café was open Monday 4.30-5.30pm and Tuesday 2.30-5.30pm and was publicised throughout the neighbourhood to attract as many people as possible (see Figure 5.16).



(Figure 5.16: Poster advertising the Gardeners' Café)

When I asked a local resident, who did not participate in urban food growing activities, what he thought of the gardens, while eating at the café, he stated:

Aye, it's grand, at first I thought it would get trashed, but I dinnae think there's been much bother, not that I see [...] all these tatties and things growin just down the way, makes ya think what ya can dae with all that land (Harry Interview).

The development of the Gardeners' Café could be understood as a direct response to the criticisms articulated by local community activists not directly involved with the project, who have questioned the scale and reach of tackling food insecurity beyond the garden membership. Although John was broadly supportive of the gardening group and its aims, he stated that the main issue was “*how do you get the produce to people beyond the immediate people who dug the garden, and at what volume and condition?*” (John Interview). Criticism of scale is pertinent in terms of tackling poverty on the systemic level, however, the group remain focused upon utilising the gardens as a vehicle to improve the local area and increasing access to fresh organic fruit, vegetables and herbs amongst participants and local residents. The gardeners are ultimately trying to create nourish-able spaces, where care is enacted in relation to the soil, plants, people, and wider ‘environment’ of the places they live and I argue, can be interpreted as a form of ordinary, everyday environmentalism (Milbourne 2012).

The café operates on a pay-as-you-feel basis, where meals are free, however, everyone using the café are encouraged to contribute in some way, including donating produce or preparing and serving meals. While not initially developed to explicitly address issues around food insecurity, the café has attracted local people experiencing instances of having insufficient access to affordable nutritious food, particularly when benefit payments had been delayed (Harry Interview). The gardens and café can be seen as an expression of caring for the community from within, as Joe remarks, “*if we don't care for each other, who will?*” (Joe Interview, GCG). This sentiment saliently highlights that care need not be motivated only by warm feelings of affection or nurturance, but is often also propelled by feelings of injustice, frustration or indignation (Martin *et al.* 2015). Indeed, the perceived neglect experienced by the gardeners in relation to the CEC, and being designated as an ‘area of multiple deprivation’

and the stigma that this signifies, led to contextual practices of care that endeavoured to enable better, more live-able forms of becoming.

Crucially, stigmatised areas of marginality (Wacquant 2008) become spatial metaphors of ‘concentrated poverty’, where communities are frequently perceived through a ‘deficit’ lens (for example, highlighted by the presence of food banks). Indeed, the SIMD assembles various statistics on income, health, and employment and ‘ranks’ them by area, creating a hierarchical representation of deficiency, which then reinforces (a somewhat de-historicised) spatial understanding of poverty. This invariably fails to address the profoundly structural processes that (re)produce marginality (Wacquant 2008). As community activists articulated such as John, North Edinburgh has been characterised by struggle, against both state neglect and stigma, however, such sweeping designations of ‘deprivation’ obfuscates the social heterogeneity of the area. Thus, utilising food as a prism, GCG seek to recognise, legitimise and build upon the diverse forms of knowledge, skills and social networks that already exist within the community and provide a fragmented glimpse of the possibilities of life not dominated by alienated social relations (McClintock 2010).

Indeed, the gardens and café were spaces of collective care, and although embryotic in their stage of development, had wider aspirations of embedding the notion of collaborative care in place (Till 2012). The fact that “*you can jump over the fence for some herbs and veggies for dinner*” (Joe Interview, GCG) and anyone can take produce regardless of being a member or an active gardener, aims to break down any (potential) stigma attached to moments of food insecurity. Furthermore, the growing and consuming of organic food collectively is seen to empower, rather than demonise individuals, as seen with foodbank ‘clients’ in “the current tide of food’s revanchist cultural politics” (Goodman 2015: 216). However, I argue, crucial to nurturing CUFGs from a marginal concern and fringe activity is to ensure that people are adequately nourished (both mentally and physically) and consequently, are able first and foremost, to *imagine* acting collaboratively. As my conversations at the Gardeners’ Café illustrated, marginalised people (both socially and economically) were unable or reluctant to become involved in the CUFGs for very practical reasons: “*not around enough*”, “*girlfriend’s sick*”, “*worked nights*”, “*knackered most of the time*” (fieldnotes, GCG, 29/07/14). Indeed, it is impossible to act collaboratively, if mere survival is an everyday struggle or the bureaucratic arrangements of claiming benefits are punitively enforced with no regard to complex, personal situations (fieldnotes, GCG, 06/05/14).

Thus urban gardeners, particularly in socioeconomically ‘disadvantaged’ areas, who do participate, must recognise the needs of those affected by contemporary structural crises of everyday life. This is demonstrated by GCG adopting a fluid organisational structure, where Joe states, “*our policy is always, you are always welcome, never obliged, which I think is quite important [...] I basically think that the point of the group is to support people in doing what they want to do, give people opportunities*” (Joe Interview, GCG). Therefore, while I am not suggesting that everyone can and should participate in CUFGs (or grow their own food in general), people should be able to partake in collaborative activities if they desire (aligning with other scholars, see McClintock 2010). I argue, CUFGs political potential resides in their ability to enable residents to claim their right to food and shape the city, altering the local ecologies of their neighbourhood and develop collectives that embody logics beyond individualism and commodification. In this sense, CUFGs enable citizens to assert their right to socionatural metabolism (Shillington 2013). Furthermore, aligning their activities (practically and conceptually) with the broader food sovereignty movement is vital (Joe Interview, GCG). Indeed, I argue, one of the most mundane of all needs, the ability to feed oneself, in a de-alienated and decommodified way, is an important basis upon which to build a care-full just city, that acknowledges and embraces the messy interdependence and needs of human and nonhuman others to flourish (Cuomo 1998). The Gardeners’ Café therefore binds food, eating and caring together through socioecological relations and emotive connections. However, the sustainability of the café pilot project is uncertain, given the reliance of small grants to fund the activities of Polly (fieldnotes, GCG, 06/05/14).

5.4.5 Summary. Grassroots Collective Urban Food Gardens: Mobilisation and Reclaiming the Streets

GCG are a community scale, grassroots urban intervention, whereby urban food production is placed within the everyday fabric of the urban landscape of a peripheral housing estate insidiously demarcated as an area of multiple deprivation (SG 2012). These ‘ordinary places’ serve both a material and symbolic importance where food acts as a source of sustenance to address food insecurity, and also enhances more convivial interactions in the interstices of the public and private. The everyday, mundane metabolic processes of transforming bland, underutilised, interstitial greenspaces into areas of creativity and productive vitality is an overt political statement in the face of imposed concretisation of ‘public’ space and various

attempts by the CEC to render payment for collective gardening activities. As a self-organised collective, the gardeners have deployed strategies to bypass elements of the local state and capital investment, by actively avoiding the funding system in the first two years of development and then subsequently, selectively applying for (small) grants to expand the number of plots and activities at a pace that corresponded to the rhythms of the participants. Thus, the gardeners are tentatively and slowly increasing the scope of urban food production with the development of collective growing spaces and consumption in the form of the Gardeners' Café, as emancipatory micro-alternatives to commodified food relations. In this sense, the café is underpinned by an ethos of care where the gift-exchange moment of sharing food (for free) is entangled with broader concerns of social justice. Indeed, they seek to demonstrate that by cooperatively and sociably working together, hunger can be satisfied, highlighting the "collective nature of care giving and receiving" among groups based on shared experiences associated with living in areas of disadvantage (Barnes 2012: 103). Thus, following Gibson-Graham's political (feminist) agenda, the "modest beginnings and small achievements" of GCG can be articulated "without restricting their effectivity in time and space" (2006: 196). Notably, through collective organising "changing the self is a path toward changing the world, and that transforming one's environment is a mode of transforming the self" (Gibson-Graham 2006: 196).

This is not to deny the structural issues that can impede and constrain place-based collective action, but to recognise both the potential and challenges without resorting to dismissive accusations of localised activism as "accommodationist and divisive" as Gibson-Graham (2006: 5) seek to challenge. The precarious position of the gardens in relation to the CEC, whereby a single (ambiguous) Letter of Comfort acts as a 'safeguard' to their actions, is tempered by the CEC increasingly supporting the creation and maintenance of food growing areas on publicly owned land within the neighbourhood. However, this is based upon the potential of communities to 'beautify' greenspace that have previously been poorly maintained and also (potentially) address multiple socioecological inequalities experienced by residents. In this sense, a distinction between the relations of care nurtured by the gardeners and notions of responsibility based on interdependence and action motivated by commitment to the welfare of others and the socioecological environment they are entangled with are contrasted against the neoliberal conceptions of self-responsibility which foregrounds the 'autonomous' individual (Tronto 1993).

5.5 Chapter Summary. The Creation of Collective Urban Food Gardens: Multiple Agendas, Diverse Stabilisations

This chapter has provided a detailed examination of the urban agents, power relations, and political processes that coalesce to form three distinct CUFGs in Edinburgh, a city where affluence and poverty reside in dynamic tension. By exploring the politics of socionature ‘on the ground’ and examining the complex and diverse formation processes, I have demonstrated that socionatures are a product of embodied labour practices and multiple negotiations, entangled with broader structural relations of urban metabolism. Indeed, heterogeneous socionatures are produced through socio-spatial processes consisting of material components (raised beds, rainwater catchment systems etc.) and affective and symbolic representations as entanglements creating feelings of fulfilment and enjoyment. Therefore, I argue, CUFGs are political sites, gathering a multiplicity of different entities, activities, and agendas, where the co-production of socionature is a “highly contested and contestable terrain” (Heynen *et al.* 2006: 13). Indeed, the constant embodied labour of humans and the liveliness of nonhumans that is needed to sustain the gardens, demonstrates how they are always in the process of being re-made, continuously unfolding, in no straightforward, or pre-determined way. Despite the diverse dynamics entangled in their creation and development, common themes can be identified across all three CUFGs, to which I discuss below.

5.5.1 Emerging from the Ruptures of the Urban Fabric

The land upon which all CUFGs were developed was not blank; indeed, there is never ‘empty’ space (Massey 1991, 2005). The land was imbued with manifold meanings: as an everyday visible reminder of the deindustrialisation process (TGCG); a site of neglect and germane symbol of residents’ marginalisation (GCG); and anti-social behaviour and fly-tipping (LSG). Thus, the creation of the CUFGs reflected a desire of residents to produce different socionatures, where people can ‘feel’ different about their immediate local urban ecologies. Consequently, spaces of neglect and abandonment, become cracks that embody possibility, regardless of the particular ‘local’ textures of neoliberal landscapes (Holloway 2010). In this sense, the diverse intimate vernacular urban ecologies of the CUFGs emerged from ruptures in the urban fabric, where the ‘urban’ is an inherently contradictory entanglement, abound with opportunity, playfulness, and emancipatory potential and simultaneously intertwined with spaces of exclusion and marginalisation (Lefebvre 1991).

Notably, despite feelings of apprehension and at times, disempowerment, gardeners articulated a shared sense of hope, which propelled them to manoeuvre within spatial fissures of a highly uneven urban environment, emphasising the possibilities of creative experimentation. Thus, gardeners undertook diverse tactics to establish the CUFGs, by prising open private land holdings to develop temporary CUFGs (G1 and G2); engaging in guerrilla gardening and then negotiating with the CEC to create multiple grassroots growing spaces (GCG); and working with a NGO in a top-down organised project (LSG). The development of the CUFGs, therefore, represented tactical interventions and can be understood as specific outcomes of socio-environmental processes.

In this sense, de Certeau's (1984) notion of 'tactics' is pertinent in that the gardeners grounded their action in concrete encounters that are diverse and unpredictable, in the face of the constraining powerful 'strategies' of government, planners, and private capital. While I am critically cautious of de Certeau's, at times, romantic embrace of (individualised) everyday tactical transgressions in fostering socio-political change, I believe there is significance in recognising the potential of such (collective) mundane manoeuvres, which make "weak positions seem stronger" (de Certeau 1984: xx). Therefore, as *collective* urban interventions, the CUFGs are tactical endeavours, premised on the entangled production of socionatures with multiple others. Thus, in the absence of a statutory framework and therefore protection as a legitimate land use (in comparison to allotments) or local government strategy, a pragmatic politics is enacted by urban gardeners to (opportunistically) gain access to land for growing food, following Gibson-Graham's (2006) strategy of "start where you are" within the contemporary neoliberal framework. Therefore, the CUFGs materialised from a fundamentally contradictory process, both emerging from, and challenging, the metabolic social, ecological and individual rift (McClintock 2010).

Developing CUFGs provided one avenue for local residents to enact collective spatial tactics and experimental practices of care, in the context of the everyday socio-environmental processes that negatively produce and maintain unequal socioecological milieus, where many residents struggle to shape and influence vital decisions facing their neighbourhoods. For gardeners across all three sites, their immediate environments became "pivotal terrains around which political action crystallizes and social mobilizations take place" (Heynen *et al.* 2006: 6). However, crucially, before such mobilisation could occur, the ability to even *imagine* collaboratively acting together was vital (and sometimes a gradual process), particularly in a

context of pervasive stigmatisation and disenfranchisement within areas of ‘multiple deprivation’ (GCG and LSG). This chapter has also sought to draw attention towards the various initial obstacles which need to be negotiated to enact collective action (from intimate feelings of uncertainty to environmental contamination). For the passionate instigators of the CUFGs, the motivation to collectively organise frequently emerged from the banal, messy, and emotional fluctuations of their lives. Notably, socioecological inequalities such as issues of social isolation, food insecurity, and ordinary environmental injustice (Whitehead 2009) became ‘collective concerns’ conjoining a “worry and thoughtfulness about an issue as well as the de facto belonging of those ‘affected’ by it” with a “strong sense of attachment and commitment” (Puig de la Bellacasa 2011: 89-90).

Focusing on what people ‘care about’ and ‘care for’ highlights the importance of thinking about ‘resistance’ and social change as collective embodied affective endeavours, grounded in an everyday (urbanised) environmentalism (Loftus 2012). Notably, while some gardeners articulated their involvement with CUFGs in overtly political terms, and consequently could be characterised as a form of explicit activism (embodying notions of self-aware, oppositional resistance), the majority of gardeners discussed their involvement in ways that align with Horton and Kraftl’s (2009) conceptualisation of “implicit activism”, which are sometimes ambivalent and indeterminate; emergent from quotidian emotive geographies of encounter between a multiplicity of entities. Taken together these “everyday activism” (Chatterton and Pickerill 2010: 479) embody an ethos of care, signifying commitment and an attentive focus to improve a situation, where those who enact care are moved by their relational actions (Puig de la Bellacasa 2012). Notably, grassroots organising beyond the various garden ‘boundaries’ in North Edinburgh emerged in relation to the deputation towards the CEC, which can be interpreted as a form of explicit (reactionary) activism, entangled with feelings of annoyance and everyday, banal injustice, where members of GCG sought to defend their right to cultivate land for free.

The case studies highlight the multiple stakeholders that can become entangled within CUFGs, where in this instance, private developers, local authorities and NGOs utilise CUFGs for various agendas, for example, as a diversification strategy to deliver ‘professionalised’ community development (LSG); a vehicle to bolster positive community relations (G1 and G2); and a tool to bring people together from a variety of backgrounds to grow and consume organic produce. Indeed, CUFGs as produced socionatures can become key agents in urban

development, facilitating the gentrification process (see Quastel 2009; Mayer 2013). Each CUFG holds a distinct disposition in relation to the local state, which is not a monolithic entity but an assemblage of socio-political flows and differentiated sets of activities. As Berlant argues, “the state is a resource as well as a site of domination” (2013: n.p.), where socio-politically attentive state and third sector actors are both supportive and involved in cultivating Edinburgh’s emerging community garden network. For GCG, their relationship with CEC is somewhat ambiguous. They endeavour to cultivate their gardens somewhat autonomously, suspicious of external funding. They aim to keep a ‘safe distance’ from the CEC and only engage with the bureaucratic apparatus when needed, such as obtaining a Letter of Comfort to somewhat ‘legitimise’ their appropriation and cultivation of land. However, this association can become consciously oppositional, demonstrated when their ability to cultivate the land for free was challenged and subsequently, resulted in a deputation. In comparison, LSG maintained a cooperative relationship with both the CEC and various local councillors. Indeed, gardeners were keen to praise the CEC for their substantial investment in the project. Similarly, for G2, the relationship was one of cooperation, where they strategically interacted with EDI (itself owned solely by the local state) to gain access to CEC owned land to develop a second garden and therefore, become entangled within EDI’s temporary use agenda to enliven a stalled site awaiting development. Based on such differences, the case study CUFGs intersect with the neoliberalisation process and the state in distinct ways and offer differential scope for more-than-capitalist possibility.

5.5.2 The Fragility of Collective Urban Food Gardens

Members of the CUFGs who invested a large proportion of their time, energy and personal commitment into both establishing and maintaining the entangled web that form the socionatures, frequently articulated the tenuous nature of the gardens as fragile moments in space-time, where the loss of a key participant, a large argument between the group, or a challenge to their land tenure would jeopardise their continuance. Therefore, the fragility of the garden assemblages requires a constant, practical tinkering (Mol *et al.* 2010) where adjustments are sought, funding decisions are made, and celebrations are organised in order to try and ‘hold’ the gardens together. In particular, both funding and volunteering emerged as major challenges facing the gardens in terms of long-term stability, however, gardeners articulated a contradictory stance in relation to their precarity and fragility, to which I discuss below.

All case studies were to differing degrees entangled within the funding matrix (LSG more so than G1 and G2 and GCG). The gardeners, sometimes with limited (financial) resources (particularly GCG), illustrated the importance of collective collaboration, where residents shared their experiences, skills, and tools with each other to engender intricate socionatures. Funding was a particularly contentious issue for GCG, who were concerned that large grants would disrupt the internal dynamics of the group and consequently, applied for only small-scale grants, which enabled relative freedom from aligning with funders' objectives and conditions. Therefore, GCG aimed to increase the capacity of the group at a sustainable rate, while not distorting the horizontal, self-organised configuration of the CUFGs. Furthermore, they also consciously sought to avoid being incorporated into the "non-profit industrial complex" (Rodriguez 2007). However, this is not to romanticise non-economic activities, as a lack of funding in some instances increased fragility by impeding long-term planning. It is also pertinent that many gardeners, across all three sites, wanted to evade discussing the garden in terms of 'benefits' associated with 'funding applications' that smooth over the everyday complexities and 'invisible' effects that cannot be reduced to calculable outcomes (Hinchliffe *et al.* 2007).

While both G1 and G2 relied upon in-kind investment from both developers (Grosvenor substantially more so than EDI), LSG were deeply entangled within diverse funding streams, where project workers were required to frame the garden in terms relevant to the funding organisations objectives, where the initial "project proposals are qualified in response to the funding landscape" (Hinchliffe *et al.* 2007: 266). Significantly, the experience of LSG highlights the importance of the continued care that is needed once the funders are satisfied and NGOs 'walk away' illustrating the "challenge to the one-stop temporality of current funding models" (Hinchliffe *et al.* 2007: 275). In this sense, gardeners aimed to foster ecologies of care that ultimately place importance on things and phenomena that cannot be easily (or at all) enumerated, but are vitally important to people's everyday lives (discussed in Chapter 6).

The chapter also revealed a nuanced understanding of volunteering in CUFGs. Fundamentally, micro-particularities matter. I argue it is crucial not to conflate the grassroots voluntary self-organised activities of urban gardeners creating new socionatures by transforming and cultivating stalled sites (G1 and G2) or underused sites in their

neighbourhood (LSG and GCG) with the type of ‘enforced’ volunteerism that is increasingly propagated by neoliberal workfare regimes (Pudup 2008). Thus, reducing volunteerism to either a result of the internalisation of the logic of (neo)liberalism (based on self-interest and self-sufficiency) or an outcome whereby citizens are somehow deceived by the neoliberal state determined to transfer responsibility to under-resourced groups, is misguided. All case study sites relied on volunteers, which gardeners believed fostered greater attachment to the spaces they nurtured, as they considered this increased a sense of ownership and agency in terms of their meaningful participation, where people could move into and out of the gardens depending on rhythms of life circumstances. However, levels of commitment vary widely between different gardeners and the ebb and flow of participation frequently meant that responsibility fell upon a ‘core’ group of committed gardeners at each site to undertake the frequently mundane, everyday ‘doings’ that are integral to maintaining and sustaining the interconnected garden configurations. The sentiment articulated by particular CEC employees regarding the support of grassroots action, as long as it aligned with (modernist) aesthetic sensibilities that essentially relieve CEC from their duty of care in maintaining urban greenspace, demonstrates the potential co-option of the energy of residents. Thus, the figure of the volunteer has both emancipatory and regressive connotations and consequently, there is an ambiguous line between the neoliberal volunteer (as a locus of personal responsibility and self-reliance) and the empowered volunteer (as a progressive form of cooperative activity beyond monetised labour). Therefore, across the CUFGs the line between co-option and empowerment is not clear-cut.

I argue, therefore, we need to conceptualise the voluntary labour of gardeners in ways which do not foreclose politically progressive motivations to neoliberal appropriation, while also taking seriously the regressive ‘capture’ of such actions. Consequently, it is important not to reduce the voluntary collaboration and cooperation of various individuals in a more-than-human world, while collectively producing socionatures, to a narrative of neoliberal co-option. Indeed, while various scholars have highlighted the regressive aspects of volunteering in terms of alienating people from both the actions and the products of their labour (see Ghose and Pettygrove 2014), in this case, the embodied, tactile, and deeply sensuous labour enacted by volunteers fosters a relationship that can repair or improve the metabolic rift engendered by capitalism between humans, the socioecological environment and the products of those relations (McClintock 2010). Therefore, to dismiss the CUFGs as neoliberal artefacts overlook their importance to people’s everyday lives (nutritionally and socially), and

collective action in quotidian spaces in general. Through the diverse constellation of agents, processes and ‘things’, each garden created a unique ecology of care emanated by an entanglement of care practices, and it is this I now turn to in Chapter 6.

CHAPTER 6

THE EVERYDAY CARE-FULL CO-PRODUCTION OF SOCIONATURES

6.1 Producing and Sustaining Socionatures: Everyday Care Practices in Collective Urban Food Gardens

This chapter explores the material and affective labour that are enacted to produce socionatures. As socionatural hybrids, gardens are co-constituted by humans, plants and various nonhuman entities that coalesce to form these spaces (Hitchings 2003; Power 2005). I understand gardening as a collective practice and attempt to demonstrate the liveliness and agencies of nonhumans without losing sight of the grounded possibilities that CUFGs can foster for human flourishing. Thus, I document the caring practices enacted by gardeners to “maintain, continue and repair” (Tronto 1993: 103) the socionatural entanglements which they are enmeshed within. This chapter draws attention to how ‘care work’ produces “not only material outputs but also affects” which can “allow new modes of being and forms of sociality to emerge” (Singh 2015: 58). Furthermore, exploring when caring relations materialised, and when they did not, between humans and nonhumans, highlights the ethical and political implications and possibilities of the everyday on-going interactions where gardeners can “learn to be affected” (Latour 2004). I therefore explore the possibility of care practices in fostering more responsible and socioecological sustainable relations by reworking ‘micro’ situated metabolic circulatory flows. I argue, being attentive to the practices that sustain and maintain these socionatures, highlights how the CUFGs can only endure because humans and nonhumans persist in their collaborations to form vibrant ecologies of care. Therefore, within this chapter I relay the multiple stories of the enacted care practices of gardeners, both the articulations and actions that sought to enhance, improve or nurture a certain matter (Mol *et al.* 2010), and the ‘care work’ of the nonhuman as discussed by human gardeners. In the following sections, I examine what gardeners ‘cared about’ and ‘cared for’, namely, ‘soil’, ‘seed-plant-produce’, and ‘human collectives’ to demonstrate the complexity and interconnected webs of caring relationships and practices in CUFGs that ‘co-produce’ socionature.

6.2 ‘Caring About’ and ‘Caring For’ Soil

6.2.1 *Soil as a Complex Life-Sustaining Web*

The crucial role of soil for growing food renders the practices of maintaining and sustaining this “living multispecies world” (Puig de la Bellacasa 2015: 695) a vital caring practice within the CUFGs, where “*soil is the most precious commodity*” (Ruth Interview). As discussed in Chapter 5, contamination was found at LSG and TGCG, however, was not seen as a barrier to food growing. Instead, designs were adapted and improvisation was enacted to overcome constraints of actually planting into the ground. This meant, however, that the soil was not remediated and thus, ‘care for’ humans through reducing risk of ingesting contaminants was prioritised over ‘care for’ the soil, in this instance.

In relation to their everyday soil care practices, gardeners placed emphasis upon “*feeding*” (Joe, fieldnotes, GCG, 13/05/14) and “*nourishing*” soil (Paul Interview, G2) highlighting the relationality of humans within the soil creation process. This ecological caring ethos is formalised in each of the garden’s constitution where members are actively required to follow organic gardening principles. However, there is no way of ensuring that all gardeners adhere to these values (Charlotte Interview, G2). This is particularly interesting from the perspective of a politics of care, whereby organic gardening is characterised by members as a sustainable and ecologically sound approach (Robert, fieldnotes, G1, 12/04/14) and posited as a fundamental feature of *good* care in relation to food growing practices. This sentiment is succinctly illustrated by Max, who stated:

Without healthy soil packed with life, ecosystems collapse [...] overworking and abusing the soil all contribute to that. Poisoning the soil isn’t common sense, gardening organically is a way of enriching the whole system, not exploiting it (Max Interview, G2).

For Max, the destructive impact of artificial, soluble fertilisers and pesticides upon the environment is deeply unethical, with organic practices conceptualised as ‘good care’ based upon knowing and appreciating soil life and its role in maintaining and repairing living webs of interdependent relations (Tronto 1993). This ecological ethic of care emerged from an accumulation of past experiences, including tending an allotment before he moved to

Edinburgh. Experienced gardeners were keen to articulate the importance of a multiplicity of involvements and interests informing their soil care practices, from tending to private garden spaces over many years (Diana Interview, G1; Judith, fieldnotes, LSG, 23/01/14) to volunteering as an organic farmer (Joe, fieldnotes, GCG, 29/07/14; Dan interview, G2). For other gardeners, the requirement to adhere to organic gardening principles led to a transformative process of acquiring new skills while simultaneously modifying and adjusting existing knowledge, behaviours and values:

I'm afraid I used to use [a commercial fertiliser] as a bit of a short cut really in my own garden, which I would never do now, just from what I've learnt here through talking to all the experienced gardeners (Jenny Interview, LSG).

The language Jenny uses – “*I'm afraid*” – and the apologetic tone she adopted to explain her pedagogical soil practices signals a change in her values in relation to soil. The ‘good’ soil care of organic gardening was articulated through the dimension of time where gradually improving soil fertility through attentive labour and respectful practical tinkering was a slow process, compared to the bad ‘care’ of synthetic fertilisers which were considered to be a “*quick fix*” (Jenny Interview, LSG). In this sense, gardeners can become more attuned to the more-than-human temporalities that permeate the CUFG. Thus, soil care was an embodied, affective learning experience, where the process of ‘caring for’ and understanding the soil was prioritised. However, this is complicated by the fact that the gardeners do utilise purchased compost in addition to their allocated contribution from the CEC each season to replenish their planters and for germinating seeds (fieldnotes, LSG, 14/05/14).

In the initial stages of the development of G2, the soil creation process took place beyond the arbitrary garden boundary. Indeed, while the garden is a materially visible ‘locality’, it is not a bounded entity (Pink 2012), but an entanglement of metabolic socioecological flows. The assembled planters at G2 were filled with peat-free compost, where the committee sought to raise awareness and provoke others to recognise the multispecies relationships that sustain (or diminish) socioecological relations, enacting an ecological ethic of care towards the complex biological environment of distant (increasingly depleted) peat bog habitats in the UK and across Europe. While each garden adheres to organic principles, practical tinkering is needed in some instances. As Joe discusses, garden assemblages create myriad demanding attachments and objects of care, which frequently need to be adjusted and negotiated:

This [Site A] is meant to be a four-point crop rotation system. It's still pretty organic, but if someone has a load of cabbage seedlings which they want to plant, we will find somewhere to put them. Stuff always gets planted in other places; we are very flexible (Joe Interview, GCG).

Joe believes that following the principles of a four-point rotation system is an important aspect of caring for the soil by alternating crops of potatoes, legumes, brassicas and roots. However, this process is not rigidly adhered to in order to engender an inclusive space, where a variety of gardeners and residents can feel they can contribute creatively to the garden in terms of what is planted and where. In this case, 'care for' the human is prioritised at the expense of 'archetype' soil care, reflecting the messy entanglements of everyday life in the garden.

6.2.2 Making Compost: Caring Practices and Creative Processes

All gardens maintained large makeshift compost heaps, creatively assembled from wooden pallet frames that formed the complex microbial environments. The creation of compost is an on-going and gradual process sustained by caring practices, however, these are not motivated out of a warm notion of affection, but a more practical understanding of asymmetrical differences between the care-taker (gardener) and cared for (compost heap) to create vital plant food. As Richard states, making compost "*is just part of the garden*" (fieldnotes, LSG, 07/05/14). However, for Diana, getting your hands dirty and feeling the compost indicates a visceral sense of interconnectedness with the socionatures that gardeners co-create enabling an emotional affinity, "*I'm not interested in a fussy organised garden, but I just love... you know what, I like to dig, I like to make compost*" (Diana Interview, G1). Indeed, for Diana, recognising the needs of and sustaining the compost, in addition to sharing knowledge to increase its liveliness, was of particular importance. Composting required maintaining moisture levels and occasionally turning the matter to aerate the stacked material, thus, the process entails adjustments, attentive monitoring and practical tinkering (Mol *et al.* 2010). Compost, therefore, emerges from the metabolic processes and practices between humans and nonhumans, which enable gardeners to appreciate the commitment invested in creating an intimate compost environment that is conducive to accelerating the decomposition of material (Cath, fieldnotes, LSG, 31/05/14). This highlights how the agencies involved in a politics of

care with companion species creates particular practical and ethico-political ‘obligations’ by the cyclical returning of organic waste through composting.

Engaging with soil was a visceral, embodied practice for many gardeners, particularly for Paul, who stated, *“I like feeling the soil, I think it’s important, you only get to know it by touching it”*, where gloves somewhat impeded this visceral experience (Paul Interview, G2). Furthermore, Luke articulated, *“I think contact with soil is therapeutic, I think touching it is good for you”* (Luke Interview, LSG). As he explains, participation in CUFGs enables a form of ‘healing’ the individual metabolic rift: *“I have a very rural background, personally I miss the countryside [...] city living sucks the energy out of me sometimes, and gardens replenish your energy levels, I think”* (Luke Interview, LSG). The heady mix of fragrant sweet peas, the aroma of moist compost and a multiplicity of herbs coalesce to create a ‘smellscape’ that gardeners perceived to be particularly relaxing (Luke Interview, LSG). As Lefebvre, argues, the production of space is intimately bound up with smell, indeed, where an “intimacy occurs between ‘subject’ and ‘object’, it must surely be the world of smells and the places where they reside” (1991: 197). Claire believed she could sense the vitality of soil through olfactory senses *“because you can smell when it’s healthy”* and clarified, *“when it’s moist, nutrient rich, it has this lovely earthy smell, you just know it’s good quality”* (Claire Interview, G2). When I asked gardeners why they compost, the majority of experienced gardeners stated that they do so out of habit or instinctively put garden ‘waste’ on the compost heap *“without really thinking about it”* (Richard, fieldnotes, LSG, 09/04/14). In contrast, novice gardeners began to do so by mirroring others behaviour, as Peter, a new member, described, how he *“follows Judith’s lead”* (Peter, fieldnotes, LSG, 12/03/14).

Through composting, gardeners return “the surplus of life” through which “the production of abundance can be sustained” (Puig de la Bellacasa 2010: 161) in order to *make* soil as much as they consume from it, where gardeners “attempt to close the nutrient cycle” (McClintock 2010: 196). Indeed, for people “living in urban areas composting is a more or less accessible practice to caring for the earth” (Puig de le Bellacasa 2010: 160). For Kate, *“growing compost”* (fieldnotes, G2, 21/08/14) was the foundation of gardening, a truly collaborative act between humans and nonhumans, informed by the permaculture ethics of earth care, people care, and fair share, requiring patience and a deep understanding of the ‘soil community’. However, she described how the compost heap was in its early stage of development at G2 and at times, was not being used correctly, with unsuitable material placed in it. Kate

attributed this to a lack of knowledge and clear instructions for new members, the majority of which were novice gardeners:

Kate believed that in-depth inductions were crucial to transfer knowledge to new members. She articulated that compared to other gardeners, she spent on average up to two hours explaining the principles and everyday practicalities of maintaining the garden (fieldnotes, G2, 21/08/14).

Indeed, Kate articulated a sense of responsibility to enable novice gardeners to gain a deeper understanding of the organic gardening principles that underpin the CUFG. However, several committed passionate gardeners who were a constant presence at G2, observed that various planters were left somewhat neglected after the initial planting stage and failed to place unwanted vegetative matter onto the compost heap. Therefore, while the garden promoted sustainable soil care, this was not always enacted by gardeners, possibly exacerbated by growing in relatively small pallet planters and consequently, restricting the extended visceral engagement of digging and mulching (Charlotte, fieldnotes, G2, 17/08/14). Furthermore, some participants suggested that the emphasis novice gardeners placed upon the experimental nature of growing, rather than extensive food production for consumption, resulted in soil care practices rendered less of a priority for members who *“just want to have fun, plant a few seeds and see what happens, because growing food on any scale requires good organic soil”* (Dan Interview, G2). Therefore, for some, soil remained a taken-for-granted component of the growing process and tensions did manifest in relation to composting.

In addition to having a designated compost heap, GCG extended their compost-making process by stacking the turf they had initially removed when transforming Site A and B into productive gardens. Joe explained how they assembled ‘turf walls’ by placing black plastic over the mounds to block out the light to *“kill off the grass”*, describing how they are their *“topsoil making walls, because rotted down turf left for two or three years is the best topsoil you can get, but in the meantime it makes a great raised bed and it grows brilliant strawberries”* (fieldnotes, GCG, 13/05/14). Indeed, this was the third year the ‘turf walls’ had produced an abundant yield, where the compost making process was utilised simultaneously to grow produce (see Figure 6.1). Consequently, compost emerges from the entangled metabolic processes and practices between humans and nonhumans. To garden organically therefore, is not merely defined by the evasion of artificial fertilisers, but also necessitates an ethos of care through the practical nurturing of a complex, living soil ecology, recognising the

interconnected socioecological web that sustains life. This corresponds with Puig de la Bellacasa's (2010) conceptualisation of ethics as an everyday doing.



(Figure 6.1: Topsoil making 'turf walls' growing strawberries at GCG)

6.2.3 The Care Work of Worms

More than any other lively creature, gardeners articulated the essential role of earthworms to the maintenance of soil health. As Puig de la Bellacasa states, worms "are a more visible manifestation of soil life than microorganisms" (2010: 160). For some gardeners, far from unrecognised, the world under their feet was a curiosity and focus of care, with feelings of unease expressed when accidentally slicing a worm with a spade when digging (Robbie, fieldnotes, GCG, 06/09/14). The process of earthworm bioturbation was initially described by Charles Darwin⁶⁷ and it is their role of "*caring for the soil*" (Dan Interview, G2) that draws attention to their agency, specifically their 'caring' capacity that is entangled in the maintenance of urban nature. It is the accumulative 'small agency' of worms, their everyday

⁶⁷ Most famously in his 1881 book *Formation of Vegetable Mould through the Actions of Worms, with Observation on Their Habits*.

activities, and the scale of their operation in producing fertile soil that for Bennett, drawing upon the work of Darwin provides “evidence of the vitality of matter” (2010: 94). The activities of earthworms were seen by Dan, as fundamental to ecosystem health and vitality, as he states, “*worms are so important, they aerate the soil through their burrows, their fertile casts make compost, they work tirelessly, they sustain the soil and keep it healthy*” (Dan Interview, G2).

Recognising the agency of worms, two of the CUFGs developed wormeries in the hope of creating nutrient-rich soil with differing outcomes. LSG embarked upon creating a ‘DIT’ outdoor wormery, however, “*no one wanted to look after it*” (Judith Interview, LSG) and balancing the temperature, moisture and pH levels, aeration and light proved to be too arduous for the gardeners. In this case, attentive care failed to materialise. In contrast, at the participatory design workshop for G2, a wormery was articulated as an essential feature of the garden design (fieldnotes, Tollcross Community Centre, 24/03/14). Subsequently, a purpose built wormery was constructed and placed in the bothy at G2, where a small group of gardeners assumed responsibility for its maintenance. While initially there was anxiety ensuring correct material was placed in their habitat, the worms remained a focus of care and attention. However, after only a few months, the bothy was vandalised, set a light and burned to the ground, killing the worms within it. Through social media gardeners expressed their collective grief and sorrow for the loss. When discussing the vandalism, Diana pondered the “*nasty death the poor worms suffered*” (Diana Interview, G1). The empathetic sentiment expressed towards the worms was entangled with an acknowledgement of their vulnerability and agency. However, the ethical concern expressed was surpassed with a response which somewhat reinforced, rather than decentred, the human as the sovereign power and focus of concern in the garden: “*nobody was hurt apart from the poor worms, we’ll just build a new bothy*” (Diana Interview, G1), highlighting that although distressing, the creatures were ultimately replaceable. Having explored the importance gardeners placed on creating compost and nourishing lively matter, I now turn to examine the interconnected embodied processes of seed saving and nurturing plants to explore how care is interwoven through sensory and practical engagement with seed-plant-produce.

6.3 ‘Caring About’ and ‘Caring For’ Seed-Plant-Produce

6.3.1 *Everyday Gardening Activities: The Sensuous Act of Saving Seeds*

The practice of saving seeds is a deeply visceral, tactile and sensuous activity that is intimately entangled with the growing spaces in which they are sown, tended, harvested and selected. Each garden placed different emphasis on the saving of seeds reflecting diverse rationales, motivations and explanations for the seed saving practice. Notably, all CUFGs kept a common pool of seeds within their garden sheds. They were an accumulation of surplus seeds collected when gardeners had run out of space to sow them or packets they had purchased or acquired attending various gardening events, in addition to seeds they had personally saved. Each garden placed importance on having these free seeds available to members, and therefore can be seen as a commoning practice, whereby sharing and exchanging seeds in the garden democratises access. As Robert stated, they “*want people to be able to join the garden and get planting straight away with no need to buy seeds*” (fieldnotes, G2, 14/05/14). This practice was articulated by many gardeners as being particularly important, exemplified by Andrés, a resident of Lochend, originally from Spain, who described how when he joined the garden he had never grown his own produce before and therefore Judith, an experienced gardener, had provided advice and seeds from the communal supply (Andrés, fieldnotes, LSG, 22/03/14). The continuous exchanging of knowledge, translated into an embodied learning experience for Andrés, which was indispensable when nurturing seeds to produce.

During my time at GCG, the saving of seeds was an affective, embodied experience and decommodification practice:

Joe took large bunches of kale, placing them inside the wheelbarrow, rubbing and thrashing the dried plants against the surface until the seeds were released, pouring them from a bucket into the wheelbarrow from height, letting the wind blow away the unwanted husk. Grace explained that this technique was used in Kenya, and Francis commented that it was much quicker than releasing the seeds individually from pods (fieldnotes, GCG, 29/07/14).

For gardeners, seed saving is a celebration of a successful growing season and also enables them to “reclaim these once-common resources from the enclosure of capitalist commodification” (McClintock 2010: 200). Indeed, while all the gardens were in a relatively young stage of their development (i.e. under six years) collecting seeds suggested continuity, stability and I suggest, a political statement. Keen seed savers, such as Max, who had gardened from an early age with his grandparents, proposed that gardeners would become “*more inclined to save seeds*” the longer they were involved in CUFGs, however, had observed “*a lot of plants being left to go to seed*” and therefore, considered this a “waste” if they were not collected (fieldnotes, G2, 10/09/14). This perhaps highlights the experimental nature of the growing process for many gardeners at TGCG and also its temporary status, which some gardeners suggested, may influence people’s decision not to save seeds (Charlotte Interview, G2; Max Interview, G2). While GCG’s main objective is to produce as much edible matter as possible, certain plants were surrendered to the natural rhythms of the life-death cycle. Indeed, in order to produce more food in the future, particular plants were not eaten in the present:

Grace shows me a leek that has gone to seed, its spherical head laden with lilac flowers. Grace explains how they will dry out the seed head saving the seeds for next year, enabling the cost of next years planting to be kept to a minimum (fieldnotes, GCG, 29/07/14).

Saving seeds was thus a practical activity and frequently a pragmatic decision when certain plants were not eaten and consequently left to go to seed, forming a common resource to be shared between all members, to be either planted within or beyond the communal garden spaces. Indeed, having been part of the seed saving process, I was gifted a handful of kale seeds to plant at other CUFGs (fieldnotes, GCG, 29/07/14). For some gardeners, saving and gifting seeds is also an act of solidarity in relation to the wider food sovereignty movement and therefore, of multi-scaled significance (Joe, fieldnotes, GCG, 29/07/14; Max Interview, G2). In the context of the increasing neoliberalisation of the corporate seed industry and conflicts over biotechnology and intellectual property rights, the ethico-political implications of seed saving and swapping are amplified (see Castree 2001b; Kloppenberg 1988; Phillips 2013). The exchange of both seeds and knowledge therefore is a practical grassroots tactic to contest the commodification of biological matter and signal an appreciation of the nonhuman agency embodied within people-seed relations (Phillips 2013).

While seeds were saved from vegetable plants for the following year's food production, importance was also placed upon harvesting seeds from herbs and flowers, as they were often a source of emotional connection and enjoyment. For example, horseshoe-shaped calendula seeds were saved at LSG, not only for their aesthetic appearance and importance for companion planting, but also because the anti-inflammatory and anti-fungal properties of this plant were valued. Indeed, petals from the often taken-for-granted 'marigold' plant (see Figure 6.2) were used in herbal infused oil (fieldnotes, LSG, 10/09/14).



(Figure 6.2: Calendula growing at LSG)

While seed saving was an activity embraced by some gardeners, not all engaged in this practice. Indeed, many gardeners gained great pleasure from purchasing their seeds from both seed catalogues and garden centres, as Jenny states, "*I'm always buying seed packets when I'm out shopping*" (Jenny Interview, LSG). Furthermore, experienced gardeners were keen to express that growing produce for food consumption involved different rhythms and experimental processes compared to specifically growing plants to 'go to seed'. Moreover, as the majority of individual growing in LSG takes places within raised beds and all gardening is confined to planters at TGCG, "*there isn't the luxury on a large scale*" (Richard, fieldnotes, LSG, 20/08/14) of allocating space for plants to go to seed in any quantity. However, the proliferation of sunflowers and the accompanying seeds were left to be devoured by nonhuman species, particularly birds (fieldnotes, LSG, 20/08/14; see Figure 6.3). The fact that plants continue to grow, wilt and die as they produce seeds brings the cycle of life, death and

decay into focus for particular gardeners. Indeed, menacingly towering over her, Carol states in relation to the large sunflowers, “*I dannae like them at all!*” (Carol, fieldnotes, LSG, 27/09/14). Notably, when seed saving does take place, it is typically motivated by everyday concerns such as waste, frugality and enjoyment, rather than underpinned by an ecological ethic of care.



(Figure 6.3: The cycle of life and decay of sunflowers)

6.3.2 Growing Plants: Active Engagements with a Lively World

The nurturing of seeds into edible plant matter demonstrates how humans and nonhumans become entangled within a politics of care. As Phillips has stated, plants and people “breathe together, we use each other as nutrients, we kill them as they escape our inevitably failing controls, we conserve and cultivate them as they ambivalently respond with flourish or indifference” (2013: 25). The germination process (in which plants grow from seed) evoked a sense of wonder, and was an affective state for experienced and novice gardeners alike, where to “be enchanted is to be struck and shaken by the extraordinary that lives amid the familiar and the everyday” (Bennett 2001a: 4), as the below vignettes illustrate:

[...] watching the roots and the shoot grow, and even now the minute something comes up inside, I call everybody, I take the tray around the house and say look the sweetcorn is coming up, in tiny little shoots (Diana Interview, G1).

I'd never really grown anything before this so I wanted to get as much into my planter as possible, I planted a variety of things, carrots, lettuce, radishes and watching these shoots poke through the soil, it was just magic, I'm completely hooked (Duncan Interview, G1).

Both Diana and Duncan's sense of wonder at the germination process was continually expressed to me by gardeners. Feelings of anticipation and then satisfaction when shoots appear through the soil and the fact that Duncan is now "*completely hooked*" demonstrates that gardeners not only shape the activities they are engaged in, but are also shaped by them. Gardeners articulated multiple senses of joy at the sign of the first shoots, where novice gardeners expressed they felt "*a sense of relief and also delight*" (Duncan Interview, G1), "*satisfaction*" (Michelle, fieldnotes, LSG, 09/04/14), and "*happiness*" (Sue, fieldnotes, G2, 11/05/14). Gardeners frequently would grow fragile seedlings within their home affording them the ability to continuously observe, nurture and attentively tinker in a way that aligned with their diverse daily rhythms and routines (Diana Interview, G1; Kate Interview, G2; Paul Interview, G2; Jenny Interview, LSG). For example, Diana, nurtured seedlings in her home before transferring them to the CUFG and her allotment, and placed great importance upon carefully watering and providing sufficient warmth for the vegetative matter to flourish: "*I like growing things from seed, I have got about a 3 foot by 4 foot of seedlings on the lounge floor*" (Diana Interview, G1). As Mary explains, this practice was encouraged at the initial stages of the development of G1, so gardeners would have seedlings to plant for their first growing season, "*I started off the seeds from the windowsill at home [...] I did that again this time*" (Mary Interview, G1).

The multi-celled trays that adorned Diana's lounge floor and Mary's windowsill were also found in the warmth and sheltered environment of the polytunnel at LSG, where gardeners attentively nurtured the tender plants. However, the communal polytunnel was not a neutral space. Indeed, 'core' gardeners who were present at the garden for most of my visits, bemoaned that some members would frequently sow a variety of seeds, however, would not return to water them and therefore, the responsibility fell upon a small group of gardeners to

ensure that they were adequately hydrated. This manifestation of ‘polytunnel politics’ was witnessed on a few occasions, where various gardeners would have bursts of activity, and then not return for a period of time, reflecting the rhythms of their personal circumstances (fieldnotes, LSG, 19/03/14).

The affective dimensions involved in the everyday, intimate, labouring practices of caring for the garden enhance knowledge and skill through repetitive action such as planting out of seedlings into raised beds (fieldnotes, G2, 05/05/14); the skilful lifting of crops of potatoes (fieldnotes, GCG, 06/09/14); and learning when to harvest produce based on a multi-sensuous engagement with vibrant matter such as tomatoes (fieldnotes, LSG, 30/07/14). Indeed, ‘care work’ “becomes better when it is done *again*, creating the specificity of a relation through intensified involvement and knowledge” (Puig de la Bellacasa 2015: 705; emphasis in original). Learning about food growing is a bodily task, where the CUFGs are laboratories of creative experimentation, where the grower is intimately entangled with edible matter, a form of ‘becoming with’. However, as Richard explained, even when gardeners attended the same knowledge workshops, a politics of care emerges, where tensions develop between gardeners, for example, over the best way to ‘care for’ an apple tree such as pruning techniques (fieldnotes, LSG, 13/08/14), demonstrating that people draw upon a range of knowledges and experiences, interpreting the same information in different ways.

Both thinning and weeding can be interpreted as a form of ‘violent-care’ (van Dooren 2014; Law 2010) where humans remove and kill nonhuman vegetative matter when they do not conform to our expectations, desires or aesthetic sensibilities. Accordingly, weeds can “be understood as plants that challenge the ideal of domestication by refusing their designation within the gardener’s plans” (Power 2005: 50). Indeed, interspecies living intertwined within the CUFGs is entangled with “mortal relatedness” (Haraway 2008: 12). Rooting out ‘weeds’ and unwanted runners of strawberries plants, for example, were the most common tasks undertaken in the CUFGs, where in this instance, “care is related to killing [...] to make possible more fertile growing” (Puig de la Bellacasa 2010: 166). For some, the task of weeding was an enjoyable and satisfying experience. For example, Chloe described how it was “*great exercise*” and better than going to the gym (fieldnotes, LSG, 21/06/14). For many, it was a relentless and laborious job that in summer months had “*to be kept on top of as weeds can easily get out of control*” (Sonia, fieldnotes, GCG, 17/06/14).

For others, it was part of their mundane routine practice, ensuring the garden was well maintained and ‘tidy’, highlighting issues relating to boundaries, responsibility, and ownership. This was pertinently demonstrated when Cath relayed to me while walking around the garden admiring produce, how she had mistakenly pulled out a quinoa plant (typically grown in the uplands of Bolivia and Peru) from another gardener’s raised bed thinking it was a weed due to its dry grey-brown appearance, where Cath exclaimed, “*she has only just forgiven me now!*” (fieldnotes, LSG, 12/03/14). Therefore, while LSG contains individual raised bed plots, which act as spatial strategies for organising responsibilities, in this instance, Cath failed to respect these ‘boundaries’. Thus, the routine activity of weeding can be imbued with power dynamics where particular members of the garden who invest a large amount of time and energy into maintaining the space to a standard they deem appropriate can at times create tension between specific gardeners.

For every seed carefully sown and tended, there are numerous instances where the nonhuman cannot be controlled, highlighting the limits of human mastery. Indeed, seeds are transported in the wind, on the fur of animals and when plants are left to live their full life, wilt, and deposit their seeds onto the soil, and thus, emerge spontaneously. Gardeners relayed multiple stories of this “planty agency” (Brice 2014: 944), for example, where ‘rogue’ rhubarb would materialise in the forest garden (LSG) and mint would proliferate in planters (G2). As Luke explained, “*with gardening nothing is ever going to go exactly the way you intended it to, but it’s not so much the end product, it’s the learning process*” (Luke Interview, LSG). Thus, through the practical, embodied process of tinkering (Mol *et al.* 2010; Heuts and Mol 2013) the limits of human control are revealed. As Paul stated, “*plants don’t talk back, but they do respond [...] well sometimes they just do their own thing*” (Paul Interview, G2). Paul went on to discuss how when he “*felt stressed*”, gardening provided an avenue to “*forget everything*” and developed connections with specific plants, such as those he had nurtured from seed on his windowsill and in this sense, tending plants can develop a ‘sociality’ between humans and nonhumans. Across all three CUFGs, improvised techniques including netting were enacted to creatively protect carefully nurtured plants from avian creatures, particularly woodpigeons. However, not all plants are ‘cared for’ in the same way, attachments are made with some, but others are discarded to the compost heap. As a situated “selective mode of attention” (Martin *et al.* 2015: 627), care demarcates and prioritises some lives, things or phenomena as its focus, while excluding others. In this sense, successful gardening was a matter of sustaining attachments and detachments.

6.3.3 Maintaining ‘Distance’: Slugs as Pests

No other creature engendered as much repulsion and disgust than slugs within all three CUFGs. Living in or on the surface of the soil, the ability of soft-bodied molluscs to leave gossamer-like trails of mucus as they thread their way through the entangled garden assemblages, devouring plant life, meant that they were an everyday, ubiquitous threat to the flourishing of edible matter (for human consumption). As one gardener commented, they “*are only pests when they eat our produce*” (Richard, fieldnotes, LSG, 04/06/14) and others articulated that their lack of aesthetic appeal resulted in them evoking such revulsion when they were encountered (Carol, fieldnotes, LSG, 30/07/14; Michelle, fieldnotes, LSG, 21/06/14; Francis, fieldnotes, GCG, 22/07/14).



(Figure 6.4: Slugs and snails devour strawberries within the forest garden at LSG)

Significantly, due to the lack of vegetative matter covering the surface and surrounding areas of both G1 and G2, gardeners reported less encounters with slugs compared to the other two case study sites. Gardeners at LSG frequently discussed them as an “*irritant*” and “*nuisance*” (Cath, fieldnotes, LSG, 09/07/14) describing them as pervasive pests. Lurking in the shady overgrown areas of vegetation, there were multiple reactions to the slugs once they had been ‘exposed’, particularly on warm, wet evenings (see Figure 6.4). Various gardeners confessed

to killing slugs and for some, they were quite comfortable to do so, with Cath stating that she “*hated them*” (fieldnotes, LSG, 09/07/14). Frustration for Cath stemmed from slugs frequently rendering her labouring care practices futile, given their prevalent consumption of carefully nurtured produce. The fact that they left explicit ‘evidence’ in the form of mucus trails added to her heightened annoyance (see Figure 6.5).



(Figure 6.5: Iridescent mucus trails left by slugs)

Indeed, Cath showed me these traces in the polytunnel on numerous occasions. Thus, growing produce is not always straightforward or rewarding. In contrast, other gardeners explicitly stated that slugs were part of nature’s interactive chain of life, if also an “*unwelcome reality*” (Hannah, fieldnotes, LSG, 17/06/14) as “uncomfortable companions” (Ginn 2014: 532), and therefore, focused on removing them by hand (with gloves), picking them off leaves or simply disposing of the largest black slugs to the confines of the compost heap, where they became part of the caring composting process. Some gardeners were uneasy killing slugs describing themselves as “*squeamish*” (Carol Interview, LSG) and favoured ‘placing’ them beyond the garden boundary, forming a ‘psychological’ separation, hoping they would not return. Controlling the ‘pests’ in a more ‘compassionate’ manner to protect produce was prioritised by some gardeners and was a matter of “*trial and error*” (Jenny Interview, LSG) through experimenting with companion planting and coffee grounds. These tactics were enacted to

find more careful solutions to eradicate the ‘pests’, what Ginn refers to as “killing mindfully” (2014: 541). By seeking to maintain detachment involves some form of connective spacing and therefore holds potential for more-than-human ethical relating. Notably, the creation of a pond within LSG was partly motivated in order to provide an environment for frogs, which would subsequently help eliminate slugs (and other pests) in such a way that aligned with organic gardening principles, based on a more care-full recognition of nonhuman difference (see Figure 6.6). Care in the garden therefore can be understood as improvised and frequently experimental, where in this case, ‘care for’ plants and ‘care for’ slugs are in tension.



(Figure 6.6: The creation of a pond to attract wildlife at LSG)

6.3.4 *The Complexities of Water Access*

The constant attention required in relation to watering the planters in summer months in order to keep the soil moist proved to be the most challenging aspect of growing produce within G2. A communal rainwater harvesting system was developed to collect precipitation, however, in the drier, warmer months the water levels in the storage tanks would become depleted, unlike G1 which had access to a mains water supply. As a response, individual rainwater harvesting systems were creatively developed by several gardeners, consisting of recycled containers attached to their planters, with canes and support frames. On several

occasions gardeners resorted to transporting containers of water to the garden when temperatures were particularly high, as described by Charlotte on a warm August evening: “I’ve brought three full water bottles from home today, because last time the water tank was empty” (Charlotte Interview, G2). Notably, the gardeners devised a system consisting of ‘please water me’ flags which were placed within planters during the summer months when members were unable to visit the garden, creating a collective arrangement whereby gardeners ‘cared about’ the wellbeing of their plants and others ‘cared for’ them by keeping them hydrated (fieldnotes, G2, 22/08/14). Improvisation regarding the water supply, therefore, was crucial to the maintenance of G2. Additional situated action, further entangled instruments and technology when water was siphoned from a main water pipe (see Figure 6.7) that was activated while a circus occupied the adjacent vacant site during August 2014, throughout the Fringe Festival, as Kate explains:

[W]e got permission to get water out of the canal and then eventually we got [temporary access to] mains [...] but we don’t have the festival connection anymore, so we are back down to rainwater at the moment [...] and it’s a really hot day and I can’t water my plants, because the two butts are dry (Kate Interview, G2).



(Figure 6.7: The festival connection: the complexity of gaining access to water)

Therefore, the gardeners returned to accessing canal water:

There is a wee pump, so Jack sort of mobilised that two people knew how to do it, so they did it for a week and then passed on the knowledge to another two people and then I eventually found out how to do it and shared it in a photo story [...] and that motivated more people to go 'oh okay, I can do it' (Kate Interview, G2).

As Kate describes, in some instances, water was utilised from the adjacent Union Canal which brought potential issues of contamination, however, gardeners did not see this as a particular concern. The Union Canal was revitalised as part of the £84.5 million 'Millennium Link Project' in 2002, the largest canal restoration scheme in Britain. As aquatic systems, canals have specific features including particularly low water flow where various external factors can influence water quality such as "industry, precipitation, surface runoff, stormwater drains, groundwater and navigation" (Carstea *et al.* 2014: 11), therefore, the possibility of pollution cannot be disregarded, particularly when growing food for human consumption. The pursuit of water to ensure the soil and plants were sufficiently hydrated rendered visible the everyday labouring practices needed to maintain and sustain life in a temporary CUFG. Caring in this instance was frequently a tiresome and monotonous task, involving a large degree of improvisation, adjustment and 'tinkering', adapting to the rhythms of the changing seasons (Mol *et al.* 2010).

All gardens collect rainwater in large containers capturing runoff from various structures including sheds. Rainwater catchment was an important practice for gardeners who sought to reuse a locally available (precious) resource. GCG does have access to an outdoor tap; however, the process of acquiring the service was protracted and at times arduous. Indeed, the CEC promised GCG water access when they initially began to cultivate the land, but only materialised three years later, once the gardeners gained support from several local councillors, thus, highlighting the continuous struggle gardeners face in asserting their right to basic amenities. However, further practical improvisation was required as the tap was placed at the back of a tenement building, where gardeners had to navigate two locked gates to gain access. Therefore, a hosepipe was entrenched underground leading to a standpipe situated within the garden boundary for convenience. Subsequently, they were able to experiment with makeshift deep irrigation systems (fieldnotes, GCG, 13/05/14). As only Site A and Site E have water access (Site E is located in the grounds of the community centre), watering cans

are filled and transported by wheelbarrow to the other garden sites, which can be a strenuous task, highlighting the embodied physical labour required to undertake the everyday mundane tasks of gardening resulting in aching limbs and blistered hands. Furthermore, the gardeners rely on the cooperation of neighbours, as Joe explains, “*you have to be quite informal with your solutions and it’s all about local support, where people will run a hose out of their kitchen window*” (fieldnotes, GCG, 13/05/14). This practice was also witnessed at LSG, where during the summer months, helpful neighbours supplemented depleted butts of harvested rainwater (see Figure 6.8).



(Figure 6.8: Rainwater harvesting butts at LSG)

6.3.5 Encouraging Attachments

Within the gardens, plants and people become “entangled through relations of care” (Power 2005: 46). As sites of experimental urban nature, the CUFGs sought to intensify ‘value encounters’ through “making companions” (Haraway 2008: 65) with nonhuman others, however, this was a selective process. Gardeners at TGCG discussed how the design of both G1 and G2 enabled people to develop weak attachments, where “*looking after the wee*

planters isn't that time-consuming" (Charlotte Interview, G2; Paul Interview, G2; Max Interview, G2). Notably, a sense of curiosity is needed to foster relations of care between people and plants, particularly in relation to their unique capacities or plant-agency. Gardeners developed and maintained affective, embodied relations with particular plants for various reasons: because of their taste and texture such as tomatoes (Michelle, LSG); for their aesthetic appearance such as sunflowers (Claire, G2); popularity such as potatoes (Joe, GCG); and importance for attracting bees (see Figure 6.9; Jenny, LSG; Judith, LSG; Todd, G1; Diana, G1; Grace, GCG).



(Figure 6.9: Encouraging bees into LSG)

Indeed, particular gardeners, such as Todd, an American postgraduate student and beekeeper, allocated the majority of his planter to the growing of bee-friendly plants including lavender and cornflowers, prioritising his care of bees owing to their vital role to ecosystem flourishing, over the direct production of food for his personal consumption. As he stated, *"this garden is not about feeding people"*, however, qualified this statement by articulating the importance of honeybees as pollinators, crucial to the food chain, where approximately *"a third of all food is pollination-dependent"* (fieldnotes, G1, 27/04/14). Thus, caring for bees entails a multi-scaled socioecological ethic of care for human and nonhumans. CUFGs provide one way to ground a care-full environmental project in the everyday, drawing upon people's ordinary socioecological concerns. As Loftus states, "we must reformulate

environmental politics on the terrain of the quotidian” (2012: xvii). Diana, however, expressed her concern at the lack of bees within G2:

I haven't seen many bees [...] The site that is next to us and beyond, they cut all the buddleias down on the side of the canal, I don't know why? I mean that's like a little green corridor [...] That would have set the butterflies and the bees along the way (Diana Interview, G1).

‘Green corridors’ play a vital role in maintaining and improving the biodiversity of urban ecologies where for gardeners, such as Diana, the flourishing of newly “introduced urban ecosystems” (Francis *et al.* 2012: 187) in the form of CUFGs were intimately entangled, however, problematically hindered, by insensitive ‘maintenance’.

6.3.6 Plants as Food: Produce as a Common?

The emphasis placed on communal food production for human consumption at GCG renders them distinct from the other CUFGs, in terms of the quantity of produce grown (see Appendix 4 for list), and also that land was cultivated as a collective. Central to their gardening ethos was that produce was shared among active members, local residents, and those with no direct long-term engagement with the project. This arrangement was both underpinned by an ethos of care and inclusivity to inspire more people to grow, join the garden, and consume healthy organic produce, and also a practical response to un-harvested plants. Indeed, gardeners articulated that people tended to be selective in the produce they harvest, explaining that “*strawberries and tatties were always popular, however, some produce such as purple sprouting broccoli grows faster than they can pick it*” (fieldnotes, GCG, 13/05/14). Notably, Grace, spent a great deal of time and energy ensuring *all* produce is harvested and consumed, where she believes food is a vehicle to “*foster a strong community*” (fieldnotes, GCG, 29/07/14). In particular, over 200 kg of seed potatoes were planted in the 2014 growing season and are extremely popular with gardeners and residents alike. Indeed, Robbie commented on the continuous supply of potatoes while we harvested a crop at Site D, and the enjoyment and satisfaction that emerged from gathering produce, “*where digging up the tatties was the best part of gardening*” (fieldnotes, GCG, 06/09/14; see Figure 6.10). While the majority of produce is shared amongst the active gardeners through attending workdays and community events, tensions do arise, and some gardeners articulated that it was

sometimes disconcerting when people who did not invest as much time into the garden and took (popular) produce such as potatoes (Sonia, fieldnotes, GCG, 06/09/14), reflecting that no official strategy was in place for allocating produce, remaining fluid and ad hoc, based on whoever is present at the time of harvest.



(Figure 6.10: Growing and harvesting ‘tatties’ at GCG)

The prominence GCG placed upon *collective* self-provisioning was multidimensional. First, growing food communally in a housing estate is a highly visible activity and a political statement regarding public use of space. Second, it provided people with the opportunity to produce and consume food that has meaning, grown with their own embodied labour, mending the ‘individual rift’ by de-alienating or “reengaging individuals with their own metabolism of the natural environment” (McClintock 2010: 202). Third, it sought to enable a relative degree of independence from the industrial food system providing a selection of decommodified organic produce. However, the low productivity of the garden in early spring did create a “*hunger gap*” (Joe Interview, GCG) where growing outside in the Scottish climate (without a greenhouse or polytunnel) limited a consistent supply of food. Nevertheless, the produce was a vehicle to ‘care for’ people, a material product to share, which enabled reciprocal social relationships based on non-capitalist exchange.

Therefore, what marks GCG different from the other case study gardens, is the conceptualisation of gardening as a medium to generate collective self-reliance based upon a notion of care that recognises our interdependence and the power of collective action, rather than liberal individualism. Consequently, the extent to which emancipatory potential resides within CUFGs lies in the ability of people to cultivate the power to produce urban environments (and food) in line with the needs and aspirations of those inhabiting these spaces. As Joe explains, *“previously people saw the streets as an unsafe space, people would hurry from the bus-stop to their flat or whatever, but having the garden, it was a bit like reclaiming the streets”* (Joe Interview, GCG). Thus, the production of the socionatural environment based on an ethos of ‘care for’ place (Till 2012) is enacted through embodied engagements, in which plants and people are a matter of practical care and attention.

Through the deeply sensuous engagements with socionatures, a grounded form of everyday environmental politics emerges (Loftus 2012). For Joe, collective food gardening was a practice of interconnected solidarity with small-scale farmers around the world, linked to an ethic of care aligned with food sovereignty. Crucially, in this context, rather than an expression of parochialism, urban gardening helps to disrupt the narrative of powerless citizens relative to powerful institutions such as ‘state’, ‘business’ or ‘capital’ and instead emphasises the collective ‘we’ and a socio-environmental responsibility that is empowering rather than burdensome. A major challenge facing the gardeners, however, is encouraging participation from the wider community, forging alliances with citizens and organisations to define the food that we eat from a social, rather than purely individual perspective.

In contrast, for members of G1 and G2, ‘community-building’ was of far more importance than the actual growing and consumption of produce, as Jack explains:

[A]t this point at its development it’s not a challenge to the local supermarket, but what it is, you are learning about collective learning, about how to be involved in a community project, you are creating things and learning how to garden, so it is much more an educational project than anything else, but it is in a very informal way (Jack Interview, G1).

Indeed, gardeners frequently articulated that G1 and G2 were sites of experimental urban nature that sought to intensify learning encounters with nonhuman others that transcended the consumption of food:

It's not about produce in a big way [...] most people are just doing it because they are enjoying the whole thing about growing. Some people are just putting flowers in, my son's plot is just flowers (Diana Interview, G1).

The motivation to grow different plants was diverse and not always related to food growing for consumption (see Appendix 4). For example, following the suggestion by Jessica, a member of G2, dye plants were grown including the native species weld (*Reseda luteola*) and woad (*Isatis tinctoria*), which produce yellow and blue colourings from their foliage, respectively, and therefore, can be used in creative activities (fieldnotes, G2, 07/09/14).

Notably, the balance between collective and individual ownership of planters was an issue to be negotiated at TGCG:

I like being individually responsible, you know, my courgettes are doing well and those courgettes don't belong to the community, they are mine, but today, I went and picked blackcurrants, I have them in a wee tub, and I'm going to make a jar of jam, I won't eat that, I'll take that if there is a picnic coming up, I'll bring the jam, this is from our [emphasised] fruit bushes, because the fruit bushes belong to everybody (Jack Interview, G1).

However, as Jack explains the communal aspects of food growing are tension-laden:

I had noticed that somebody had got to the gooseberries before I did, and there is no sign of them, so I am hoping gooseberry jam will appear on the table, otherwise I want to know why (Jack Interview, G1).

The balance between individual cultivation and collective commoning of produce is a contentious issue for certain gardeners such as Jack. Indeed, this happened on multiple occasions, the most controversial revolved around the harvesting of 'charismatic' plants such as communal artichoke heads at G1 (fieldnotes, G1, 01/07/14). After months of collectively

nurturing and watching them grow, gardeners were dismayed to find that they had been taken by a fellow gardener for personal use (see Figure 6.11). Therefore, while there was an implicit understanding that communally cultivated produce should be shared at community meals and celebrations, this incident demonstrated two main points. First, there was no specific mechanism in place to ensure a fair distribution of communal produce among participants, and second, even if rules are in place it is difficult to make people adhere to them.



(Figure 6.11: Artichokes grown in a communal planter at G1)

A similar arrangement between individual raised beds and communal areas was enacted in LSG, where a collective permaculture-inspired forest garden is populated with gooseberries, redcurrants, blackcurrants, and strawberries, in addition to apple and cherry trees, where the produce is shared between all members. The forest garden encapsulates the central space where individual raised beds are positioned (see Appendix 4 for list of produce grown). There were instances where tensions would manifest when gardeners gathered large amounts of produce from the communal forest garden such as strawberries for personal consumption (fieldnotes, LSG, 30/07/14). Conversely, when gardeners harvested produce from their personal raised beds and had a surplus, they were encouraged to place these items on the 'sharing table' for others to consume in order to reduce waste. Furthermore, to ensure all produce is harvested at the correct time, notes were written on the communal white board in

the shed highlighting when produce was ready to gather. The communal polytunnel is utilised to grow a range of produce including tomatoes, chillies, and peas (see Figure 6.12), which can create tension over responsibility to ensure the produce is adequately watered, usually falling upon a small group of active members. While gardeners maintain individual raised beds, similar to both G1 and G2, the quantity and selection of produce for consumption is markedly higher.



(Figure 6.12: The polytunnel at LSG, left: an abundance of tomatoes and, right: peas)

A particular nuance emerged in relation to the production and consumption of produce when Luke became a member of LSG with the prime objective to grow fruit and vegetables for Edinburgh City Mission (ECM) foodbank, where he volunteered. Luke was in the process of changing careers, from a translator with ambitions of becoming a Christian missionary. Having been unable to gain access to an allotment, due to the length of the waiting list in the city, he turned his attention to acquiring an outreach bed. As Luke explains, *“I know a lot of foodbanks won’t necessarily accept fresh vegetables but ECM agreed they would [...] so the foodbank plus the garden gives us the opportunity to care for people in a practical kind of way”* (Luke Interview, LSG). Thus, for Luke, the produce he grew was not for his own personal consumption but rather a ‘gift’ to the foodbank based on a specifically Christian ethic of care. This notion was grounded on an obligation to ‘care about’ and ‘care for’ the

wellbeing of wider society, particularly the vulnerable, and was based on a Christian responsibility of unconditional benevolence to those in need. Having examined how the nurturing of plants from seeds to human consumption highlights the practical tinkering (Mol *et al.* 2010) that is required to enable the agential qualities of biological matter to flourish, I now proceed to explore how sharing of food is crucial in forming bonds, friendships and informal care within and beyond the gardening collectives.

6.4 ‘Caring About’ and ‘Caring For’ Collective Human Flourishing

6.4.1 *Everyday Eating and Sharing as Care Practices*

The nurturing of organic plants into edible matter that can be shared and enjoyed by the gardeners is an integral element in fostering social connections. Eating food cultivated from the CUFGs, not only highlights how the politics of food is inseparable from the politics of socionature, but also draws attention to the intimate metabolic process of exchanging matter across corporeal boundaries. At LSG, the shared lunches on workdays provided an opportunity for people to gather together around the large wooden table (built by Richard) in summer or the veranda of the shed in winter to discuss and debate a variety of topics, including the development of the garden, forthcoming celebrations, or current affairs, in a convivial atmosphere. Indeed, eating is a practice, a form of nourishing care, and as Mol argues, meals are events, where they are “good events if they are *sociable* and *cosy*” (2010: 217; emphasis in original). The arrangement of flowers positioned on the table while sharing food reflects the importance gardeners place upon creating a relaxing and welcoming space (see Figure 6.13). Surrounded by the aesthetic and fragrance of edible plants, the everyday sharing of food in the garden facilitates multi-sensory experiences that enable the agential qualities of plants as a foodstuff to shape knowledge-in-the-making, “*prompting questions such as which plants are in season? And what can be eaten raw?*” (fieldnotes, LSG, 09/07/14). Growing plants for food enables gardeners to recognise how human and nonhuman lives are intimately and materially entwined through care and nourishment. Indeed, gardeners tend, weed, water and ‘care for’ the plants and the plants, by providing sustenance, care back.



(Figure 6.13: Freshly cut flowers arranged in a hand-painted glass jar)

The sharing of produce, a meal, or a cup of tea, in the non-commercial spaces of the CUFGs, are crucial to creating an atmosphere of conviviality and developing stronger affective ties between gardeners. As the below extract from my fieldnotes demonstrates, eating together reinforces the notion of CUFGs as spaces of sharing, exchange and nourishment:

As we sat down to eat, rummaging through my backpack I realised I had forgotten to bring my lunch, Cath recognised immediately, expressing concern and so together we embarked upon assembling a salad of lettuce and herbs from the garden and incorporating elements from her own lunch in which she shared boiled eggs, tomatoes, and cucumber. It was delicious. Cath always makes sure that everyone has something to eat (fieldnotes, LSG, 31/05/14).

While the majority of people brought their lunch from home, as the garden began to produce more food as the seasons progressed, a variety of fresh salad leaves, herbs, and tomatoes were

incorporated into meals. The absence of cooking facilities on site was restrictive and it was this void that led to the development of an outdoor oven during spring/summer 2014 (see section 7.5.1). While the consumption of organic produce from the garden was encouraged, not all food consumed aligned with the notion of ‘healthy eating’ (such as bacon sandwiches and goods from the local bakery). Indeed, vegans and vegetarians ate alongside meat-eaters; all food was welcome in their aim to make the garden an inclusive space. All CUFGs distanced themselves from moral prescriptions of ‘good food’ or ‘ethical choices’, they embraced eating together, whatever that may entail, not wanting to create any barriers to involvement. Consequently, while personal food choices were enacted by some people articulating that their commitment to local, organic, or vegetarian food (such as Hannah, LSG; Kate, G2; Charlotte, G2; Beth, LCGP; Paul, G2) was an ethico-politically informed decision, I did not witness any ‘moralising’ tensions during my time at the gardens.

The everyday consumption of produce within the context of GCG differs from the other two case studies in that all residents were encouraged to take produce whenever required, thus producing a fluid movement between the boundaries of public and private. For example, while attending a Tuesday workday in early September harvesting an array of potatoes, parsnips and carrots, Sandra, a local resident dropped by and Joe proceeded to assemble a large bag of produce and explained that she uses the vegetables to “*create meals for all the residents of her stairs*” and then articulated that this form of sharing produce and caring for others was “*what the garden was all about*” (fieldnotes, GCG, 06/09/14). Notably, the gardeners extended this ethos of not only producing but also consuming food together in the experimental development of a Gardeners’ Café (as described in section 5.4.4), where produce from the gardens was utilised to create communal meals for all the neighbourhood to enjoy on a pay-as-you-feel basis. Thus, their attempt to effect change at the community-level orientated around the sharing of food in order to enact in the present the changes they would like to see on a broader scale: such as addressing community food insecurity; replacing the stigma attached to using foodbanks⁶⁸ with an empowering narrative of collective self-determination; and create opportunities to eat together to share stories, knowledge and experiences:

⁶⁸ The Trussell Trust documented that in 2014-15, over a million people accessed and utilised foodbanks in the UK (The Trussell Trust 2015) with 117,689 people receiving food in Scotland.

In this area we have got two foodbanks⁶⁹, which are reporting loads of people showing up who literally don't have any way to get food that day, and the use of them are going right up. So we are kind of working on the question, if we all look after each other, we all should be alright, we can grow loads of stuff, we can grow it and eat it, maybe it works better if we do that together sometimes, instead of us all going into our wee flats cooking on our own. So it is a bit of an experiment in that we can build a bit of momentum around people, where everyone can do something to get involved, either gardening, harvesting, washing veg, doing décor, making a poster or clearing tables, that is kind of the vision (Joe Interview, GCG).

Thus, the café became a vehicle to care for those who are vulnerable to social isolation and food insecurity, and sought to rearticulate collaborative social relations around food. Indeed, where caring is absent, there is an obligation to care which “calls upon a commitment to *share* troubles and burdens of those who are neglected” (Puig de la Bellacasa 2010: 165; emphasis in original). The gardens and café are purposely characterised as embodying a different ethos to the proliferation of foodbanks in the area, which community activist John compares to “*sticking a plaster on a broken leg*” (John Interview). Notably, foodbanks are positioned as ‘lifelines’, momentarily caring for the most food-insecure in society. However, in contrast, GCG articulated a different temporality of care. As Tronto argues, “[t]ime spent caring is not about mastery and control but about maintenance and nurturance” (2003: 123). The gardeners emphasised a distinct expression of care based upon long-term inclusivity and relative stability, where from the standpoint of care, relationships are nurtured and “grow only in their own time” (Tronto 2003: 123). Therefore, while not claiming to be a direct substitute at present, and were only in an embryotic stage of development, GCG articulated a vision to build community resilience from within based on collective action and support, with a desire for broader progressive change, such as the implementation of a living wage to ensure people are adequately fed. Indeed, for Joe, Polly, Sonia and Grace, food insecurity is socially and ethically unacceptable, thus place, is “not a thing, but a way of seeing and focusing – an entry point” (Gibson-Graham 2002: 32) to practice, experiment and perform more caring production-consumption relations.

The Gardeners' Café is a warm, welcoming space where people can share a meal together to overcome social isolation. I experienced this myself when I would eat at the café after

⁶⁹ Run by Edinburgh City Mission, ‘Basics Banks’ are located within churches in Granton.

attending gardening workshops, where people would frequently relay to me how it was a safe, comfortable space with Fraser stating, he “*didn’t have to think about getting food today*” (fieldnotes, GCG, 03/06/14). Soup, a mainstay on the menu, is particularly emblematic, an assemblage of garden produce, diced together and simmered in stock, is a comforting and satisfying meal to nourish the soul. Thus, GCG are endeavouring to foster nourish-able spaces in that they ‘look after people’ in varying ways: learning new skills, improving health and wellbeing, and enriching social friendships by sharing food together. However, first and foremost, before people can participate in everyday gardening practices, they need to be nourished through the transformative flows of enjoying and metabolising healthy food (i.e. nourish-able, in the sense of having the energy, skills and opportunity to do so). The café was therefore a vehicle to facilitate people other than the gardeners to thrive physically and socially, where they endeavoured to “seek to improve a situation—whatever ‘improve’ may locally mean” (Heuts and Mol 2013: 136).

6.4.2 Caring for the Collective Through Celebrations

The sharing of a meal is particularly important whereby the communal experience of eating food was seen as a tool to break down discursive barriers between people and build solidarity between those who “*break bread*” together (Luke Interview, LSG). As Luke explains: “*food is something that you can sit around a table and share. There are all sorts of things going on in terms of acceptance, it’s an intimate thing sharing, and it breaks barriers down, I suppose food is something we all need, you can’t live without it and in terms of communion it’s symbolic*” (Luke Interview, LSG). Indeed, Parham argues, a “shared meal around a material or metaphorical table expresses conviviality by reaffirmation and solidarity, marking daily life, the seasons and stages in agricultural production, especially the harvest. It is symbolic of family, kinship and other social ties” (2015: 20). Thus, the exchange and sharing of food at community meals, gatherings and events, in particular physical spaces, become potent empowering tools to enable marginalised groups to envisage and enact emancipatory alternatives.

Gardeners at GCG relayed how sharing a meal was just as important as the growing process. In the early stages of the garden’s development, members would meet in the local community

centre for a potlatch⁷⁰ supper, “*where everyone would cook something from the garden as much as possible, so about a dozen or fifteen people, we did a few every few months and became a wee tradition of their own*” (Joe Interview, GCG). Once connections and relationships had been forged with paid employees at the community centre, they began to organise large-scale communal meals, the first of which was a ‘Harvest Meal’ in October 2013, publicised through posters and a Facebook page and was attended by sixty residents, as Joe describes, “*we just invited everyone, we just said we have been growing this stuff in our gardens we are going to cook it all, and all neighbours are welcome and it was just a really good event, quite an unlikely mix of people all sitting down to eat together*” (Joe Interview, GCG). This was followed by a further celebration in December 2013, which reached the capacity of the venue, therefore, subsequent meals were arranged in the large sports hall of the community centre. Indeed, due to their popularity, the gardeners partnered with the ‘Living in Harmony’ initiative based at PCHP which as Sara, Food Development Worker explains, aims to “*bring BME [Black and Minority Ethnic] groups together in North Edinburgh*” (Sara Interview) to arrange a Burns Night ceilidh with ‘haggis, neeps and tatties’⁷¹:

[T]he event was ticketed, but tonnes of people showed up at the door, and I was at the front desk [...] and people kept coming in to tell me that you can’t let any more in, it’s too busy, but I just couldn’t turn them away, they were people I knew, who had just walked around the corner and they came with their kids, all dressed up, you can’t turn them away, it would have been wrong (Joe Interview, GCG).

The fact that Joe could not turn anyone away highlights an ethic of care for the community, where he did not want to alienate anyone from the celebration. As John highlights, celebrations are collaboratively constructed embodied experiences that are co-created by participants coming together in locally grounded communal festivity. In this sense, the

⁷⁰ A term frequently used by gardeners to describe their collective eating arrangements whereby an abundance of food is prepared, cooked, and shared between a group in a gift-giving format. The term originates from the Native American winter festival where food was gifted in an extravagant arrangement [Chinook, from Nootka *Patlatsch*, a gift] (*The Chambers Dictionary* 2011).

⁷¹ A traditional Burns supper, held on the 25th January, is a celebration of the life and poetry of Robert Burns (1759-1796), consisting of *haggis*, a Scottish dish made of the heart, lungs, and liver of a sheep or a calf, chopped up with suet, onions and oatmeal, seasoned and boiled in a sheep’s stomach-bag, or a substitute; *neeps*, a Scottish name for turnips; and *tatties*, a Scottish name for potatoes.

sharing of food is not only an intercultural exchange, but also a political statement, which can support decommodified ways of exchanging and engaging with food:

The 250 people who turned up at the Burns Night, that was a great night, that was an indication of what could be done, I think the Sunday dinners and the get-togethers, sharing of food, it is a way of bringing people together, and people laugh and smile and it's also a way of overcoming some of the separation that comes from having different cultures, Eastern European, Sudanese, Nepalese, coming together [...] I do think it has a cohesion, a cement, and it can be a rock to which the community can stand on, and it can be an indicator for a different kind of world, or a different kind of way we can operate and work (John Interview).

As Nettle has argued, events that urban gardeners arrange “reflect their beliefs about what is worthy of celebration, often assigning new meaning to traditional rituals” (2014: 149).

Indeed, the particularly nationalistic celebration of the life of Robert Burns was reinterpreted at GCG as an intercultural event: where readings of traditional Scottish poems; performances by a Nepalese dance troop; a ceilidh band; and a contemporary dance act, coalesced to celebrate the area and its residents. Indeed, for all CUFGs, community celebrations were not seen as marginal occurrences, but a central feature of urban food gardening practice.

Gardeners were particularly passionate and proud of their large-scale community celebrations where eating food together was an integral element. A central component of G1's first birthday party was the sharing of food in a potlatch format. Louis, a gardener and chef, prepared a selection of stir-fry dishes utilising produce from the garden. Thus, particular food materials helped create a welcoming, convivial and engaging space. Indeed, the party ended with a spontaneous ceilidh reinforcing the notion of the garden as a space of celebration.

Members of LSG placed great importance on friendship in sustaining the gardens and saw the various celebrations they organise throughout the year as a way to recognise all the hard work that goes into maintaining the garden. The Spring Equinox Party I attended pertinently highlights this point, where people shared food in a potlatch format and celebrated the arrival of spring and the forthcoming planting season (fieldnotes, LSG, 22/03/14). Indeed, these cultural events organised by gardeners reflect the seasons, marking harvests and solstices. Furthermore, gardeners at LSG frequently organise and attend community meals beyond the arbitrary boundary of the garden to nurture social networks. Indeed, gardeners continually

invited me to share their experiences of communal meals. For example, in January 2014, they prepared and cooked a Burns' Lunch for residents of Lochend and Restalrig at the local community centre, attended by a large proportion of elderly local people. The event included music, poetry recitals and the 'piping in' of the haggis (by Richard) and was an attempt to forge connections with the wider community and promote the newly autonomous garden and enrol potential new members (fieldnotes, LSG, 23/01/14). The importance of fostering connections between members of different local food projects throughout the city is highlighted by gardeners from LSG along with GCG attending a seasonal meal of vegetarian curry (comprising of locally grown produce) at 'The Kitchen', Fidra Court, Muirhouse, hosted in conjunction with PCG (fieldnotes, Fidra Court, 03/05/14). These gatherings illustrate the importance of events which have a social, rather than an explicit gardening focus. Nonetheless, not all members are involved to the same extent in social events, and many do not attend at all, however, this is not to detract from the importance of these gatherings for those who do actively engage and learn about other projects (Cameron *et al.* 2011).

Similarly, gardeners from TGCG, utilised the annual Canal Festival in Fountainbridge as an opportunity to open its doors to the public: "*As I walked along the canal experiencing the multiple stalls and live music, there were several posters and chalk messages wrote on the pavement encouraging people to explore the garden*" (fieldnotes, G2, 21/06/14). Celebrations, therefore, had several purposes: they publicised the gardens' achievements beyond their 'boundaries'; endeavoured to entice new members; provided opportunities for informal learning and skill sharing; and sought to develop affective and emotional attachments amongst the gardeners and between human actors and nonhuman natures, to help sustain involvement and participation

6.5 Chapter Summary. Care as Multiple in Collective Urban Food Gardens: 'Caring About' and 'Caring For'

6.5.1 Care-full Gardening

Gardening is a dynamic relational process that involves repetitive, mundane activities and practices that create and sustain the CUFGs. Gardeners 'care for' CUFGs in a multiplicity of ways, by composting and nurturing the soil, watering, pruning, weeding, selecting seeds, all

of which are enacted in ways that seek to enable lively matter to flourish. In this sense, care is a 'doing' that involves a variety of activities that are continued throughout the seasons in collaboration with nonhumans. I have also sought to demonstrate that both humans and nonhumans 'care for' a multiplicity of others within CUFGs. However, this is not based upon a symmetrical understanding of an abstract equality between species, but recognising the capacities and vitality of the more-than-human in terms of 'care for' our interdependent existence. Indeed, the 'care work' of earthworms was certainly not the *same as* that of the care activities of a human gardener ensuring all participants were adequately fed on workdays, nor am I claiming that earthworms or any other nonhuman intentionally cares for humans, but I am suggesting that recognising the liveliness of the more-than-human in terms of care, enables gardeners to be sensitive to the multiple others who 'produce natures'. CUFGs therefore are a terrain for everyday more-than-human eco-political actions, I suggest, because they enmesh and collate multiple different entities and activities situated in a particular time-space. In this sense, care is political, because it holds together an array of emotional, practical and ethical relations, always subject to reorientation. However, while 'care' in the gardens is a way of *relating* to a multiplicity of others, it also seeks to maintain *detachments* by finding more care-full ways of mindful killing (Ginn 2014), highlighting how the ethical aspects of gardening emerge from mundane actions and encounters (Puig de la Bellacasa 2010).

As discussed in Chapter 5, the gardens are always in flux and are fragile relational entanglements. In this chapter, I have demonstrated that a multiplicity of situations and entities demand diverse forms of attention. It is these multiple ways of caring and the diverse rhythms they embody which holds the collective together, however, as I have previously highlighted, this does not mean that recognising our interconnected being, generates a moral obligation towards nonhumans in the abstract (Lulka 2012). Care can fail to materialise for certain creatures, and often prioritises the human. Across all three sites, certain processes and practices relating to urban metabolism were reworked based on a lived sensuous tacit understanding of urban nature, which gestures towards how we might take forward an everyday environmentalism (Loftus 2012), which values quotidian experiences and implicit activism which proceed without fanfare (Horton and Kraftl 2009) that seek to engender joyful and more socioecological sustainable relations. Indeed, rainwater was collected and utilised, compost was tended to and created, and in some instances, food waste was recycled

through vermicomposting projects. These were modest attempts to enact and re-use locally available resources, however, there were no attempts to close the whole food cycle.

6.5.2 Cultivating a Caring Ethos: To Be Affected

While I have focused upon the actually existing care practices enacted in the gardens, I now turn to reflect on whether participation in gardens cultivates a caring ethos. Enacting care practices entails being affected, to be moved in some way to take action. In this sense, people need to be affected to be effective (*Precarias a la Deriva* 2006). From this research it was evident that mere ‘interaction’ with various entities, such as earthworms or soil do not foster caring attitudes or action in isolation. While CUFGs engender multiple constellations of encounters with various human and nonhuman agents, I argue that people must be *curious*, which I define as being open to difference and to be affected, to engender meaningful care relations. I contend that without a sense of curiosity for the other, in terms of its needs, agency or possibilities, it is very unlikely that care (particularly for the nonhuman) can be cultivated. For the gardeners who placed emphasis on encouraging people to ‘care for’ more-than-human animals, plants and environments, they stressed the importance of long-term cultivation of dispositions and capacities of people through informal knowledge exchange and everyday practices. For Charlotte, “*you can’t make people care*” (Charlotte Interview, G2), but by recognising that we are always entangled within interconnected everyday relations of care that link all inhabitants of the planet together forming a “complex, life-sustaining web” (Fisher and Tronto 1991: 40), people can (and do) learn to be affected where “the more contrasts you add, *the more differences and mediations you become sensible to*” (Latour 2004: 211; emphasis in original; Cameron *et al.* 2011; Gibson-Graham and Roelvink 2009). Therefore, an ethos of care can develop in relation to a multitude of things, by recognising and responding to the mundane socioecological entanglements we are immersed within. Crucially, it was the intensity and quality of the encounters that people developed within the CUFGs that determined caring attachments, highlighting that care “only varies its intensity, its qualities, and its form of organization (more or less unfair, more or less ecological)” (*Precarias a la Deriva* 2006: 41). Consequently, care can manifest in multiple ways, and within the CUFGs was based on practical tinkering to improve a situation (Mol *et al.* 2010).

I argue that caring is always context dependent and therefore, ethical obligations are grounded in the everyday ethical doings that entangle gardeners with more-than-human worlds (Puig de

la Bellacasa 2010). Consequently, generalised ethical sensibilities may not transverse the garden boundaries, where a particular mode of care may not easily translate into another situation (Puig de la Bellacasa 2012). Encouraging people to ‘care for’ the collective (humans and nonhumans) is not straightforward. Within feminist care ethics literature, there is a tendency to request or recommend that we should care and thus make moral demands of agents. However, following Puig de la Bellacasa (2010) I argue that care can develop an ethical capacity from having your hands in the soil and therefore, can be not necessarily normative. Conceptualised this way, I believe demonstrates how care sometimes fails to generate ethical sensibilities which transcend the garden places. Indeed, the ability to ‘jump scales’ (both mentally and physically) and link the everyday care practices enacted within specific garden entanglements to broader ethical concerns did not always materialise. Certain gardeners recognised this as the “*big leap*” (Alex Interview, G2), where while relatively ‘easy’ practices such as consuming more fresh, organic fruit and vegetables, recycling or composting can be interpreted as everyday expressions of care (for self and others), this did not always develop into a broader care ethic for those at a distance (Massey 2004). Indeed, the majority of gardeners placed importance on meeting the needs of their neighbourhood, and therefore could be considered as parochial urban interventions. However, I am cautious to dismiss the actions of grounded practices purely because they fail to ‘jump scales’. Indeed, understanding care as a dynamic relation enables care to be regarded as a flow relating to all practices directed towards the (re)making, maintenance and care of all kinds of entities and their environments. However, fostering subjectivities that align with democratic socioecological justice and connecting urban gardening projects remain large challenges.

6.5.3 Care as Politics: Food as Sustenance, Celebration and Commons

All humans have the unavoidable need for food in order to stay alive. Given its centrality to human flourishing, gardeners seek to cooperate in both producing and consuming food, where not only is hunger satisfied, but alliances and friendships are forged (Bowlby 2011). Thus, fulfilling this need collaboratively, creatively and socially in a collective setting, can engender bonds between various people, as highlighted by the numerous collective celebrations all gardens organised. I argue the sharing of a meal consisting of collectively grown organic produce is an accumulation of a multiplicity of implicit activisms (Horton and Kraftl 2009), where an array of ‘small acts’, from the turning of compost, the nurturing of seedlings and the sharing of knowledge, coalesce to make a powerful political statement regarding the

possibilities of collective care. Thus, I contend that the “politically radical character of care” emanates from the nurturing of interactions beyond those of commodity relations, where “one gives without knowing, what, how, and when one will receive something in exchange” (*Precarias a la Deriva* 2006: 40). Indeed, this was witnessed when gardeners at GCG would ‘gift’ produce and seed to local residents without any expectation of anything in return, only that food is shared between people collectively and enjoyed. In this sense, the notion of care *as* politics emerges within dynamic relationships between different agents and environments, which are ethically positioned in contrast to priorities of individualism, choice and commoditised consumption. CUFGs, therefore, not only have the potential to foster new forms of cooperation and connection emerging from patterns and feelings of neglect and abandonment but also creativity and curiosity.

As discussed by multiple gardeners, perhaps the most potent effect of the CUFGs is that they are visible and dynamic expressions of care (in all the complexity and nuances of that term), as Claire states, “*the garden shows [...] we care about the neighbourhood, [and] urban food growing*” (Claire Interview, G2). I maintain therefore that care, is a radical concept in relation to everyday life, which can be understood as an attitude towards the world, in contrast to social abandonment or isolation. I argue that the embryotic forms of commoning, in relation to the spatial aspects of the CUFGs and the produce gardeners cultivate, materialise from an ethos of care, by recognising that care generates life, nourishes it and makes it grow in radically different ways to neoliberal logics of the imperative of profit. However, this process was tension laden, where self-interest and collaborative action were in tension on multiple occasions, highlighting the micro-politics that emerge within communal projects. However, making places that prioritise socionatural relations that seek to foster socioecological processes in more equitable and care-full ways (regardless of contradictory practices) enables us to imagine worlds where “the profit economy could be replaced by the ecology of care” (*Precarias a la Deriva* 2006: 43). In this sense, the CUFGs can be understood as microcosms of creative possibility, encounter and play, to which I now turn to explore in Chapter 7.

CHAPTER 7

THE ENCHANTMENT OF SOCIONATURES: CREATIVITY, CARE AND KNOWLEDGE COMMONS

7.1 Introduction

This chapter explores the ways in which CUFGs provide opportunities to enhance the capacity for both collective and individual (however, always interconnected) learning through various tactile embodied multi-sensuous experiences such as spontaneous encounters, informal workshops, communal workdays and city-wide skill sharing networks, where knowledge is generated, utilised and diffused. Focusing upon the creative, experiential practices which emerge from the specific everyday contexts of the CUFGs, highlights the significance of sharing knowledge in relation to the production of food *and* experimental artistic, imaginative endeavours. Thus, examining the “vernacular creativity” (Edensor *et al.* 2010) that is fostered and mobilised as part of knowledge exchange relations, can valorise the endeavours of marginalised and disenfranchised groups, disrupting traditional understandings of what is considered to be ‘creative’ and where it might reside (Milbourne 2010).

Furthermore, the importance placed upon the free exchange of knowledge and skills which seeks to decommodify the production of information through embodying an ‘open-source’ ethos is crucial to understanding CUFGs as (imperfect and embryotic) knowledge commons. Moreover, by examining the multiplicity of creative workshops that interweave practices of care, skill sharing and collective labour, emphasises the knowledges generated and shared within CUFGs and between a broader urban gardening network, which acts both as a collective resource and a mechanism that defines, forms and helps re-create the CUFGs (Eizenberg 2013).

As socioecological urban interventions in which creative spatio-temporal practices are enacted by multiple agents that seek to intervene in the everyday life of cities, the CUFGs are ‘living laboratories’ of creative experimentation where gardeners can learn from each other. In this context, Lefebvre’s notion of ‘creation’ is pertinent; to signify the multifarious ways gardeners deploy creative and deeply sensuous everyday practices to reconfigure the socionatural processes that produce socionatures. As Lefebvre provocatively states:

Let everyday life become a work of art! Let every technical means be employed for the transformation of everyday life! From an intellectual point of view the word ‘creation’

will no longer be restricted to works of art but will signify a self-conscious activity, self-conceiving, reproducing its own terms, adapting these terms and its own reality (1994: 204).

Lefebvre's invite to "Let everyday life become a work of art!" of course does not simplistically imply that everyone should become artists, but that creative methods and approaches should be extended to the production of everyday life itself. I argue, the intricacies of vernacular creativities and collective learning, which form the creative knowledge commons that sustain the CUFGs, open up the imaginative possibility of a more-than-capitalist world. Indeed, the gardens are pedagogical spaces where diverse and multiple feelings of possibility and modes of re-imagining socioecological future configurations can be cultivated. Moreover, flows beyond the permeable garden 'boundaries' are intensified with the creation of a grassroots, self-managed 'Germination' network of skill sharing and knowledge exchange. The network generates and harnesses the curiosity of urban gardeners in relation to the interconnected dependencies of humans and 'nature' through a process of de-alienation by building socioecological knowledge into everyday practice (McClintock 2010). Furthermore, participants also learn to be affected by other gardens (Cameron *et al.* 2011) in forging connections between various gardening projects with diverse perspectives and organisational structures to nurture a supportive interwoven web of care. This chapter consists of two parts, the first examines the creative endeavours, collective workshops and experiential learning that takes place within the case study CUFGs. The second explores the embryonic development of the city-wide Germination skill sharing network.

PART I: Collective Urban Food Gardens as Knowledge Commons

7.2 Experimentation, Creativity and Play

The CUFGs are places where everyday creative explorations and expressions are seeded, and where experimentation is expressed in diverse ways. Indeed, gardeners are encouraged to generate and explore their own vernacular creativities (Edensor *et al.* 2010). In this sense, just like plants, creativity must be nurtured. In order to be creative, the gardeners are encouraged to let go, to play and accept the novel and 'useless' as a form of "creative resistance" (Walter 2013: 523) to the intensified surveillance, control and elite consumption of urban space. As Sayer argues, "[w]e are playful beings, not just in the childish sense but in the sense of

finding change and experiment appealing” (2011: 114). Indeed, play, far from being trivial, is merely a high-level form of interactivity, engagement and connectivity, where we are unrestricted and prepared to entertain the intermediate impossible, where an idea is just fun to think of, which might lead somewhere interesting, or may not. Play and experimentation could be interpreted as relatively marginal concerns in the context of the increasingly precarious socioeconomic conditions of various members of society such as the long-term poor, young people and students with few employment prospects or the ‘squeezed’ middle-class (see Mayer 2013), heightened by austerity politics since the financial crisis and economic recession. However, I argue that the ability to imagine and desire new ways of being with each other, both human and nonhuman, is crucial to (re)invigorating collaborative action (Gibson-Graham and Roelvink 2009), through playful affective labour based on a more-than-capitalist agenda.

7.2.1 *The Curious Case of Alice in Wonderland*

Whilst all three CUFGs are relatively recent interventions within the urban fabric, the development of G2 during my fieldwork afforded the opportunity to actively participate in the initial formation process. Central to gardeners’ ethos was a sense of creativity in terms of both design and conceptual openness, where the vast amount of space enabled large-scale, experimental, DIY artistic and architectural urban interventions to proliferate in contrast to the highly orchestrated design of G1, implemented primarily by professional landscape architects. From its inception, G2 was a place of artistic freedom and engagement, “*a melting pot of ideas and interactions*” (Charlotte Interview, G2), which drew inspiration from multiple sources including, literature, art and architecture:

Except for the Heras fencing around the boundary allocated for the garden, the space emits an aesthetic of austere minimalism. Underfoot the ground is uneven with coltsfoot (Tussilago farfara) breaking through the surface together with lengths of industrial metal. The gardeners enthusiastically recalled how on one of their first visits to the site they had found a discarded copy of Alice’s Adventures in Wonderland, its pages flapping mercilessly in the wind (fieldnotes, G2, 12/04/14).

The micro-geographies of place, such as the encounter with the Lewis Carroll novel, *Alice’s Adventures in Wonderland* (AAIW) influenced a range of creative endeavours and practices

that enliven and sustain G2. The novel, therefore, was much more than a found object, but a stimulus to cultivate curiosity in an ordinary space. Not unlike Alice who “opens the door to her wonderland” (Douglas-Fairhurst 2015: 13) the gardeners themselves were able to weave their idiosyncratic interpretations of the novel into the very fabric and affective atmosphere of the garden. Indeed, in those initial visits to the ‘vacant’ expanse, it was only in their imagination – in their dreamscape – that the garden ‘existed’, as Kate explains:

When the site first started it didn't look like this, it was just leaving a lot open to imagination, and not everyone gets it, they just go 'argh!' [...] but that's the whole thing that is so great because then people go right, this needs doing, it is a whole different reality to our dreams (Kate Interview, G2).

As Alex described, the CUFG was a curious adventure “*into the unknown*” (fieldnotes, G2, 12/04/14), where unlike G1, they had greater creative freedom to plan and assemble a place of possibility through the process of everyday vernacular creativity (Edensor *et al.* 2010), where a multiplicity of activities, materials, and ideas were involved in the creation of various socionatures. Thus, a process of improvisation, a continuous “adjustment and response to the conditions of a world-in-form” (Hallam and Ingold 2007: 3), unfolded within the garden. Central to the creativity emerging from G2 was balancing the regulations stipulated by the developers, while simultaneously positioning the garden as a place not pre-defined or overly restricted by rules.

Various gardeners utilised AAIW as a reference point for their creative undertakings and was a source of enchantment; as Bennett asks, “why must nature be the exclusive source of enchantment? Can't – don't – numerous human artifacts also fascinate and inspire?” (2001a: 91). This is exemplified by Laura, a member of the CUFG and local artist, who drew inspiration from the novel to create a painted mural, which adorns the storage container (see Figure 7.1). The mural depicts Alice in the garden surrounded by giant flowers while waves swirl around her (referencing Chapter 2, The Pool of Tears, in AAIW). This explicit creative reference was juxtaposed with Sue, who upon watching Laura paint the ‘Alice in Wonderland’ mural, while tending her planter, took subtle inspiration. She discussed how it made her think of the song ‘All in the Golden Afternoon’ from the Walt Disney (1951) cartoon adaptation of the *Alice* books and singing it with her two children when they were young: “*You can learn a lot of things from the flowers. For especially in the month of June*”

(fieldnotes, G2, 21/07/14). She recalled how she was particularly fond of the brightly coloured pansies⁷², and therefore decided to plant this variety in several containers.



(Figure 7.1: Creatively interpreting Alice in Wonderland at G2)

The development of G2 fundamentally enabled gardeners to create a multi-sensory space that was conducive to curiosity, assisting members to observe and experience ordinary objects differently. This is saliently exemplified by a canoe cast adrift in the garden, resting on the gravel surface, a reference to the adjacent canal and its links with the Forth Canoe Club. It functions as an item of play, an interactive, imaginative object that intrigues both children and adults alike. Indeed, the garden is full of items that at first glance would seem out of place within an urban food growing project: a porcelain sink filled with soil and a plastic figurine of Darth Vader nestled within it; plastic ‘trees’ constructed from recycled bottles; repurposed rolls of artificial grass used both as an informal stacked climbing frame and a covering for the uneven ground. Indeed, various assembled structures and objects stimulated sensory responses that helped initiate and sustain curiosity in the garden. In this context, Bennett’s

⁷² In Chapter Two: The Garden of Live Flowers in *Through the Looking-Glass* a range of flowers are mentioned including: rose, lily, violet, larkspur, and daisy.

(2010) conceptualisation of matter's vitality is pertinent. Indeed, she invites us to stand back in wonder, to feel the energetic powers of matter, where things vibrate, and see the world in these terms. Significantly, she also imagines that by doing so, we will be influenced to live and act differently, fostering ethical sensibility towards the more-than-human. I argue that in the context of the CUEGs, curiosity engendered attentiveness to a variety of assembled vibrant matter for some gardeners, however, for others no such disposition was stimulated. However, as one gardener highlighted, the use of a whole array of recycled material in the garden, not only provoked discussions regarding waste locally, but also globally:

There's no such thing as waste in nature, everything gets returned, used, recycled. I think we have tended not to think about where that plastic bottle or bag or whatever goes to, where it ends up, just some landfill that is someone else's problem [...] if you look around both gardens, they are full of things that are considered waste, that's the issue, there is no such thing as waste, it's a mind-set thing (Paul Interview, G2).

In the garden, 'waste' was a resource, where the recycling of all types of matter; food and plant material to create compost, rainwater to hydrate the soil and repurposed wooden pallets to create growing containers, were articulated as a form of everyday environmental ethics which also had economic advantages, as Diana explains, "*we buy very little*" (Diana Interview, G1). Indeed, Robert, was keen to highlight at a North Edinburgh Community Garden Network Event that they "*are managing with bits and pieces from freegle and freecycle, acquired from elsewhere*" to create the infrastructure of the garden (fieldnotes, 13/05/14). Improvisation and working with whatever was at hand highlights the messy ways activities, materials and affectivities are interwoven in everyday life. Indeed, the immaterial atmosphere of creativity, articulated by the gardeners as being crucial to G2's essence, is somewhat dependent upon a maelstrom of materialities. Found or recycled materials (that go beyond 'typical' gardening objects) were key agents in the making of other creative assemblages and urban learning (McFarlane 2011). Improvisational learning "takes place by seeing not just materials, but *possibilities* – in this case of bringing materials into new interactions" (McFarlane 2011: 36; emphasis in original). As within AAIW, although discussed by its members, certain aspects of the garden "refuse to be explained away" (Douglas-Fairhurst 2015: 18). These various vernacular 'art installations' such as a recycled plastic bottle 'tree', not only sought to disrupt the pervasive dualism between 'nature' and 'society' by provoking discussion of what urban nature is or can be, and what does and does

not belong, but also encouraged people to engage in further communal artistic activities within a complex milieu composed of a plethora of lively urban flotsam, swept upon the shore of creative possibility.

The assortment of plants, animals, humans, baskets, lost shoes and canoes, to name a few, which coalesce to form the garden, each makes room for the other to ‘dwell’, engendering a particular understanding of the garden as a radically socionatural assemblage. The subsequent arrival of Laura’s campervan to the site (see Figure 7.2) and its transformation into a communal library and meeting space extended the notion of the garden as a space of imagination, play and reciprocity (fieldnotes, G2, 25/07/14). To those who enter the garden, a complex political ecology is encountered provoking many to contemplate our interdependence with all matter of ‘things’. In this sense, ‘sustainability’ or how to live with various others, becomes something to actively explore through gardening practice. Thus, curiosity is not necessarily easy or comfortable.



(Figure 7.2: An assemblage of urban flotsam)

As Paul Chatterton has stated, “[l]ike an Alice in Wonderland who has found herself in the city, we need to dream six impossible cities before breakfast” (2010: 235). In this context, the garden can be considered a collective interpretation of what an “urban impossible – being simultaneously within, against and beyond the current urban condition” (Chatterton 2010: 236), may be in the present, continuously in flux, a city yet to come. Indeed, gardeners are

well aware of the doubled-edged sword that the temporary garden presents – in that it both resists and is co-opted by neoliberalism, together subverting and reinforcing existing power structures (as discussed in section 5.2). As Fellner *et al.* (2012: 748) state, critiquing “what exists create spaces of resistance, cracks in the edifice of power with potential to transform; but these ideas are simultaneously absorbed, co-opted, and repackaged by the powerful to serve their own goals”. Therefore, despite contradictory socioecological relations, the garden strives to be a more-than-capitalist endeavour that is both a symbolic and material manifestation of a more playful urban political ecology. Indeed, Laura articulated that the garden is a space where experimental play, imagination and creativity can be the basis of collective socioecological action (fieldnotes, G2, 11/08/14). This renders the garden more than simply a place to grow food in the city. Indeed, gardening is about “regaining control over ‘cultivation’ and reappropriating not only the material space of the city but the imagination itself” (Newman 2015: 31).

While there were multiple expressions of individual artistic endeavours at G2, emphasis was also placed upon the collective possibilities of creativity where members were able to participate in numerous communal, collaborative workshops. For Jack, the garden is “*learning about being a collective, learning about how to be involved in a community project where you are creating things*” (Jack Interview, G1). Gardeners believed that the conceptual ‘openness’ and the physical capacity of the G2 site, in terms of its size, facilitated the development of such creative endeavours and learning exchanges. However, tensions did arise in relation to these specific creative projects. The construction of a bothy began by a small group of gardeners collecting salvaged wood from the peripheral areas of the development site, extracting nails from the planks to assemble the structure (see Figure 7.3). Various gardeners expressed that the construction of the bothy was intended to be a community-build project, translating architecture into a low-tech hands-on experimental design and articulated (to me) a desire to be actively involved. However, they did not participate in its design and construction, believing they would be intruding on what ultimately transpired to be an endeavour by a small group of enthusiastic, skilled professionals (fieldnotes, G2, 12/06/14). Therefore, for some gardeners, the project lost sight of the communal ethos propagated by the garden. Thus, while the membership of G1 and G2 consists of a number of creative professionals and students including architects and urban designers, this actually meant for some, they experienced feelings of inadequacy and therefore, in this case, the exchange of knowledge failed to materialise hindering the

envisaged collaborative process, reinforcing (to some extent) divisions between ‘experts’ and ‘novices’.



(Figure 7.3: The bothy created from salvaged wood and glass at G2)

Notably, with the development of G2, TGCG attracted an increasing number of students, who were drawn to the project for its artistic creative potential. In this instance, the garden became a creative entry point to artistic praxis enabling the reworking of socionatural relations.

Megan, an art student, articulated this sentiment, *“it’s really helpful for me to be involved, so the creativity side. I’m interested in the idea of living art, so recently I’ve been thinking about the use of plants as an artistic intervention, as a political statement, which is very different from public art”* and then went on to discuss the food growing aspect of the garden, *“I’m not really interested in the food or eating part as such, that’s not what drew me here [...] so it’s linking the artistic practice with the growing”*, however, qualified *“I’m growing carrots [...] that’s great, I want to learn more about healthy food production, so that’s quite exciting”* (Megan Interview, G2). For Megan, who lives in nearby student accommodation, the garden was primarily a creative space which helpfully aligned with both her personal interests and university studies, however, articulated that she was not interested in joining the committee

and instead liked to “*keep an eye on what’s going on and come and go, but that’s it really*” (Megan Interview, G2). Thus, the fact that some gardeners did not want to become too entangled with the everyday organising of the garden disrupts the notion of the ‘collective’ that the committee members prioritise.

However, for participants such as Jack, the garden is a vehicle to foster change around collective learning by interweaving theory and practice into critical praxis. Thus, a Freirean-inspired ‘epistemological curiosity’, based on critical reflection centred upon the experience of everyday life, highlights the subversive possibility of curiosity, linking thought, emotion and action. Indeed, Jack spoke at length of the importance of engaging in practical activity, rather than musing over abstract concepts to foster collective action (Jack Interview, G1), where emphasis was placed upon adult learning, nurturing ‘*concientización*’ (Freire 2000 [1968]). Therefore, his outlook exemplified Marx’s sentiment outlined in the eleventh *Theses On Feuerbach*: “The philosophers have only interpreted the world, in various ways; the point is to change it” (Marx 1845, quoted in Loftus 2009: 163). In the context of the garden, the oft-cited quote from AAIW is particularly pertinent:

‘Would you tell me, please, which way I ought to go from here?’, said Alice.

‘That depends a good deal on where you want to get to’, said the Cat.

‘I don’t much care where—’ said Alice.

‘Then it doesn’t matter which way you go’, said the Cat.

‘—so long as I get *somewhere*’, Alice added as an explanation.

‘Oh, you’re sure to do that’, said the Cat, ‘if only you walk long enough’.

(Lewis Carroll 1998: 56)

For the urban gardening activists involved in the project, G1 and G2 were urban interventions that demonstrated, however contradictory or provisional, alternative visions of urban food growing, the production of space and creative experimentation (through generating grounded embodiments of collective imagination) were possible. Indeed, the “Cheshire Cat’s response acknowledges that we are the creative artists of our lives when we select our own perspectives” (Mayock 2010: 160). The gardens, therefore, created space for a multiplicity of people to experiment, propose and enact various ideas, rather than defining a singular utopian vision, as Alice states, ‘—so long as I get *somewhere*’. However, unlike Alice who states she doesn’t ‘much care where’, particular gardeners cared deeply about the direction of a

(climate) changing world (Hobson 2008). The CUFG therefore opened up new dialogue between members about how to get to that ‘*somewhere*’ in a more socioecologically sustainable care-full way. Indeed, various gardeners articulated a rather hopeful (or pragmatically optimistic) vision for the future, heading ‘*somewhere*’, rather than ‘*nowhere*’ (Kate Interview, G2; Beth Interview, LGCP; Paul Interview, G2; Joe Interview, GCG).

Indeed, for Kate, questioning the patterns of her experience and participation within TGCG and critically assessing the limitations of food growing in relatively small pallet planters, stimulated a sense of committed curiosity orientated towards searching for new ways to grow in the city. This aligns with Foucault’s argument that the etymological roots of curiosity “evokes the care one takes for what exists and could exist; an acute sense of the real which, however, never becomes fixed” (1988: 327). Kate together with two fellow gardeners, Maria, an architect and Simon, a ‘*Passivhaus*’ consultant, began doing “*a wee bit of design work around planting ideas for our own fun and entertainment*” (Kate Interview, G2), sharing their experience, skills and experimenting with different growing models “looking at things otherwise” (Foucault 1988: 327). They eventually decided upon a modular growing system they named ‘Grow Eden’ that would temporarily occupy a site on EDI development land, if sufficient funds were raised to translate their design into a reality. The grow house was envisaged as an aquaponics system: “*which is a mixture of aquaculture and hydroponics, so this means you mix plants with the tilapia fish [...] at the moment it is set out to be 12 by 5 metres [...] built on the ‘passiv’ principle, so this means that energy conservation, it goes before energy usage*” (Simon Interview, G2). As Kate explains:

It’s going to be how do you feed people in a small growing space and do intensive growing? And so part of the design is that we are going to do at least 3 meals and that people can see from plant to plate [...] so you literally can see the whole cycle (Kate Interview, G2).

Curiosity, creativity and experimentation were central to envisaging what the ‘everyday utopian’ ‘*somewhere*’ could be for this group of gardeners. Therefore, what I want to highlight, is the importance of imagining “new possibilities for living and acting” (Gibson-Graham and Roelvink 2009: 328). As Jameson argues, “Utopia as a form is not the representation of radical alternatives; it is rather simply the imperative to imagine them” (2005: 416). Through the passion and continued engagement collaborating together to

generate designs (and potential realities), the example of ‘Grow Eden’ demonstrates the vernacular creativity that manifests in these spaces of possibility that can facilitate new ideas that transcend their immediate boundaries.

7.3 Informal Conversations, Tactile Connections, and Improvisation in Collective Urban Food Gardens

7.3.1 Spontaneous Exchanges: Learning, Creativity and Curiosity in Gardening Practice

Gardening practices were used by many to nourish curiosity, not in the unusual or rare, but the everyday metabolic flows that sustain our lives. In this sense, the gardens “constitute an informal urban resource for learning” (Eizenberg 2012: 774). As Joe, a qualified teacher, articulated, he *“was more interested in what happened to the kids who school didn’t really work for, so then I went onto youth work [...] I’m definitely interested in education but I have not like, explored that in a more formal way. I have loved running the kids gardening club here [community centre], it’s really good”* (Joe Interview, GCG). For Joe, drawing upon his role as a youth worker, educating children on the organic growing process was a matter of gaining their attention, encouraging questions, and fostering curiosity about how to do things, as a form of embodied learning. A variety of produce, particularly soft fruit, captured children’s imagination and I witnessed this on numerous occasions where they would reach under the canopy of leaves and pick jewel-like redcurrants burgeoning from stalks. For those who were more tentative, Martin, a gardener, who would sporadically attend the CUFG when his busy work schedule allowed, would harvest a cluster, wash them and encourage children to taste the fruit (fieldnotes, GCG, 26/07/14). Therefore, gardeners sought to foster curiosity in a range of nonhuman things, textures, and smells within the garden spaces with the hope of encouraging young people to consume the garden produce. Strawberries were a particular focus of curiosity: *“Francis [a student volunteer from the University of Edinburgh] and I discussed how the strawberry mounds are just the correct height for children to pick fruit, inquisitive little hands are already checking for ripened strawberries”* (fieldnotes, GCG, 17/06/14). Thus, the garden provides numerous opportunities for people, especially children, to develop new ways of relating to natures (not in the sense of a romanticised external Nature, but a deeply social nature, located literally, on their doorstep), by engaging with, tasting, and metabolising edible matter.

However, curiosity did not always lead to the positive outcomes that gardeners envisaged. Indeed, a pumpkin patch was nurtured and tended by a group of young people in the grounds of the Royston Wardieburn Community Centre to gain an embodied learning experience of the growing process, where they could subsequently be utilised for either food consumption or lanterns for Halloween (see Figure 7.4). This process however, was abruptly interrupted when the pumpkins became a source of interest for others who removed several from the garden, smashing them onto the road leaving Joe to pick up the debris (fieldnotes, GCG, 09/09/14). Thus, while curiosity was a form of attentive consideration for some, highlighting how curiosity can be a quality of care, it “can take many paths” (Fellner *et al.* 2012: 747) and therefore, also be a form of inquisitive destruction. Similar to members of G2 who experienced vandalism of the wormery and bothy, members at GCG were rather philosophical about the damage of the pumpkins, stressing the importance of not taking things personal and remaining resilient to destructive acts. It must be noted, the CUFGs attract people who are already interested (to some degree) in the growing process. The experience of GCG and LSG highlights the complexity of reaching beyond those who already display an awareness or curiosity and therefore, highlights the effort needed to inspire others to participate. Indeed, it is a constant process to try and encourage sustained interactions with the gardens.



(Figure 7.4: A pumpkin growing at the Royston Wardieburn Community Centre)

Phillips argues, “passion and pleasure are important drivers of curiosity” (2015: 159), particularly for learning and sharing knowledge. Multiple gardeners are deeply curious about the potential of what forms of individual and collective wellbeing could emerge from urban food gardening (Jack, G1; Kate, G2; Grace, GCG; Joe, GCG; Carol, LSG). Wellbeing, however, was not seen as the mere absence of ill health and therefore an outcome of particular actions, but a relational process between multiple entities (see Atkinson *et al.* 2012). Indeed, place, wellbeing and curiosity are all relational in that they are constitutive of, and constituted by, practices and a range of human and nonhuman entanglements. All the CUFGs are informal knowledge commons that seek to stimulate curiosity by creating and maintaining socioecological assemblages that encourage multi-sensuous engagements with the environment and it was these aspects of gardening that were deemed specifically therapeutic. Many expressed the perceived restorative, calming and therapeutic effects of gardening activities and the garden’s affective properties as key components in reducing stress, and therefore, cultivating care for the self. As Cath conveyed, “*we are sitting here on the veranda, the sun is shining, people are working, and it’s so calming, therapeutic, superb it is, and for a lot of people who come up on their own, it’s good*” (Cath Interview, LSG).

However, some gardeners found it extremely difficult to articulate what exactly it was about the CUFGs they thought was therapeutic, highlighting that affective dimensions frequently exceed words (Anderson 2006). Gardeners described how their tension or stress frequently “*melted away*” or they “*just felt better*” (Carol Interview, LSG), where physical activity “*takes your mind off things*” and “*you feel relaxed*” (Claire Interview, G2), once they immersed themselves in the space through transpersonal affective capacity (Anderson 2006). In this sense, the CUFGs cultivated ‘good encounters’ between humans and nonhumans, such as a chat when lonely or physical exercise when feeling lacklustre (Cath Interview, LSG). However, if we conceive life as “an intersecting multiplicity of harmonious and disharmonious relations” (Anderson 2006: 749) it becomes clear that the CUFGs do not always produce ‘good encounters’ (Massumi 2002) and therefore, should not in any way be romanticised. Indeed, tensions over the harvesting of communal produce (such as the artichoke at G1), the tedious quest of water in the summer months (especially at G2) and feelings of burdensome responsibility completing administration tasks (at LSG) demonstrate that participation is not always enjoyable.

Gardeners across all sites were keen to articulate that the more time they spent in the CUFGs, the greater their desire to know more, or learn something new, through exchanging practical knowledge, aligning with the conceptualisation of “learning in community gardens as a form of public pedagogy” (Walter 2013: 524). Furthermore, for some, it led them to question their position in a larger interconnected web and flows of activity, as Charlotte explains:

I'd been thinking about all these things for a while, reading a lot on peak oil and the utter reliance of our food system on fertilisers, transportation and food miles, all these things, so I wanted to learn how to grow my own food and once I began, I wanted to know more and more (Charlotte Interview, G2).

Thus, curiosity is not merely based on the visual (i.e. on a particular object), but also the subject's embedded interconnectedness in seemingly ‘invisible’ processes. In this sense, curiosity and embodied labour enables gardeners to overcome an “internalized rift in our cognitive and experiential understanding of ourselves as functional organisms existing as a part of a larger ecosystem” (McClintock 2010: 201).

Significant emphasis was placed upon circulating knowledge in all gardens, based on an ethos of “*pass it on, so then they share it with others*” (Paul Interview, G2). This sentiment is pertinently highlighted by Kate:

I joined the committee on the basis that I would do a lot of the ground stuff and gardening and bring some permaculture into it, so I was teaching people, helping people in the community how to grow off their windowsills [...] so I was just sharing it onwards and because it was such a beautiful opportunity to have the land [...] I was watching the new gardeners come in and I heard them share stuff that had been taught last year and almost heard my own words. There was a guy telling someone else and it was like pretty much paraphrasing my words, and it wasn't important that it was my words, I just saw that it was working in action, that once you teach enough people, those people teach the next (Kate Interview, G2).

As Kate's quote demonstrates, ideas and knowledge emerge, and are shared amongst gardeners in an organic way, frequently through informal conversations, where “spontaneous production and sharing of knowledge occurs in those daily unplanned interactions in the

garden” (Eizenberg 2012: 774). Indeed, Megan, a novice gardener discussed how she had watched another member create cloches from plastic bottles and struck up a conversation that led to further spontaneous gardening advice, *“I thought I’d just ask how he made the cloches in his planter and then it ended up being a half an hour chat about cold frames”* (Megan Interview, G2). Asking questions, listening to others and learning from different people encourage moments of emergent vernacular creativity. Indeed, being creative and improvising is a crucial component to urban gardening (Crouch 2010; Milbourne 2010).

Spontaneous advice occurs within the Gardeners’ Café at Granton where people use it as a ‘drop in’ for information regarding food growing, as Joe explains: *“people come in and say I’m trying to grow tatties, and ask what should I do? And what am I doing?”* (Joe Interview, GCG) and various knowledge exchanges emerge informally through chatting over the fence or while gardening. Indeed, while lifting potatoes with Sonia and Robbie, Edith joined us and explained she is having problems with woodpigeons at PCG, where Robbie advised her to use broken egg shells to deter the avian creatures with Edith stating, *“this is why I love community gardening!”* referring to the multiplicity of spontaneous learning encounters that emerge within CUFGs (fieldnotes, GCG, 06/09/14). The “relative absence of spaces that are safe and open enough for such spontaneous learning and sharing of skills and knowledge” highlights the distinctive and important role the CUFGs can play in everyday knowledge exchange (Eizenberg 2012: 774). For Joe, an experienced grower, informal conversations were an important avenue to foster confidence and share knowledge with novice gardeners. This included support and advice on how to grow in various contexts ranging from private gardens to communal spaces and also developing further CUFGs in the residential area of Granton, as Joe explains:

we will help start a garden anywhere there is people who ask [...] so the story of this garden [Site B] is that people who stay over there [gesturing] they got in touch with us and said we want to start a community garden in our street, can you show us how we do it? So I worked with them to do a consultation (Joe Interview, GCG).

Furthermore, forming a CUFG enables the nurturing and validating of a multiplicity of skills and capabilities people possess: *“people with all kinds of skills come out of the woodwork, like one of the people who has done loads of work here used to work in a garden centre, and there is a guy who is a joiner, and people can do all kinds of things”* (Joe Interview, GCG).

Similarly, the committee members of LSG were particularly keen to articulate that building confidence and valuing people's skills was important to strengthening the garden collective, where situated knowledges of local residents were explored through "open-ended and intuitive creative practices" (Till 2012: 12). Indeed, the CUFGs act as forums to share and learn new skills, 'attuneing' oneself to the demands of multiple others. Thus, learning in the gardens is a process that is always embodied (through touching, bending, lifting) and socially enmeshed within various activities and tasks. This sensuous learning, therefore, renders the CUFGs "tactile space" in that they have a "participatory component, which allows individuals to engage in an exchange of knowledge" in an embodied way (Carolan 2007: 1267).

7.4 Informal Workshops as Knowledge Commons

7.4.1 Entangled Matter: Fractured Pieces, Creativity and Care Practices in Informal Workshops

Creativity materialised through the process of repurposing, recycling and reassembling everyday 'vibrant matter' through artistic workshops across all three sites, where learning takes place as a communal experience. These workshops enlivened the gardens and also served to nourish the creative capacities of the gardeners to imagine and experiment with playful possibilities. In particular, I was asked to facilitate a free mosaic workshop by Cath, a LSG committee member, who was eager to arrange a collective arts and craft project to develop the creative skills of gardeners through collaborative action and to nurture confidence, by creating a symbolic representation of the garden. While attendance fluctuated, on average ten people participated (ranging from children to gardeners in their seventies), over a three-week period spanning June-July 2014. Various gardeners had donated an assortment of colourful ceramic tiles (particularly Amy), broken costume jewellery and fragmented ornaments to contribute to the design. As an artistic practice the creation of the mosaic combined various aspects of the garden which the participants were enchanted by:

People made multiple suggestions: butterflies, carrots, strawberries, chives, bees, insects, frogs, snails, and a sunburst. After a process of trial and error to create a coherent composition, once everyone was happy, we drew the final design on to the board (fieldnotes, LSG, 07/06/14).

The creation of the mosaic reflected the personal effort, energy and work needed, not only to produce the artwork, but also to maintain the garden. Over the weeks, piece-by-piece, ceramic tiles were fixed in place. The interstices between each fractured piece of tile were held together in relational tension: together, but distinct. There is something captivating in the way broken or once forgotten pieces, as transgressing with previous patterns or configurations, may liberate form to create new entanglements. This is particularly embodied in creative practice. Indeed, the finalised mosaic fostered enchantment (Bennett 2001a), where beauty was found in broken fragments (see Figure 7.5). The rearrangement of forms were not only a specific representation of the garden at that particular moment but also embodied the aspirations of the participants for the future. Indeed, the mosaic epitomised the space's transformation from an area of neglect to a diverse garden assemblage that aimed to encourage biodiversity and foster creativity, knowledge exchange and social connection.



(Figure 7.5: Finalised mosaic displayed at LSG)

Carol, who had been involved with the project from the initial planning and design stage, passionately discussed the garden as a place that aimed to overcome feelings of dislocation and isolation, where people could interact and “*get to know each other*” (Carol Interview,

LSG). The mosaic, therefore, was a collective endeavour that sought to provoke dialogue about what we perceive to be broken and how we would like to repair it. In this context, the actual patterns held within the mosaic signified relations of care, friendships and curiosities. Consequently, relations of everyday care and vernacular creativity coalesced to reflect personal and collective understandings of the micro-geographies of place. Indeed, learning in CUFGs gestures towards the more joyful, enchanting and playful sharing of skills, experiences and knowledges. At the ‘Germination’ knowledge exchange event held in November 2014 at LSG (discussed in section 7.5), Beth explained that since the mosaic had been completed, it had inspired several members of the garden to create other mosaic designs (particularly Michelle and Cath), and light-heartedly remarked, “*if there is a flat surface it could end up with a mosaic on it*” (fieldnotes, LSG, 29/11/14), demonstrating how skills acquired within the garden spaces can transcend the garden ‘boundaries’.

Creativity materialises from practical doing, the active, visceral engagement of transforming urban flotsam into new hybrid entanglements. Thus, recycled plastic bottles, become vertical growing containers (see Figure 7.6), where ‘waste’ becomes vehicles of care:

As myself and eight other members of the garden sat around the outdoor table, Rebecca (our instructor and fellow gardener) explained the process of creating a vertical garden, and how it was perfect for growing in small spaces, discussing how they were just like mini greenhouses [...] The garden acts as a social space, a place of interaction and sharing creative solutions for urban food growing (fieldnotes, G1, 11/06/14).

The workshop sought to encourage gardeners to replicate the artistic and practical process in various other locations from communal backgreens to private windowsills. All case study gardens placed great importance on a programme of free workshops that run throughout the growing season that encourage sharing skills and knowledge and therefore underpinned by a non-economic ethos⁷³. Knowledge was perceived as an unlimited resource, where everyone could bring something to the table, be that skills, time, ideas or materials. As Alex states, “*everyone can pick up a spade and dig, or pick up a brush and paint, the key is to feel like no one is judging you, and that’s the problem, everything is constantly reviewed, evaluated and assessed [...] what really matters is enjoying the process*” (Alex Interview, G2). Indeed, each

⁷³ During my time in the field I participated in numerous free workshops including: Lantern Glass Painting (LSG, 19/03/14); Painting Terracotta Pots (LSG, 05/04/14); Flower Weaving and Seed Bombs (G1, 27/04/14); and Pebble Painting for Planters (G2, 01/06/14).

garden derives its unique atmosphere from the variable relations that congeal or destabilise between materials, gardeners, and plants, where sharing (stories, knowledge and food etc.) and cooperation are crucial to sustaining the CUFGs.



(Figure 7.6: Hanging vertical bottle wall at G1)

7.4.2 Non-Formal Learning: Workshops, Knowledge Exchange and Caring for the Self

Organised workshops were common experiences at all CUFGs. These short-term (usually over a few months), voluntary, structured learning opportunities had both a teacher and ‘curriculum’, and were flexible, responding to the needs and interests of participants and therefore an expression of non-formal education (Walter 2013). These workshops were typically orientated around urban food growing, however, also drew upon the diverse interests and expertise of gardeners. Emerging from the everyday situated knowledges (Haraway 1991) of different actors, workshops create dialogue, opening up new spaces for sharing knowledge.

One such example, was a six-week ‘Introduction to Herbal Medicine Course’ (IHMC), at LSG, facilitated by Beth, a member of the LCGP, co-initiator of the Germination knowledge exchange network, and DIY herbalist, who had attained a Diploma in Herbology from the RBGE, and was studying towards a BSc in Herbal Medicine. I attended this course with (typically) nine other gardeners (however, attendance did fluctuate), the majority of which were the most consistently active and committed members who I spent a large amount of my time gardening with. As the following extract from my fieldnotes highlights:

The workshop was attended by: Cath, Judith, Michelle, Richard, Carol, Amy, and baby Holly, Hannah and Debbie. Ages ranging from 1 to 70. The same people attend the organised workshops. I thought an evening event (6-8pm) would attract more gardeners (fieldnotes, LSG, 10/06/14).

The workshops were tactile, deeply visceral, and multisensory, where tasting the herbal tinctures⁷⁴ was a central component of the learning experience. Latour’s (2004) concept of “learning to be affected” is particularly pertinent, whereby through the multiple workshops, the multisensory capacity of individuals to detect various tastes, textures, smells and identify differences between diverse plants led to a heightened appreciation of the herbs agency. Learning in this context was a social and multi-sensuous experience. Indeed, experiencing what it *feels* like to know something through practical engagement can “have affective and cognitive force on the recipient, prompting a relationship to the other and expanding the collective’s capacity for affecting and being affected, prompting joy” (Roelvink 2010: 115).

Herbal medicine, as a form of non-biomedical healthcare, was a source of inquisitive curiosity for most participants, however, also approached with an initial degree of scepticism by others:

Michelle was particularly tentative in her expectations, however, was willing to explore the medicinal applications of herbs. As part of the holistic approach embodied in herbal medicine we were asked to initially sit calmly, relax, and evaluate how we were feeling, to ‘listen’ and ‘connect’ to our bodies; in order to identify appropriate action for attentive care for the self (fieldnotes, LSG, 10/06/14).

⁷⁴ A tincture is an extract of a herb made using alcohol, or a mixture of alcohol and water, and are the most common kind of herbal preparation used by herbalists in the UK.

Focus was placed upon supporting and nourishing the body from within, overcoming the body/mind dualism, considering the person both physically and psychologically, rather than concentrating on a particular symptom. Over the weeks, the tasting of herbal teas, tinctures and raw leaves were crucial components to the embodied, visceral learning experience whereby the qualities of the tastes of herbs: sweet (comfrey), salty (nettle), pungent (ginger), sour (sorrel), bitter (bog bean) and astringent (calendula), and the smells and colour of the liquids were “a dynamic trajectory by which we learn to register and become sensitive to what the world is made of” (Latour 2004: 206). Participants were animated and expressive in their response to consuming the herbal teas and tinctures, where they were drawn to particular tastes and repulsed by others (fieldnotes, LSG, 08/07/14). The IHMC highlighted that learning to be affected is not based on abstract ideas or learning ‘facts’, but a deeply visceral, embodied relational connection where gardeners literally ‘feel’ the socioecological entanglements of herbs. However, crucially, there is no guarantee that ‘knowing about’ and recognising contrasts between herbs, lead to ‘caring about’ or ‘caring for’ the nonhuman such as herbal plants. Indeed, no gardener experiences participation in the same way; certain emphasises are intensified for some and loosened for others, becoming more sensitive to differences in heterogeneous ways. There is no predetermined outcome of experiential learning; some gardeners may continue to explore herbal medicine, others may not. The point I want to highlight is that involvement in LSG afforded people the opportunity to experience and extend engagement with herbal medicine, if they wish to do so, in a collective and decommodified manner.

Within the herbal medicine context, the pursuit for good health and ‘balanced’ wellbeing centred upon the notion of the relational self, where caring for oneself, others and the world are interwoven. Entangled in Beth’s narrative of herbal medicine was the notion of ‘natural’ healing where the ‘naturalness’ of utilising herbs to address multiple health-related issues was articulated based upon an appreciation of the rich tradition and folklore surrounding herbs and a historic trajectory of diverse cultures (for example, Chinese and Tibetan). The IHMC revealed a complex narrative centred upon the notion of ‘nature’, whereby herbal remedies are characterised as a more ‘natural’ way to medicate ourselves, compared to biomedical pharmaceutical drugs. This aligns with a problematic tendency to equate nature with the ‘good’ and therefore, ethically pure, drawing upon a pervasive assumption of the virtuousness of the ‘natural’ world, a narrative that presumes nature to comprise of only the nonhuman. However, what was particularly illuminating about the IHMC, was the emphasis placed upon

the intimate human involvement and vernacular creativity involved in organic growing techniques, plant identification, foraging, and sustainable harvesting practices of native species of herbs and the multi-sensuous process of creating tinctures, oils and emollients, which highlights the entangled socationatural assemblages of herbal medicine. Significantly, an ecological ethic of care in relation to ‘caring about’ the impacts of the broader anthropocentric influence of introducing non-native species into various geographical areas; the potential exploitation of indigenous knowledges; and the increasing commodification of medicinal plants which can result in the destruction of habitats, was emphasised as a multi-scaled environmentalism (fieldnotes, LSG, 10/06/14). Thus, caring for the self and distant others becomes entangled.

DIY herbal medicine demonstrates the complexity and multidirectionality of care, and collapses the boundary between ‘caring about’ and ‘caring for’. The (human) caring practices of tending, watering and nurturing the herbal plants and soil organically is reciprocated in the medicinal properties harnessed from herbs for human consumption, highlighting the agency of plants interacting with the body’s ‘internal ecosystem’. This explicitly renders the nonhuman plants capable of taking care of the human carer. For Beth, herbal medicine is a caring practice in which the ethical everyday doing is embedded in the visceral, embodied, tactile activities connecting “the personal to the collective and decentres the human” (Puig de la Bellacasa 2010: 152). As Beth explains, she became involved in community gardening to enact practical environmental ethics within everyday praxis:

I studied politics at Edinburgh and I really enjoyed it but then I graduated and I was starting to do more practical environmentalist political activities, but I just felt completely useless, I felt like I could have a really excellent argument with somebody about a political issue, but I couldn’t actually do anything, if you threw me into a field I would just not know what to do with myself, so I just started to do things related to plants and I just really loved it, and I was never happier (Beth Interview, LCGP).

Thus, for Beth, her involvement with community gardening and herbal medicine was a way to link grounded activity with broader socio-environmental issues in relation to the “*sheer terror of the catastrophic world we live and climate change and social isolation*” (Beth Interview, LCGP). For Beth, care for the self emerges through the everyday practices of caring for and working with an array of human and nonhuman others through sensuous embodied practical

activity. Consequently, as a practice, care is performed and enacted embodying a responsibility to constantly tinker (Mol 2008; Mol *et al.* 2010), to find better, more care-full ways of being in the world (Gibson-Graham 2011).

The course itself can be seen as a caring practice, a process of exchanging knowledge and democratising access to information, where the ability to pay does not limit the opportunity to participate. Thus, the workshops were an accessible forum, free of charge to garden members, in which Beth disseminated knowledge accrued through formalised education. Indeed, Beth's teaching materials are available online through the 'creative commons' framework that enables information to be shared legally between others. While these organised non-formal learning workshops are free to participants, this arrangement is dependent on funding from various NGO and Government bodies. Thus, the workshops do rely on some form of monetary exchange, albeit not directly between the participants and the teacher. This is further complicated by the fact that the level of money received for such courses are frequently reduced by instructors, as Beth explains:

I'm getting to the place where I am offering and getting funding to do herbal medicine making classes and stuff, but then I feel really awkward because it's like in the community in which I live and in the community garden where I volunteer, I am sort of getting some money to do these things when I could just do them for free you know, but it's like where and how do you draw the line I guess [...] At the moment, I charge [...] £15 an hour for herb things because my degree is very expensive, and that's a bit more specialist, so I think that's okay. But I know other people charge £20, £30, £40, £50 an hour, for exactly the same kind of thing. And I really don't agree with that (Beth Interview, LCGP).

Thus, an ethos of care encapsulates Beth's approach to knowledge exchange and skill sharing, where she pragmatically balanced personal considerations of earning a living with a more-than-capitalist sensibility. Moreover, I utilise the example of the IHMC to highlight the complexity that encompasses care for the self in relation to the CUFGs. Indeed, caring for the self has been typically analysed within a biopolitical Foucaultian framework, where self-care is understood as a disciplinary force where responsibility for the health and wellbeing of our bodies is governed through diffused power dynamics. In the CUFGs, however, caring for the (relational) self can enhance capacities, rather than simply reproduce an oppressive discourse

of governmentality. Sharing knowledge and learning new skills as demonstrated with the IHMC, far from placing responsibility onto individuals to self-adjust to neoliberal conditions, actually facilitated care for the body in a meaningful, and I argue, care-full way for the participants, through the embodied experiences of learning to be affected (Latour 2004). The tactile, sensuous engagements with medicinal herbs, by learning, smelling, feeling and digesting them, enabled their properties and agential capacities to be recognised, and also facilitated gardeners to take time to meaningfully reflect upon their wellbeing, in a supportive environment (fieldnotes, LSG, 22/07/14). Therefore, while a crude division, I find it helpful (following Murray 2007 and Atkinson 2011) to distinguish between disciplinary self-care and more empowering care for the self. Importantly, there is no singular, autonomous ethical subject, only a relational interconnected web, where the self is constituted inter-subjectively. Therefore, I argue, in the context of the IHMC, an attentive care of the self, rather than an internalised surveillance self-care was enacted. However, this distinction is purely arbitrary and therefore fluid, where the body is a site of both self-care and attentive care for the self, where it is difficult to untangle such ‘logics’.

PART II: Commoning Socioecological Knowledge Beyond the Garden Boundaries

7.5 Skill Sharing and Knowledge Exchange through Community Garden Networks

Moving beyond the specific garden spaces, the establishment of a grassroots community gardening network across Edinburgh, reveals how practices of care can coalesce (and momentarily stabilise) to constitute subtle acts of ‘doing things differently’ through communal embodied learning. By endeavouring to create new collectives based upon political public pedagogies and actions, gardeners experiment with ways that could have a positive effect on the world in which they live. However, there are no guarantees, just a practical tinkering enacted to make the network a success (Mol *et al.* 2010). Indeed, the network and the consequent knowledge-exchange gatherings invite gardeners to act towards each other in caring ways and ‘care about’ the broader collective, based upon notions of friendship solidarity, creative learning and skill sharing. The embodied, experiential learning of making, chatting, walking, tasting and sensing together enabled gardeners to acquire new knowledge(s) about community gardening, where the “opportunities for learning to be

affected are potentially amplified through interactions with others” (Cameron *et al.* 2011: 497). In the following section, I discuss the attempts made by gardeners to create a network of mutual interdependence as a “practice of collectivity” (Gibson-Graham 2003: 65), which departs from dominant neoliberal capitalist assumptions of individual self-sufficiency.

7.5.1 Germination: Bodily Learning, Building Connections and Skill Sharing

Once you teach enough people, those people teach the next and to me that's the principle of community growing and community learning, that's one way of growing a garden, is that you make sure the knowhow grows along with the plants (Kate Interview, G2).

‘Germination’, a grassroots Edinburgh-wide community gardening skill sharing network, was initially devised by Beth and Ryan, key figures within the city’s urban growing scene. Essentially a cooperative experiment that situates gardeners as both learners *and* teachers, Germination was developed through a collaborative gathering of community gardeners, where an inclusive, non-hierarchical ethos was adopted for the organisational structure. It was envisaged that each season, a different community garden would host an interactive event free of charge to all those who would like to participate, as Ryan, a Community Gardening Development Officer for ELGT articulates:

So the idea was that one project, each quarter, would host it and then two people from other projects would come through to support it, so you would have this little group of three organised people to take it on (Ryan Interview).

Therefore, the network “*belongs to no particular individual or group*” (Beth Interview, LCGP) and was created in a self-organised, non-alienating and purposively non-capitalist manner. However, as Ryan explains, Beth’s passion and enthusiasm was a significant influence in its development:

[...] she felt that it shouldn't be the responsibility of paid workers to organise all these networking things, so she wanted to try and set something up that was kind of self-sustaining and people would take turns from different projects to make it happen (Ryan Interview).

At a Meanwhile Land Use Event, which explored both the potential and barriers of temporary urban food growing (fieldnotes, 19/02/14) and a North Edinburgh Community Gardening Network Event (fieldnotes, 13/05/14), both organised by the FCFCG, many attendees expressed their concern that community gardening “*has become this zeitgeist, but in ten years’ time, will it be?*” (Ron, fieldnotes, 13/05/14), with participants articulating a feeling of apprehension of the burgeoning ‘top-down’ professionalisation process that they were witnessing in the city and beyond, and emphasised that demand for CUFGs must come from the grassroots, rather than ‘parachuting’ projects into deprived areas.

Therefore, as Ryan articulated, the notion underpinning Germination was to foster a grassroots networking event that nurtured the capacities of gardening groups throughout Edinburgh to self-organise as a form of collective learning, as “an experiment with others [...] in making new political configurations possible, in bringing new ecological associations and knowledge practices into being” (Hinchliffe and Whatmore 2006: 136). The establishment of the civil society network of self-directed gardeners can be seen as a form of counter-hegemonic pedagogy, that challenges the commodification of learning. Thus, its creation was an enactment of care, actively responding to the needs of the wider community gardening movement, to overcome feelings of isolation and forge meaningful associations by cultivating knowledgeable and caring bodies. As Gibson-Graham argue, the “ethical practice of cultivation involves giving people multiple opportunities to encounter each other in pleasurable ways – creating spaces of engagement, offering activities and events that promote receptivity” (2003: 67). Indeed, networks such as Germination provide the opportunity for fellow gardeners to meet and share experiences, foster and transmit excitement and engage in collective activity, which is particularly helpful in “*finding out what’s happening because you get so busy, because we are out getting our hands dirty everyday*” (Sam Interview, Gracemount Walled Garden [GWG]). As Ruth, FCFCG Development Worker states:

people are starting to do it for themselves, is what I am seeing more, and feeling more empowered and the support networks are there [...] and under their own steam these projects have got together, they have now produced a group called Germination, and that is to do skill sharing (Ruth Interview).

However, the process of enacting the envisaged format and objectives of the network was tentative:

So the first one we wanted to try and just ease into it, because it was quite a radical idea, Beth and I were the supporters and Bob from the Hope Triangle Project in Oxfangs was the host and it worked really well, we got a fair few people, we got some really nice teaching skills, people sharing their skills [...] and did a bit of work on the project which was also kind of the idea as well. And that worked really well and that was the end of last year [2013] (Ryan Interview).

Therefore, the network helps to intertwine the broader gardening collective together and is an important vehicle for knowledge exchange, however, as Ryan explains, the following event did not capture the ethos of the network:

I don't think they got it, because the idea was that they would ask the network for people to come forward and share skills, whereas they just did the skills amongst the three of them, so as a result, the skills weren't that exciting and there wasn't that many of them (Ryan Interview).

Consequently, the network lost momentum in early 2014, due to a postponed event, which left both Ryan and Beth contemplating whether to continue with the idea. Indeed, Ryan stated in April 2014:

I just today sent Beth an email and said what are we going to do? Are we just going to let it drop or are we going to try? It would be rubbish if Beth and I still had to be involved all the time because that was not the idea (Ryan Interview).

Although they envisaged that the gardening community would embrace and implement the horizontal organisational structure, this did not materialise and it was therefore left to both Beth and Ryan to continue to drive forward the vision of Germination. This again demonstrates how a small number of dedicated, passionate people, particularly those who frame their involvement in ethico-political terms, such as Beth, work tirelessly to implement a politically-informed everyday environmentalism (Loftus 2012). This highlights that while particular gardeners were passionate about providing opportunities for network building, there

is no guarantee that others would want to participate. However, Germination did gain momentum throughout 2014 with more gardeners being enrolled into the network. Consequently, an Autumn/Winter Germination event was held at LSG (with members from both GCG and TGCG attending). The event was highly participatory, inclusive and practical, and provided the opportunity for collective learning drawing upon the knowledge of a variety of stakeholders (including professional ‘experts’ and volunteer community gardeners) where a diverse range of workshops were organised:

The activities included: ‘wreath-making’ (Molly, G1 and North Edinburgh Grows), ‘herbal lip balm making’ (Beth, LCGP and PCG), ‘wildlife in your edible garden’ (Vicky, RBGE), ‘creating a seed tapestry with dye plants’ (Ellen, G1), ‘constructing an outdoor oven’ (Richard, LSG), ‘homemade liqueur sampling’ (Felix, Girvan Community Garden) and a ‘guided walking tour’ (Judith, LSG). A community gardening telephone number was written on the information board for potential new gardeners to contact – in addition to being a knowledge exchange event, Germination is also a forum to attract new members (fieldnotes, LSG, 29/11/14).

The Germination event provided the opportunity for gardeners to pass on knowledge, where learning is simultaneously, cognitive, sensory, emotional and physical. Crucially, the “nonhuman world was also an active participant” where the “sights, sounds, smells and feel were prompts for the process of collective inquiry” (Cameron *et al.* 2011: 501). Assembled structures such as an outdoor oven “*that online can cost thousands of pounds*” (Michelle, fieldnotes, LSG, 27/09/14) demonstrated how the recycled materials (salvaged from demolished buildings), construction process (led by Richard, a skilled craftsman, together with other volunteers) and knowledge (exchanged at gardening celebrations and events) could be decommodified. Crucial to the ethos of the network is the valuing of gardeners multidimensional skills, which people can share with others in a non-economic format. The oven received a great amount of interest from other gardeners, who humorously stated that they are a much-coveted feature of CUFGs, placing them as sites of food consumption as well as production (see Figure 7.7 and 7.8).



(Figure 7.7: Outdoor oven under construction at LSG)



(Figure 7.8: Cooking baked potatoes direct from the garden)

The event illustrates that practices of care, such as sharing time, resources and food, encouraging each other's efforts and exchanging knowledge, are essential for creating and maintaining a web of interpersonal relations of care to sustain the community gardening

network, based upon a commoning process, entangled with relations of mutuality and cooperation. In this sense, Germination seeks to establish a sociality that is transformative in its promotion of collective learning, DIT ethic and collaborative ethos where power is vested in everyday praxis. Indeed, at the event, several of the workshops were orientated to demonstrate that skills can be attained enabling the production of a variety of items (such as lip balm, wreaths, and liqueurs) that can be given as gifts or exchanged with others, as a form of diversifying the community economy (Gibson-Graham 2006; Gibson-Graham, Cameron and Healy 2013). Across all workshops, it was the personal, intimate process of creating, viscerally feeling, and the transforming of material, investing time and effort that distinguished the production of these items from purchasing products, and in this sense, “de-alienating the labourer” from sensuous physical labour and the biophysical environment (McClintock 2010: 202). Therefore, I argue gardeners were practicing care in a political manner through supporting each other in and through informal group learning that is aimed at reshaping their knowledge and material environments, in subtle ways.

The process of providing mutual support and learning together beyond specific garden ‘boundaries’ comprise an important form of practical curiosity, as described by Ellen, from G1, who stated she: “*likes to visit and learn about what other gardens are up to*” (fieldnotes, LSG, 29/11/14). However, it must be noted that only a small proportion of community gardeners throughout Edinburgh are involved, indeed, Ellen and Molly were the only gardeners that I encountered at the event from TGCG, perhaps both reflecting its embryotic stage and the challenges it faces, where “what one claims to care about does not strongly determine how one behaves” (Hobson 2008: 205). Therefore, while gardeners may articulate that they ‘care about’ collective activity and learning this does not necessarily translate into practice. Thus, fostering a communal subjectivity is not easy to stimulate and demonstrates the hard work, both material and affective labour, which goes into forming a ‘collective’.

The event provides a forum for face-to-face conversation where past failures, accomplishments, and the sourcing of material and funding can be discussed and debated, what Gibson-Graham call “cultivating local capacity” (2003: 69). As Beth states, “*I really feel strongly that it’s important that we are all part of a bigger community and support each other*” (Beth Interview, LCGP). Thus, the network emerges from those who “desire to *do* and *be* with others, connecting with strangers (no matter who), encountering and transforming oneself through experience” (Gibson-Graham 2003: 69; emphasis in original). The greatest

benefit articulated by gardeners was the increased connectivity that the network engenders, which facilitates newly formed and smaller projects with limited resources to connect to more established gardens. As Beth states, *“little things particularly help new projects, that was one of the big things, how can we support people who are just starting and feel really isolated”* (Beth Interview, LCGP).

For passionate urban gardeners, it was important to recognise their interdependency in order to strengthen the collective, where connections can be nurtured and made between various projects as a form of everyday ethical relating. As Beth explains, the FCFCG were keen to implement the model throughout Scotland as a way of overcoming the perceived (and actual) fragmentation between growing projects:

FCFCG picked up on it and they want to make it Scotland-wide [...] in each city or in each locality. So I think that would be really good. Just purely in the sense that we do need, you know, if we really are going to have lasting change, then we need to support each other (Beth Interview, LCGP).

Significantly, a supportive network of passionate gardeners, both volunteers and paid staff involved with organised gardening projects throughout the city, are eager to attend and share knowledge in their spare time for no monetary exchange. The process of commoning (in this instance, knowledge) is motivated by an ethos of care that seeks to nourish and sustain the wider community gardening network. For many of the gardeners I spoke to at the event, it was the enthusiasm, determination and commitment of this collective of people that sustained not only the garden spaces they were intimately involved in co-producing, but also the (embryonic) broader network. While the network may appear to be modest and provincial, currently only operating city-wide, there is potential to operate at a wider political scale linking with “translocal assemblages” which are entanglements of place-based social movements that exchange knowledges, ideas, materials and resources (McFarlane 2009, 2011). Thus, there is potential of connecting with projects in different geographical areas, positioning urban food gardening as concurrently an interconnected local, regional, national and global issue, initiated and imagined from the ‘ground up’ in the form of a grassroots, autonomous collective. However, the challenge remains to “weave the gardening community together and strengthen its connections to the larger food movement” (Walter 2013: 534) and to mobilise diverse political energies in which issues of justice and equality become central

components to produce more caring, supportive, equitable and enabling socioecological assemblages (Wekerle 2004; Levkoe 2006).

7.6 Chapter Summary: More-Than-Urban-Gardening: Care-Full Creativity, Learning and Experimentation

In this chapter, I have argued that the interweaving of creative and caring practices in CUFGs generate new ways of relating to a variety of human and nonhuman entities. Indeed, for many gardeners, their deeply sensuous, physical, and embodied practices rework the socionatural relations of their neighbourhoods and enable them to reimagine what the city is and can be in addition to its role in food production (such as the Grow Eden project emerging from G2). It is the actual doing, the process of trial and error, and the creative collaboration itself, that is more important than the completed product (as with the mosaic created at LSG). Thus, the conditions of possibility of the CUFGs, emerge from their openness to creativity, as Alex argues, there need not be a particular goal in mind, “*doing it for doing its sake*” may be reason enough (Alex Interview, G2). Indeed, working with a variety of materials to create various artistic assemblages in a central city location that would ordinarily be covered in glass and steel structures (and soon will be), was of crucial importance to many gardeners at G1 and G2. Therefore, the freedom of expression to reimagine urban nature and what relationships that might entail, was positioned in comparison to the regulated, managed spaces of the neoliberal city. For gardeners such as Kate, Charlotte, and Laura, the atmosphere of openness and at times messiness of G2, fosters a feeling that creativity, experimentation and cooperation are not only beneficial, but also crucial to the gardens vitality. Indeed, the affective aspects of the gardens, how they felt, smelt, sounded, tasted and what they looked like, marked them as different from other spaces of Edinburgh, and it is this active participation and sensuous experience that leads to gardeners forming meaningful attachments with these places.

Significantly, the case study CUFGs function as non-economic spaces, for exchanging ideas and skills between multiple others and in this sense, can be considered ‘knowledge commons’ based on principles of open source skill sharing (Müller 2012). Gardeners place great importance on sharing knowledge, not only through informal and structured workshops and events but also spontaneously through everyday conversations and observations. The sharing of knowledge both within and between gardens is based on the premise that everyone benefits

from passing on skills, ideas and experiences. Indeed, the sharing of knowledge is not exhaustive. In this sense, the gardens become workshops themselves, where a variety of things are repurposed, reinterpreted and developed creatively and assembled in new relationships where the creative process never reaches an end point, but perpetually unfolds.

Each garden encouraged creative encounters, however, they manifest in distinct ways reflecting the particular ethos of each garden and the interests, skills and curiosities of their membership. As Phillips argues, curiosity “is understood differently and takes different forms. In other words, there is no essential curiosity, but rather a series of different curiosities, emerging in different forms and intensities, in different times and places” (2015: 155). For G2, there was a discernable tension between individual creative low-tech architectural/artistic endeavours and the emphasis certain gardeners placed upon collective learning and knowledge exchange, as critical conscious-raising activities that fosters ‘concientización’ (Freire 2000 [1968]). For GCG, creativity focused upon the growing process, reflecting the prioritisation of food production as its main objective. While for LSG, the fact that during Carr Gomm’s involvement, multiple workshops were arranged and facilitated by various ‘experts’, meant that once the gardeners themselves took over the management and organisation of the garden, this emphasis has been sustained, by placing importance on skill sharing and collective learning. While all the participants I gardened with, were receptive to learning new skills, in reality only a small proportion of gardeners attended the organised workshops. When I discussed this point with members of the CUFGs who did not attend various creative workshops and organised workdays (I participated in), several stated that they were either “*too busy*”, had “*other plans or commitments*”, with the majority stating that they were “*at work*” (fieldnotes, GCG, 06/09/14; fieldnotes, LSG, 27/09/14). Indeed, the timing of these workshops seemed to be crucial to increased attendance (weekends more popular than during the week). However, some gardeners simply stated that they were not interested, for example, in creating a mosaic, and placed importance upon attending other events such as celebrations instead (fieldnotes, LSG, 12/07/14). It is for this reason that the core group of gardeners at both LSG and TGCG were particularly keen to organise and promote a variety of workshops, tailoring them to diverse interests, and therefore, appeal to a larger group of people.

Creativity was both spontaneous in moments of enchantment and organised in the form of workshops and was both an individual act and collective experience. Importantly, all forms of

vernacular creativity were valorised within the garden spaces (however, this does not mean that particular manifestations were necessarily liked by all members, as with the bothy at G2), but disrupts the idea that creativity is equal to artistic production and therefore resides only in the hands of the privileged, what I term ‘bourgeois creativity’ or the exceptionally gifted. Indeed, for the CUFGs to be creative, gardeners needed to legitimately suspend judgement to enable disconnected ‘things’ to coalesce through improvisation (Hallam and Ingold 2007). Many of the gardeners discussed how it was the creative workshops that they enjoyed most, the affective encounters between a multiplicity of vibrant matter that they recalled fondly when reflecting on their time in the garden. Thus, disrupting the tendency to place gardening as the central concern for participants. Indeed, both spontaneous and orchestrated moments of enchantment reinvigorated the gardeners to continue to attend, maintain and sustain these spaces, as Bennett has argued:

Enchantment and critical theory probably do entail different affective constellations: one can’t be enchanted and skeptical *at the same time*, and the unrealism of wonder may induce a sense of generosity but reduce insight into the mechanisms of power. On the other hand, part of the energy needed to challenge injustice comes from the reservoir of enchantment [...] For without enchantment you may lack the impetus to act against the very injustices you critically discern (2001b: 22; emphasis in original).

I argue that this is particularly pertinent in relation to sustaining each CUFG. Indeed, gardeners frequently stated that what drew them back time and time again, were manifestations or experiences that could be interpreted as moments of enchantment: the first new shoot peering from the soil (Diana Interview, G1), the sight of an urban fox (Richard Interview, LSG), learning something new, both growing vegetables and artistic skills (Cath Interview, LSG), nurturing curiosity in others (Joe Interview, GCG), rendering the unknown familiar, the list is long and diverse. Thus, the creative process of continually re-making gardens through practical sensuous activity and knowledge exchange can lead to more creative and care-full urban natures. Indeed, I began this chapter with Lefebvre’s (1994) call to “Let everyday life become a work of art!” and all CUFGs embody this sentiment, not through privileging artistic creativity, but by recognising its transformative importance of gathering ordinary people together, fostering festivity (*La fête*) as they disrupt the relentless routine of everyday life. Thus, urban gardening is not just a leisure activity that punctuates the drudgery of daily rhythms, but contains the seeds of political possibilities beyond a merely

compensatory activity from the world of paid ‘work’. As Andy Merrifield has argued, politics “more than anything else needs the magical touch of dream and desire, needs the shock of the poetic” (2009: 386). Indeed, central to Lefebvre’s (1994, 1996) position is the critical politicisation of the everyday, which is both a space of the most vivid and material alienations, while simultaneously providing fertile ground from which experimental transformations can emerge, recapturing the urban as a collectively produced *oeuvre*. I argue that the creative potential of CUFGs resides in the sense of care and commitment to human and nonhuman flourishing in fostering spaces of more-than-capitalist potential, based upon moments of enchantment, festival and learning, as part of the city, not an escape from it.

This research revealed that the CUFGs were ‘caring’ not because of some innate goodness associated with nature, but because participants were able to take the time to experience and *feel* the garden with all senses; to be open and curious in a more-than-human world.

Experience, in this context, is not a property of an autonomous self, but a form of relationality and it is this relational way of becoming that is the site of creativity and care. Gardeners could actively shape and be shaped by the spaces through ecologies of care; participate, learn, improvise, experiment and interact and importantly, be heard and hear. Indeed, a poignant discussion I had with one gardener in particular, at the Germination Event, illuminated this point. For them, in a world where they feel ignored and marginalised, LSG provided a place to be heard and valued, not as an individual economic agent (where our worth is evaluated on our ability to create and spend money), but as a member of a collective who deeply ‘cared for’ and is ‘cared by’ the garden. Therefore, investing time, energy, and sharing skills has consequences for everyday knowledge practices and wellbeing (fieldnotes, LSG, 29/11/14). Consequently, care, as a relational way of being, is a source of creative vitality and belonging.

The CUFGs’ public visibility enables these informal caring practices and vernacular creativity that would otherwise remain somewhat hidden, to be revealed, discussed and shared both between and beyond the garden spaces. Thus, rather than essentialising the gardens’ subversive characteristics as ‘alternative’ places-in-the-making, it highlights that “resistance is perhaps better seen as hard-wired into the productive daily acts of project building rather than as part of direct action and confrontation” (Chatterton and Pickerill 2010: 482). Care therefore, is not about attempting to control or fix, when this happens we no longer listen, but being open to difference and creative possibilities, being receptive to the emergent, and experience the vitality of our relations with a multitude of others. Embodied vernacular

creativity provides a way of being that recognises the deeply sensuous embodied relationality gardeners' feel when they lose themselves in the moment.

CHAPTER 8

CONCLUSION

This thesis has examined how, and in what ways, care comes to matter and influence the development and lived experiences of urban natures. I have argued that conceptualising care as a political practice in relation to UPE enables an exploration of how and why specific intimate urban ecologies are produced through material, affective and emotional labour. This elucidates the (micro) political contestations that emerge from the coalescing of multiple agents and, at times, conflicting agendas. I have contended that by examining what urban agents ‘care about’ and ‘care for’ (Milligan and Wiles 2010; Collins 2015) through patterns of everyday encounters, reveals a complex politics of care in terms of what and who are sustained and maintained, and who benefits, and who does not, from particular socioecological assemblages. By rendering ‘visible’ the actually existing, everyday care practices that sustain and maintain CUFGs, this thesis draws attention towards how care-full socioecological relations and responsibilities might be nurtured and cultivated further in strengthening everyday environmentalisms for emancipatory socioecological politics (Loftus 2012; Milbourne 2012). This chapter begins by outlining the theoretical contributions of the thesis and then proceeds to draw together insights from the empirical findings to extend existing understanding of CUFGs. I conclude by highlighting fertile directions for future research.

8.1 Towards a Care-Full Urban Political Ecology

This thesis has sought to make an original contribution to the exploration of CUFGs by bringing the diverse literatures of UPE into conversation with care scholarship. An ‘ecologies of care’ conceptual framework was developed, which directs theoretical and empirical attention to the material, ethical, and affective (re)arrangements of socionatural relations to deepen understanding of human-environment relationships and embodied, sensuous everyday (urbanised) environmentalisms (Loftus 2012). Drawing upon feminist scholars who have sought to re-orientate research to the multidimensionality of care, I have argued that care can be understood as a practice, ethical obligation and affective state, crucial to human and nonhuman flourishing in everyday life (Puig de la Bellacasa 2011). By conceptualising care in an expansive manner (Fisher and Tronto 1991), beyond purely social relations, to socionatural entanglements of humans and nonhumans, enables care to be understood as an everyday

relationality, generated through multiple practices that binds complex assemblages of entities together (Mol 2008; Mol *et al.* 2010). Thus, I have placed care as a legitimate and productive lens to explore socioecological relations. Focusing on the dynamics through which social natures are produced, my aim was to uncover the complex practices of care that can create, maintain and sustain socioecological relations in CUFGs. Significantly, while I have argued that care permeates all aspects of existence in discreet and apparent ways, not all relationships inevitably embody notions of care. Indeed, my starting point was the lived experiences of those who ‘care about’ and ‘care for’ a multiplicity of entities in their everyday encounters and practices within CUFGs to highlight that care is multiple, situated and context-dependent. However, I also have contended that it is crucial not to romanticise care practices or covet an idealised caring world, but instead, to conceptualise care as a complex, tension-laden practice, and a collective commitment, that has the potential to re-orientate everyday life by being attentive to diverse multispecies needs (Haraway 2008), prioritising practical tinkering to improve a situation (Mol 2008; Mol *et al.* 2010) and enacting collective action as an ethical project (Gibson-Graham 2011). Throughout this thesis, I hope to have shown that care draws attention to the affective, emotional and embodied labour entangled within the production of socionatures and the possibilities and contradictions held within everyday life to foster an ordinary quotidian environmentalism which takes the ‘urban’ as a productive terrain for reworking socioecological relations in more sustainable ways.

In general, urban theory has neglected to explore the insights of care scholarship in enhancing understandings of the ‘urban’ as a socioecological emancipatory perspective, which can influence the production of an array of enabling and restricting socio-environmental conditions. Thus, this thesis has argued for a politicised understanding of care. Furthermore, drawing attention to when care is (or is not) enacted in various, situated contexts “to maintain, continue, and repair our ‘world’” (Fisher and Tronto 1991: 40), enables the entangled, messy and ordinary ways care-full practices are enacted in the urban to adopt a politics of the possible (Gibson-Graham 2006). Conceptualising practices of care as “implicit activism” (Horton and Kraftl 2009) can assist in valuing ‘small acts’ which rework socio-ecologies, taking the quotidian actions of collectives as a basis to enact a progressive grassroots politics. This is not a mere gesture towards an abstract ethical injunction to care based on compassion and mutual help. There is nothing necessarily particularly radical about an ethics of care. However, relations of care highlight the progressive possibilities of coordinating collective energies that can strive for different socioecological orderings that seek to improve various

situations (Mol *et al.* 2010). It is precisely the mundaneness of care, its everyday necessity, which holds the potential to be expanded to the more-than-human in the form of an everyday environmentalism, in which the environment at stake is understood as profoundly socioecological (Loftus 2012; Milbourne 2012; Mansfield *et al.* 2015). In this context, collective care and a socioecological ‘being-in-common’ (Gibson-Graham 2003, 2011), can be nurtured, building upon the numerous acts of care practiced continuously to ensure individual and collective survival (Lawson 2007). The challenge, however, remains to think spatially about care, to extend care to distant others (Massey 2004), where the complexity of care relations draws attention to the processes of power and the production of inequality from the most intimate to global scales.

In the context of this thesis, my focus on care is not intended to imply that caring labour or affective, emotional investment is a priority for all gardeners, or to argue that all collective gardening activity can, or should, be seen as embodying a caring ethos. Rather, I have sought to highlight that care is a political issue, implicated in socioecological entanglements of everyday practices, micro-strategies and spatial tactics, and therefore, crucial to imagining and enacting more socially just cities. I have contended that demonstrating how care flows through and shapes socionatural relations can strengthen understanding of urban political ecologies, addressing the neglected status of care, emotion and affect in the broader PE literature. Crucially, a care perspective articulates the importance of interdependence, emotion, practice, embodiment, and lived experience, which tend to be devalued in ‘masculine’ frameworks (Tronto 1993; Sayer 2011). I argue that the conspicuous lack of theoretical attention to care practices is not a consequence of their insignificance or absence in socioecological entanglements, but rather a limitation of (urban) PE theory (however, see Hinchliffe 2008), which has largely failed to develop a framework to account for, and analyse, a multiplicity of affective processes and embodied practices involved in complex relations of socionatural assemblages (however, see Elmhirst 2011; Nightingale 2011; Sultana 2011; Hayes-Conroy and Hayes-Conroy 2013; Singh 2013, 2015). I argue, from the vantage point of everyday care, it becomes possible to observe how quotidian banal acts of producing socionatures (re)produces capitalist social relations, exposes their contradictions and contains the seeds of their transcendence. Thus, interweaving the findings of the three empirical chapters together, I now turn to examine what ecologies of care are produced, maintained and sustained, by and for whom, in relation to three diverse CUFGs.

8.2 Multiple Agents, Multiple Agendas: The Co-Production of Socionatures

While there has been a substantial increase in scholarship relating to urban gardening initiatives in the Global North, focus has primarily orientated towards the benefits of experiencing an established garden, thus effacing the complex socioecological relations and political processes through which these socionatural hybrids were instigated and developed. In order to counteract this tendency, I explored the urban agents, negotiations, and nuances entangled in the creation of three diverse CUFGs, located in Edinburgh, Scotland, a city comprising of a permeable patchwork of affluence and poverty. I have presented a partial, situated understanding of their development, demonstrating that they are an outcome of various discussions, agendas and agents cultivating socioecological relations, which seek to reorder socionatures. Indeed, the CUFGs are neither purely social nor natural, but rather hybrid urban ecologies, enacted in multiple ways through everyday embodied practices. Thus, in Chapter 5, I revealed how these socionatural assemblages are produced in decidedly political ways, entangled with relations of care and emotion, where social relations of commitment, connection and trust are not idealised terrain, but rather fraught with power relations that manifest in specific, grounded contexts, between a multiplicity of actors. Therefore, whilst, on the surface, CUFGs may appear to be relatively benign spaces of ‘nature’ in the city, I have demonstrated how these socioecological entanglements are interwoven with the urbanisation of nature, motivated by and fulfilling a variety of agendas. The case studies demonstrated the diverse modes of emergence CUFGs can take, following distinctive development trajectories entangling various (non-gardening) stakeholders and urban gardeners. While GCG emerged organically through a grassroots collective utilising minimal funding, LSG materialised as a top-down, organised project facilitating an NGO diversification strategy, entangled within a complex funding matrix, with TGCG an outcome of consensual agreements between developers and an activist-resident collective.

This research demonstrated that CUFGs do not exist in isolation, they are rooted in the specific histories of the sites they emerge from, where the local environment influences the ordinary quotidian injustices (Whitehead 2009) that residents encounter and experience, entangled in the UPE of the post-industrial city. The research revealed that in the neglected fissures of the urban fabric, gardeners manoeuvre and enact spatial tactics (de Certeau 1984), not through oppositional confrontational strategies, but rather the careful cultivation of allies

through various negotiations, particularly regarding land tenure, to open up possibilities to transform their local neighbourhood ecologies. In this sense, residents translated their collective concerns and grievances into grounded action, based on an ethos of care for their immediate environment (Barnes 2012). The motivations of passionate participants involved in the initial development of the CUFGs, emerged not only from feelings of frustration in relation to ordinary social and environmental concerns such as vacant land, food insecurity, and social isolation, but also a desire to enact hopeful, creative and enjoyable spaces of experiential learning, conviviality and collective care. The findings suggest an inherent dialectic between autonomous collective agency and neoliberal capitalist appropriation (McClintock 2014), which produces fragile assemblages, vulnerable to the precarious fluctuations of funding, the ebb and flow of volunteer participation, and in the case of TGCG, the role of temporary gardens in facilitating the gentrification process (Quastel 2009; Mayer 2013). In this instance, the line between cooperation and capitalist co-option is blurred. This highlights the importance of gardeners remaining reflexive in relation to their enrolment as a vehicle for positive PR facilitating urban development. Indeed, the ‘meanwhile’ CUFGs of G1 and G2, highlight the complexities and ambiguities of urban food gardening, where resistance to capitalist social relations is never pre-given or straightforward, entangled in the messy exclusions and emotional landscapes of the (neoliberal) city. However, rather than dismissing CUFGs wholesale as facilitative of ‘roll-with-it’ neoliberalism (Keil 2009), I have argued (following Hayes-Conroy and Hayes-Conroy 2013), it is crucial to embrace the complex, contradictory and undetermined nature of such socionatural assemblages.

An important implication of the empirical findings is the necessity to be attentive to the affective, emotive and material dimensions of urban gardening praxis. In particular, I have argued, a care perspective values the ordinary, “implicit activism” of everyday practices, small acts and kind words (Horton and Kraftl 2009) alongside forms of more explicit activism to counter the masculine conception of resistance and social action (Nettle 2014). Thus, disrupting the academic prioritisation of ‘jumping scale’ and the subsequent dismissive wholesale enunciations, if groups fail to do so (Chatterton and Pickerill 2010). Therefore, I have argued, it is crucial not to overlook the important, yet nonverbal, affective, emotional and meaningful feelings and labour entangled in the co-production of socionatures. Indeed, gardeners placed great importance upon transforming space, where they were able to feel differently about their immediate environment by creatively cultivating new ways of ‘becoming with’ more-than-humans, which are modest, mundane and less spectacular, than

Marxist interpretations of a “class-based revolution” of social change (Till 2012: 13; Gibson-Graham 1996). Furthermore, I posit that nurturing and eating (a proportion) of personally grown produce, is a deeply political act, which to varying degrees, challenges the commodification of food and land (McClintock 2010).

The complexity, negotiations, and politics of care in relation to the intimate urban ecologies of CUFGs, highlights that gardeners articulated a far from romantic sense of a mythical ‘back to nature’ sentiment. However, participants did value the ability to meaningfully ‘reconnect’ with nature, learning to grow organic produce, designing and constructing various assemblages, and acquiring new knowledge of various lively others, which suggests a tentative process of overcoming the individual metabolic rift (McClintock 2010). The veneration of CUFGs as sites to solve a multiplicity of socioecological problems is itself problematic, where the difficulties of participants are in no way magically resolved by their time co-producing these socionatures. This is not to downplay that gardeners do learn to be affected (Latour 2004) to different intensities in relation to their socioecological environment and gain a sharper sense of the urban ecologies they are entangled within, while nurturing feelings of improved wellbeing. However, this research suggests the need to somewhat mollify the enthusiasm of the suggestion that community gardens are ‘inexpensive’ solutions (as articulated by ELGT, and city elites and third sector employees in relation to the development of LSG) to a cornucopia of complex social, health, and economic inequalities.

Indeed, amid the palpable revanchist cultural food politics (Goodman 2015), evidenced by the rise in foodbanks throughout Edinburgh (and beyond), urgent action is needed to address food insecurity. Therefore, the small-scale activities of gardeners and the re-orientation of urban growers’ skills and knowledge towards organic gardening methods may appear to be an atavistic ‘return to nature’ impulse that does little to disrupt the structural causes of inequality. However, as political ecological practice, urban food gardening indicates towards the possibility of a politicalised and progressive environmental politics of socionatures based on the emotional and/or affective material power of socio-political praxis to enact and envision how socioecological relationships could be fostered in care-full and playful ways. In the case of GCG, everyday practices reflected a grounded practical critique of the industrial food system, by engaging with the community’s specific needs in the intimate spaces of everyday life. Crucially, CUFGs celebrate and nurture empowering collective care, challenging the

neoliberal notion of personal responsibility for poverty, unemployment and ill health that places onus onto individuals.

Reaching beyond people who already feel comfortable and confident to engage in collective urban food growing projects, however, remains a major challenge for all case studies. Therefore, it is important to highlight that the relational responsibility nurtured in the CUFGs effects only those who choose to participate. Indeed, the gardeners that I dug, weeded, chatted and ate with were those who were already interested (to varying degrees) or passionate about gardening. However, this is a challenge continually reflected on by gardeners, encapsulated by the participants referring to the need to reach beyond the “*usual suspects*” (Claire Interview, G2). The research revealed the reliance on a dedicated group of gardeners who invested a large amount of emotional significance and physical effort into maintaining and sustaining the socionatural assemblages, which enabled the fluid movement of more ‘casual’ members, allowing them to ‘dip in and out’ in response to life circumstances. Therefore, this calls into question the ‘collective’ in CUFGs.

8.3 Everyday Care Practices in Collective Urban Food Gardens: Maintaining and Sustaining Socionatural Entanglements

Within Chapter 6, I delved deeper into the everyday doings of gardeners, examining the multidimensional embodied experiences of urban natures and the care practices that sustain and maintain the CUFGs. I demonstrated that care practices are always specific and respond to a situated relationship, however, they are complex, multifarious and not necessarily positive. In particular, I demonstrated the complexity and interwoven web of caring relationships and practices in the CUFGs. Indeed, everyday ethical doings (Puig de la Bellacasa 2010) such as composting, seed saving and nurturing plants enables people to *feel* their position in an interconnected web of species, where everyday multi-sensory care practices facilitate people to become more attuned to the needs of the more-than-human. Thus, while it is important not to romanticise the ability of ‘getting your hands in the dirt’ to transform subjectivities (Guthman 2008; Pudup 2008), the embodied labour of gardeners was crucial to developing affective and in some cases, caring relationships. As a “selective mode of attention” (Martin *et al.* 2015: 627) care-full gardening entails sustaining attachments and detachments, prioritising some lives, things and phenomena as its focus, while excluding others. The production of socionatures are intertwined with deep emotional significance for

some participants, where they develop attachments to the more-than-human. This is not an abstract gaze as experienced with an urban park, but a lived embodiment through the senses (Degen *et al.* 2009). As places of encounter, co-presence, interspecies interaction, sharing and collaboration, CUFGs enable various affective attachments to develop, stimulating creativity and imagination and enhancing a sense of wellbeing for various participants.

Following Puig de la Bellacasa (2010), this research revealed that caring obligations do not necessarily arise from moral codes, but are nurtured through practical sensuous activity, where attentive curiosity is a key factor influencing care practices in CUFGs, determining what needs are recognised and attended to, and what are neglected and ignored. Indeed, the ordinary, joyful, creative aspects of embodied activities are revealed to be more important in cultivating and performing everyday ethical commitments and attitudes, than moral motivations or deliberation. This highlights the limitations of ‘abstract’ knowledge as a way to encourage responsible socioecological action. Gardeners’ sense of responsibility emerged from specific interrelations rather than a vague notion of ethical obligations towards generalised ‘others’ (human and nonhuman). Therefore, intimate connections (however, not necessarily spatially proximate relations) invoked emotional and caring responses for some gardeners, while ambivalence in others. I have argued that care is not limited to the human subject, whereby learning to be affected (Latour 2004) enables gardeners to acknowledge the ‘caring’ capacities of the more-than-human. However, this is not based on a symmetrical understanding of an abstract equality between species, or to argue that nonhumans intentionally ‘care’ for humans, but rather grounded in (some) gardeners recognising the vitality and liveliness of the more-than-human, which subsequently heightens a sensitivity to interconnected difference.

While attentive care is not inevitable, the research revealed that the CUFGs seek to engineer affective value encounters (Haraway 2008) with a multiplicity of ‘things’ to stimulate an ecology of care that recognises the agency of nonhuman others. Across all case study sites, the ‘unruly’ agencies of nonhumans helped disrupt the pervasive notion of human sovereignty to *some* extent for *some* gardeners. However, care for the nonhuman is selective in the gardens and predominately orientates around producing ‘nourish-able’ food for human consumption (particularly for GCG and LSG). I argue that what distinguishes those who care for the nonhuman aspects of the garden more than others, is their amplified attentive, practical tinkering to improve a situation (Mol *et al.* 2010). Furthermore, I argue, while participation in

tactile activities can foster ethical sensibilities, gardeners have to be curious to being open to such value encounters, and therefore, this is not inevitable. Indeed, people experience, and are affected by, various situations in different ways and therefore, there is no uniform, homogenous response to involvement in CUFGs. The research also revealed that mundane care practices are permeated with complex ambivalence, however, rather than dismissing this uncertain and tentative capacity towards various others, I argue that it is within this ambivalent indeterminate spacing in which gardeners' curiosity can be nurtured and cultivated. Indeed, possibilities unfold where gardeners' interest is stimulated, to be open to different socioecological configurations through informal conversations, embodied, tactile workshops and knowledge exchange events.

I have argued that everyday environmentalisms need to be nurtured, stimulated and supported, not with reference to an imagined external Nature, but as Loftus (2012) posits, in the dirt, noise, fumes and concrete of the contemporary city, where the majority of the global population now resides. Indeed, it is within quotidian sensuous acts that new ideas and new worlds are imagined and enacted. As Loftus states, “[n]ot only in quiet moments of reflection but in shared acts of making the world, people hear, feel, and begin to touch the possibilities for making things differently” (2012: x). This research has argued that CUFGs provide one avenue to nurture ordinary environmentalisms (Milbourne 2012), where care practices are subtle, playful and creative, through which the affective dimensions of reworking intimate urban ecologies enable people to develop care-full socioecological entanglements. I argue the potential of transcending the constraints of an environmental politics based on the separation of nature and society, resides in a socio-environmental ethos of care that is always multiple and emergent. This research therefore offers a glimpse of the more-than-capitalist possibility that emanates from these socionatural entanglements, which engender collective care, forms of commoning and knowledge exchange, while stressing the importance of keeping distance “from the social magnetism of a simultaneously sentimentalized and oppressive nature” (Smith 1998: 281-2).

This research demonstrated produce for food consumption was grown to varying degrees by the particular CUFGs. Perhaps the most pertinent commonality across all gardens was that growing food within the interstices of the urban fabric was a highly visible activity (particularly in relation to GCG) and a political statement regarding meaningful collective use of space. Notably, produce was a vehicle to care for people, and a material product to share,

which enabled social relationships based on non-capitalist exchange such as sharing and gifting, to be enacted, thus decommodifying organic produce (at both GCG and LSG, more so than TGCG). However, it must be noted that low productivity, particularly in early spring, creates a ‘hunger gap’ and therefore the potential of the CUFGs to become thriving food commons is currently restricted. Furthermore, the process of allocating communal produce can be at times tension-laden, particularly when there are no formalised guidelines for the distribution of the harvest. All gardens placed importance on sharing meals, whereby the communal experience of eating food was seen as a tool to foster connections between participants and in several cases, local residents, as with the Gardeners’ Café in Granton. The sharing of food was not only an intercultural, intergenerational exchange but also a political statement which supported non-commodified ways of exchanging and engaging with food. In this sense, the CUFGs transcend the logic of profit in a neoliberal context, where the interests of capital frequently determine production. Indeed, the abstract logic of capitalism can never truly encompass the totality of everyday life (Lefebvre 1994).

Gardeners across all three case studies articulated the importance of being able to shape their surroundings, in both explicit (transforming a vacant site into a productive garden) and subtle ways (planting culturally appropriate produce with deep emotional significance). Thus, this research points towards the importance for people to produce their own idiosyncratic interpretation of creativity and to rework socioecological relations to develop urban ecologies that draw upon a wide range of passions and interests. Having space in the city to congregate, beyond monetised consumptive activities, to enact imaginative visions is crucial to a flourishing urban condition. Thus, beyond the individual case studies, this research has shown the importance of providing practical, tangible opportunities for people to shape and transform their immediate environment. However, as discussed in Chapter 5, temporary meanwhile uses vividly highlight both the creative possibilities and problems associated with using *terrain vague* as experimental sites of collaborative action.

8.4 The Enchantment of Socionatures: Creativity, Curiosity and Commons

A politics of vernacular creativity (Edensor *et al.* 2010) and collective imagination were embodied in the urban interventions gesturing towards anti-capitalist forms of creative production. Gardeners placed importance upon an open disposition in terms of fostering creative expression, where knowledge exchange and creativity were integral processes that

helped maintain and sustain the garden spaces. While knowledge exchanges proliferated regarding gardening practices, such as seed saving, building cold frames, and companion planting, other skills were also exchanged, such as arts and craft, which multiplied the pathways of collective learning into other socioecological issues. Gardeners placed importance on sharing knowledge and learning with others where curiosity and care are interwoven (Haraway 2008; Latour 2004). Learning within the garden spaces manifested in multiple ways and generated various flows of knowledge. Bringing together and assembling a variety of diverse people, a range of skills and knowledges are shared, through spontaneous discussions and structured workshop activities. Indeed, the research revealed that the CUFGs are knowledge commons (Müller 2012). Each garden can be seen as a ‘living laboratory’ of creative experimentation and skill sharing, where it was the actual doing and the process of trial and error that were more important than the finalised ‘product’. Various ‘things’ (discarded items, recycled material, and flora and fauna) became the focus of curiosity and creativity generating new ways of relating to an array of humans and nonhumans, which provided the freedom to (re)imagine and (re)interpret urban nature and what relations that might entail. I argue that the most potent creative processes were those that embodied a collaborative ethos, however, this did not always materialise in the gardens.

The CUFGs secrete creative possibilities, where moments of enchantment (Bennett 2001a; Bhatti *et al.* 2009; Buck 2015) dwell within the mundane (exemplified by the discovery of the AAIW novel). Indeed, in Chapter 7, I revealed how both spontaneous moments and longer sustained entanglements of enchantment are actively fostered in the CUFGs by introducing diverse temporalities and tactile encounters in knowledge exchange workshops such as the tasting of herbal tinctures or the making of a mosaic. I argue, highlighting the enchanting relations of the garden entanglements does not imply a romantic or naïve interpretation of collective gardening experiences, but rather enables the optimistic and hopeful aspirations of gardeners to be understood as interwoven with feelings of frustration and fragility. I have argued that CUFGs have the power to engender a variety of encounters and experiences that are conducive to fostering opportunities of collaborating and working collectively, however, this is not guaranteed and participation can encompass self-interested behaviour (Nightingale 2011). In this sense, the CUFGs can be sites where people can be ‘alone, together’ simultaneously *feeling* a part of a collective, while retaining ‘distance’ by choosing not to partake in collective celebrations or workdays.

Indeed, I stress the notion of ‘moments’ of enchantment to highlight how instances of pleasure, achievement and festivity punctuate what can be at times, hard physical labour, where gardeners become emotionally and practically connected to the CUFGs. These affective relations are important for people’s willingness (or not) to cooperate (Nightingale 2011), where care and emotion are crucial to collective action. Moreover, the interpersonal sociality nurtured within the CUFGs escapes capture by forces of co-option. Thus, moments of enchantment facilitate a momentary rupture of the logic of capital which insidiously propagates a sense of competitive urgency and the impossibility of alternatives which in turn seems to feed off feelings of hopelessness. As Bennett has argued, it is “hard to love a disenchanted world” (2001a: 12) particularly, when the logic of capital is frequently seen as inevitable or omnipresent (Gibson-Graham 2006). Therefore, while I am not suggesting that enchantment is a substitute for structural, institutional and political changes to democratise the production of urban environments, this research has demonstrated that moments of enchantment can foster and sustain care and relationships, engendering experimental playfulness. Thus, enchantment can assist in fostering socioecological transformations, providing impetus for collective mobilisation, in contrast to pure, and therefore potentially demoralising, critique (Bennett 2001b; Buck 2015).

The establishment of the city-wide Germination network enabled gardeners to move beyond the boundaries of their particular garden to share knowledge, experiences and skills. However, engendering this collective was a complex and at times, uncertain process, relying upon the energy and commitment of a small group of people. I argue sharing knowledge is a form of practicing care in a political manner, orientated towards decommodifying the learning process. Indeed, through commoning their skills, gardeners were able to (re)make their socio-material circumstances for the better, in subtle, but no less important ways. The on-going task of Germination is to attract gardeners throughout Edinburgh and to nurture the capacities of participants to become a fully autonomous network that places social and environmental justice at the heart of their endeavours.

8.5 Collective Urban Food Gardens as Ecologies of Care

Throughout this thesis, I have sought to demonstrate that sustaining and maintaining CUFGs involves a multiplicity of entities to be constantly entangled and therefore, practiced to create socionatures. I have argued that paying sufficient attention to the actually existing practices of

care, highlights how various inequalities can begin to be addressed from starting from where you are (Gibson-Graham 2006) through collective action, where shared concerns foster experimental responses. Understood in isolation, care practices can appear to be mundane and insignificant, however, when woven together to create an intricate ecology can become effective sites of creative possibility. In this sense, care is an ecology, it creates relationality, and therefore, is produced with others (Puig de la Bellacasa 2010). Thus, ecologies of care look and feel different consisting of diverse constellations of humans and nonhumans, which prioritise particular attachments and detachments. Accordingly, various ecologies of care are created and sustained by interrelated doings that are connected to the needs of the specific neighbourhoods, places, and circumstances in which they emerge. Moreover, ecologies of care are political; they are never neutral, but rather messy, complex and contested, permeated with webs of power. Crucially, I have sought to highlight the ways in which everyday care is enacted and entwined with other processes and materialities. In particular, the research has revealed that practices of care are brought into being through everyday processes of commoning (de Angelis 2010; Linebaugh 2008), demonstrating that these embryotic, imperfect, actually existing urban commons (Eizenberg 2012, 2013) are enacted by a multiplicity of inter-actions, thus are fragile and always emergent. I argue, the more-than-capitalist potential of CUFGs resides in their ability to nurture vernacular creativities, multiple forms of commoning and care practices to engender social natures that lead to hopeful, just socioecological configurations for humans and nonhumans. A care lens highlights both the joyful and at times, burdensome affective labour that is needed to sustain these socionatural assemblages.

Therefore, rather than being indifferent to the complexities of care, I argue that urban political ecologies need to be produced in ways that allow human and nonhuman others to flourish (Cuomo 1998). I have contended that care, as a radical practice of everyday life (*Precarias de la Deriva* 2006), is vital to enacting new worlds in which 'sustainability' is not orientated around an economic politics of the capitalist status quo, but rather socioecological flourishing based on a multiplicity of practices orientated towards a care-full future. As demonstrated in Chapter 5, care alone is not sufficient to enact new socioecological entanglements and the practical politics of negotiated socio-spatial tactics can subvert or silence care relations. However, deprived of care, socionatural assemblages are regressive, reinforcing socioecological inequalities. Thus, while CUFGs are complex and contradictory, I have argued they seek to produce ecologies of care that shape socioecological entanglements that

prioritise encountering others in ways that support their flourishing. This research has revealed that CUFGs attempt to do this by tinkering, improvising and seeking to improve a situation collaboratively, where gardeners are affected to act, to meet a concern. Thus, I contend that while care is concerned about meeting needs, it is also much more than this; it can seek to provoke joy and enchantment (Bennett 2001a, 2001b; Buck 2015; Jaggar 1995), fostering conviviality between collectives and significantly, is a vital necessity for flourishing relationships beyond market exchange logic (Skeggs 2014). I argue, the political task is to experiment and to continuously tinker (Mol 2008; Mol *et al.* 2010) with what is at hand in the here and now, to create new, more caring socionatures.

8.6 Future Research

It is hoped that this thesis contributes to a richer, more diverse picture of urban food gardening, providing a detailed ethnographic exploration of three CUFGs in a particular Scottish city, Edinburgh, which thus far, has received little attention in the broader community garden literature. I have endeavoured to present a nuanced understanding of CUFGs which offers insights into the complex and at times, difficult negotiations, practices and relations of care that were required in developing, maintaining and sustaining these socioecological entanglements. As outlined in Chapter 4, this thesis represents only a moment in space and time and I have argued that CUFGs are always in a continuous process of making and (re)making. Therefore, it would be interesting to explore their progression over a longer period of time to investigate whether they are able to maintain the momentum and enthusiasm of volunteers, while also recruiting new members (an aspiration all CUFGs reiterated) to sustain the socioecological entanglements. This is particularly heightened with TGCG, due to their explicitly temporary nature and whether the group will be able to transcend the physical garden boundaries of G1 and G2 and develop further urban food growing spaces within the city. It will be particularly interesting to observe the gentrification process of the Fountainbridge area as it unfolds, what socio-material spaces emerge, and how FCI and the gardeners navigate this transformation. Indeed, a pertinent future research opportunity would be to explore the interrelationship of urban gardens to the ecological gentrification process.

The prevalence of contamination at two of the case study sites highlights the significance of exploring the intricacies and complications of urban ecologies as sites of food production. In

the Scottish context, while progress has been made with the publication of '*A Guide for Growing on Land Which May Be Contaminated*' (GYOWG 2014), I argue that further research is needed to explore the experiences of urban gardeners in overcoming or remediating land for food growing purposes, if urban agriculture is to be scaled-up. I suggest, knowledge and skill sharing grassroots networks such as Germination could play an integral role as an accompaniment to official guidance, where groups can share experiences and discuss the emotive and affective aspects of overcoming various challenges which are absent from written documents.

The different case studies explored in this thesis provide examples of the diverse development trajectories CUFGs can take and therefore, could be utilised towards the development of future policy and practice guidance in relation to urban food production, greenspace and the urban environment. Furthermore, this research highlights the continuous embodied material and immaterial labour that is needed to sustain these socionatural assemblages. Therefore, I argue, greater focus needs to be placed upon providing support for the long-term continuation of CUFGs, beyond purely monetary funds. As LSG demonstrates, multiple relations need to be sustained once funding has ended for CUFGs to continue. While the development of the 'GYOWG' has underlined the importance of strategic support, emphasis on developing the skills of gardeners in a collaborative bottom-up process is crucial to their flourishing. In this sense, the nurturing of grassroots initiatives such as the 'Germination' network may be more meaningful to gardeners than imposed top-down mechanisms.

When contemplating my final question, regarding the more-than-capitalist possibilities of CUFGs, there are many ways this could be strengthened: greater communication and collaboration between groups drawing upon the momentum of the Germination network; the continued and coordinated commoning of produce, skills, and knowledge to decommodify the urban experience; and connecting with diverse struggles for broader social change to create a "translocal assemblage" (McFarlane 2009, 2011). However, without deeper, structural transformations, I suggest that these activities are likely to fail to achieve the changes hoped for by passionate community activists. CUFGs address only the symptoms of what are actually deeper structural problems of the industrial food system, current neoliberal urbanism and the broader inseparability of land as a form of capital accumulation. Although not discussed in this thesis, the impact of the *Community Empowerment (Scotland) Act 2015*, gestures towards an intriguing avenue for future research in terms of the potential of

grassroots organisations developing collective urban food interventions that embody more-than-capitalist possibility⁷⁵. Thus, the challenge is to nurture opportunities for collectives to imagine and enact radically different care-full and egalitarian forms of the production of urban socioecological assemblages. However, by starting from where people are and engaging in collaborative action, ordinary people can prise open cracks in the city, in small, but not insignificant ways. I hope to have highlighted some of the potential held within these socionatural assemblages, where the possibilities of rupture are found in the terrain of the everyday.

⁷⁵ Notably, the Act requires local authorities to “develop a food growing strategy for their area, including identifying land that may be used as allotment sites and identifying other areas of land that could be used by a community for the cultivation of vegetables, fruit and herbs or flowers” (see: <http://www.gov.scot/Topics/People/engage/CommunityEmpowermentBillFAQs>).

APPENDIX 1

Gardening Stakeholders – Participants			
Name	Gender	Age	Garden
Alex	M	30s	G2
Charlotte (WI)	F	30s	G2
Claire	F	40s	G2
Dan	M	30s	G2
Diana	F	60s	G1
Duncan	M	30s	G1
Jack	M	60s	G1
Kate	F	40s	G2
Mary	F	50s	G1
Max	M	30s	G2
Megan	F	20s	G2
Paul (WI)	M	30s	G2
Simon	M	40s	G2
Carol	F	70s	LSG
Cath (WI)	F	60s	LSG
Hannah	F	20s	LSG
Hazel	F	50s	LSG
Jenny	F	50s	LSG
Judith (WI)	F	60s	LSG
Luke	M	30s	LSG
Richard	M	60s	LSG
Francis	F	20s	GCG
Grace	F	60s	GCG
James	M	60s	GCG
Joe (WI)	M	30s	GCG
Lilley	F	30s	GCG
Robbie	M	40s	GCG
Sonia (WI)	F	30s	GCG

* (WI) indicates an additional walking interview

APPENDIX 2

Urban Gardening and Food Projects Visited (2014)	
Within Edinburgh	
Royal Edinburgh Community Gardens Fidra Kitchen, Muirhouse Edinburgh University Allotment The Edible Gardening Project, Royal Botanic Gardens Edinburgh Kirkyard Graveyard Herb Garden Gorgie City Farm Duddingston Community Garden North Edinburgh Grows, The North Edinburgh Arts Centre Pilton Community Garden Portobello Electric Bungalow Community Garden (following removal) Saughton Park Lady Road Allotment Milton Road Community Garden Leith Community Crops and Pots Redhall Walled Garden Sighthill Community Garden Gracemount Walled Garden Harrison Park Herb Garden	
Outwith Edinburgh	
Graham Bell's Garden Cottage, Coldstream North Queensferry Transition Walled Garden	

APPENDIX 3

Non-Gardening Stakeholders	
Name	Role/Organisation
Adam	Tendering and Development Manager – Carr Gomm Scotland
Angela	Community Development Health Worker
Ben	Planning and Development Director – Grosvenor
Beth	(Previously) Community Project Worker – Carr Gomm Scotland
	Community Grower – Lochend Community Growing Project/ Pilton Community Garden
	DIY Herbalist
Callum	Councillor – City of Edinburgh Council
Clive	Community Gardening Activist
Emily	Development Manager – EDI Group
Harry	Local Resident – Granton
Hilary	Manager – Ripple Project
John	Community Activist – North Edinburgh
Lauren	Estates Surveyor – City of Edinburgh Council
Matthew	Social Entrepreneur – Edinburgh Community Backgreen Association and Re:Solution
Mike	Development Worker – Community Land Advice Service
Neil	Property Team Leader – City of Edinburgh Council
Nicola	Development Worker – Edinburgh Garden Partners
Philippa	Planner – City of Edinburgh Council
Ross	Partnership Development Officer – City of Edinburgh Council
Ruth	Scotland Development Worker – Federation of City Farms and Community Gardens
Ryan	Community Gardening Development Officer – Edinburgh Lothian Greenspace Trust
Sam	Community Gardening Development Worker – Gracemount Walled Garden
Sara	Food Development Worker – Pilton Community Health Project
Sean	Allotment Officer – City of Edinburgh Council
Sophie	Partnership and Information Manager – City of Edinburgh Council
Stuart	Councillor – City of Edinburgh Council
Tim	Landscape Architect – HarrisonStevens

APPENDIX 4

List of Fruit, Vegetables, Herbs and Flowers Grown at the CUFGs		
TGCG	LSG	GCG
Artichoke, beetroot, blackcurrants, carrots, cornflowers, daikon, gooseberries, hyssop, kale, lavender, lettuce, mint, mustard greens, nasturtiums, pansies, peas, potatoes, radishes, sage, salad leaves, spinach, sunflowers, Swiss chard, thyme.	Apples, blackberries, blackcurrants, broccoli, carrots, cherries, chillies, chives, chrysanthemums, courgettes, cucumber, foxgloves, gladioli, gooseberries, leeks, lemon balm, lettuce, lovage, lupins, marigolds, marrows, mint, pak choi, pears, peas, peppers, potatoes, quiona, raspberries, redcurrants, rosemary, rhubarb, runner beans, sage, spring onions, squash, strawberries, sunflowers, swede, sweet peas, Swiss chard, tomatoes, thyme.	Beetroot, broad beans, brussels sprouts, cabbages, carrots, coriander, French beans, garlic, gooseberries, kale, leeks, lettuce, marigolds, mustard greens, nasturtiums, parsnips, peas, potatoes, pumpkins, purple sprouting broccoli, redcurrants, rhubarb, rosemary, runner beans, sage, spring onions, strawberries, sunflowers, swede, sweetcorn, Swiss chard, turnip.

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