

Towards a more Ecological Urbanism:

**The Sheffield Abundance fruit harvesting project
as critical urban learning assemblage**

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satisfaction of the requirements for the degree of Doctor of
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Katherine Knowles

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Summary of thesis

The overarching context of this research is the problem of sustainability in, or of, existing urban areas. Urban populations are expected to rise in the UK, without a corresponding rate of change to the physical form of cities. This research looks to the expertise of inhabitants in existing urban areas for understandings and practices that could address sustainability and that may complement or obviate physical urban design interventions. It seeks to explore the relationship between locality, local knowledge and broader themes of sustainability.

The Abundance urban fruit harvesting project in Sheffield is taken as an example of collective local action by inhabitants in an existing urban area to address themes relevant to sustainability. Abundance participants find, harvest, distribute, map, and celebrate surplus produce, such as fruit, nuts and herbs in the city. Blurring boundaries of what is considered urban, rural, nature, or private, and bringing humans into closer connection with the ecological life of the city, could be said to increase ecological sensitivity.

In terms of methodology, this study takes an inductive approach, informed by grounded theory. An ethnography of the Abundance fruit harvesting project in Sheffield is conducted over a full year. The thesis includes thick description that relates the practices involved, the spaces used, and the changed relations produced. This forms the basis for considering how sustainability is understood in the context of 'bottom up' community projects and practices in urban areas, and what implications this raises for 'mainstream' approaches to sustainable development in urban planning and design. As a learning assemblage, Abundance critiques aspects of conventional urbanism and draws together more ecological alternatives.

The results constitute an original contribution to knowledge in that this is one of the first such studies of a project of this kind, and as it draws on interdisciplinary literature encompassing participatory urban design, sociology, anthropology and geography. In particular the key findings are: 1. grassroots collectives can practice a form of urban design that is vernacular and experiential; 2. this type of urban design can play a role that is tactical and critical in processes of urban development and change; 3. participants adopted an eco-centric understanding of sustainability (an assemblage or meshwork of ecological relations) which is rooted in entanglements with living and non-living others; 4. social learning is a way of inhabiting the city, and in this context makes a novel contribution to practice theory; 5. socially engaged arts practice and collective action by urban inhabitants offer routes to activating change in existing urban areas and; 6. the use of ethnographic methods can enhance urban design research.

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Chapter 1. Introduction

This chapter introduces the research problem and context, and explains my interest in and approach to it. It sets out the research aims and objectives and a summary of what can be found in each chapter.

1.1 The problem of sustainability and existing urban areas

The overarching context for this research is sustainability and the problem of existing urban areas. The majority of the world's population (54%) now lives in cities and urban environments (World Health Organization, 2014). This has been the case since 2006 and urban populations are set to rise. Added to the rising scale of urbanisation is the expectation that most of the existing urban fabric will still be in use long into the future. In the UK, two thirds of homes that will exist in 2050 have already been built (Communities and Local Government Committee, 2008). Studies of UK cities have identified numerous concerns in relation to sustainability, not just as physical forms but as social processes of development, and identify a range of challenges for urban planning, management, design, and governance, see for example (Blowers & Young, 2000; Wheeler & Beatley, 2009). It is clear that the existing built environment needs new thinking about sustainability.

1.2 Urban sustainability responses: disciplines of the built environment

There are a number of approaches to sustainable design across the range of design disciplines. These reflect not only different ideological interpretations of sustainability but also different tools perceived to be available to designers within different sectors and disciplines. This section will discuss key approaches to sustainable design found in built environment disciplines, such as architecture, urban design and town planning.

A key dualism in urban design is identified by Mike Hodson and Simon Marvin (Hodson & Marvin, 2010. p. 310). They present two '*competing logics of eco-urbanism*': '*new-build*' eco-developments; and '*alternative [...] bottom-up community-based approaches around relocalisation*'. The eco-development approach, exemplified by Masdar and Dongtan eco-cities in UAE and China respectively, belongs to a neo-liberal tradition of urban development in which large cities can be produced based on a technocratic model without changing the organisation of society or the economy. The '*alternative*' approach seeks to address social and economic organisation within the design process in a more radical way, and is designed in context predominantly by local people. Movements such as the Transition Network, on which Transition Towns are based, and small communities of Low Impact Development, sit within this category.

The dualism described by Hodson and Marvin provides a useful overarching framework for understanding design approaches in the built environment. However, drawing a complete distinction between technical and social or behavioural approaches is rejected by many commentators who note a number of nuances that merit further discussion. These range from approaches that acknowledge some form of link between social and technical, or physical. It is not

my intention to provide an exhaustive account of these, but a flavour of these are discussed further below.

Katie Williams and Carol Dair, for example, argue that a sphere of interaction exists in which certain sustainable behaviours could be supported or enabled by specific physical elements of the built environment at the neighbourhood level (Williams & Dair, 2007. p. 161). The link to the disputed history of architectural determinism is noted by the authors, as is the scant empirical work to explicitly support the theory behind the model and the framework of behaviours. Nonetheless, there is a large literature from the fields of sustainability, behavioural and design theory, urban sociology, planning and psychology that support the claim, and the theory is widely utilised in urban planning and design guidance and policies. The types of behaviour that Williams and Dair describe within their framework of behaviours supported by the built environment are: use less energy in the home; use less water in the home; recycle waste; maintain and encourage biodiversity and ecologically important habitats; make fewer and shorter journeys by fuel inefficient modes of transport; make essential journeys by fuel efficient modes of transport; take part in local community groups, local decision making and local formal and informal social activities and use local services, amenities and businesses (ibid, p. 168). '*Ethical investing*' is given as an example of sustainable behaviour not reliant on the built environment (ibid, p. 162). The authors recognise that they include only those behaviours that could contribute to sustainability in a relatively mainstream built environment. They therefore omit behaviours common only to groups of people with particular philosophies of sustainable living (e.g. communal living, ecological design devotees). They state that the framework relates to a built environment that supports a modern society and economy, and an interpretation of sustainability that may require some lifestyle adjustments, but not major philosophical or practical changes. Assumptions are made about what factors enhance the likelihood of sustainable behaviours being taken up. These include: the presence or absence of a certain feature within the dwelling or neighbourhood; the proximity of the feature to a resident's dwelling; the accessibility of that feature from a resident's dwelling. Although the framework does not set out to explain behaviour, it initiates a discussion that could usefully be expanded to consider how people would come to utilise the built environment in the way intended and how that could be incorporated into a design strategy.

The framework above, and indeed most contemporary discussion of urban sustainability, is based on a model of development in which physical infrastructure is provided for a local community by outside agents such as private developers or the local authority. Local people may participate in decision making, but to a limited extent and would certainly not initiate or deliver projects. Two immediate questions arise from this. First, could the conversation about sustainability in existing urban areas be expanded by considering interventions that do not involve major physical alterations to the built environment? Second, what about other models of development or habitation, such as vernacular traditions, in which the built environment is designed and created by those inhabiting it?

1.3 Urban sustainability responses: broader thinking

There is huge confidence within design disciplines that design has a central role to play in bringing about change and creating a more sustainable world (Ehrenfeld, 2008; Fry, 2009; Fuad-Luke, 2009; Manzini & Jegou, 2003; Thackara, 2005). There is also considerable discussion about exactly what

that role is and who plays which parts of it. This thesis aims to contribute to that debate. One aspect of this will be, as described above, moving beyond the current divide between physical/technical and social design and understanding design in a more holistic way. A first stage is to think about design approaches that may be applied in the built environment, but that are not typically considered within the discipline's literature. These draw from the broader design literature, and include social design; slow design; and co-design.

1.3.1 *Social design, or socially active design*

Alastair Fuad-Luke defines social design as *'the development of a social model of design, and a design process intended to contribute to improving human well-being and livelihood'* (Fuad-Luke, 2009. p. 152). The primary concern of social design is not products for sale, but the satisfaction of human needs. The focus is on designing new *'functionings'*. These provide *'enabling solutions'* that empower and extend the capability of the user. Consequently, socially-active design is *'design where the focus of the design is society and its transition and/or transformation to a more sustainable way of living, working and producing'* (ibid, p. 78). These form part of what he describes as *'design activism'*. There are a number of empirical examples of this type of design and how it applies to the built environment (Julier, 2008; Manzini & Jegou, 2003; Meroni, 2007) but they are not developed in detail.

1.3.2 *Slow design*

Slow design aims to be the antithesis of the fast design processes that involve unsustainable flows of resources and a metabolism driven entirely by economic imperatives. Slow design focuses on ritual, tradition, experience, reflection, evolution, participation and shared knowledge. It includes the well-known Italian Slow Food movement (Fuad-Luke, 2009. p. 157) and is reported to help generate fresh awareness, possibilities and create new societal values. Its relevance to the built environment is likely to be most relevant in terms of the process of development, perhaps moving from a front-loaded approach in which plans and outcomes are defined in detail from the outset, to a more evolutionary and organic approach in which outcomes are more flexible over time and in which uses can develop in situ.

1.3.3 *Co-design*

There is broad recognition that sustainability is a complex and inherently political issue. Therefore, some design practices seek solutions by requiring dialogue and resolution amongst a range of stakeholders. Co-design refers to any practice of *'designing with'* others and is based on the premise that people who ultimately use a designed artefact should have an input into how it is designed, and that this will increase the effectiveness of the outcome. Co-design can include participation in all aspects of design, from context and problem definition through to implementation. Its current use is most common in community architecture and urban planning (Fuad-Luke, 2009. pp. 147-148). In terms of its relevance to this thesis, co-design confirms the importance of user participation in design and also suggests possible strategies for interaction between professional designers and

citizen groups. However, the main focus of this thesis is design initiated and led by those groups, rather than *'with'* them.

1.4 The role of citizens and inhabitants

There is considerable debate within and beyond the sustainability literature about the way change happens and the role of different agents in bringing it about (Onyx & Dovey, 1999). Depending on the scope of their influence and the tools available to them, different agents can intervene in different ways.

The UK sustainable development strategy, *Securing the Future* (HM Government, 2005) is primarily based on *'ecological modernisation'*, creating greener markets and driving business innovation in eco-efficiency (Seyfang & Smith, 2007. p. 585). Therefore the role for Government and business in recent years has been central and relatively well defined position. Also within the UK strategy is a strand focussing on community action and the social economy. This agenda recognises the need to embed sustainability governance, behaviour and lifestyle changes in local communities and not to prioritise economic growth to the exclusion of *'quality of life'*. The policy states the need to acknowledge the role of *'socio-technical regimes'* and their influence on behaviour. Currently, however, little recognition is given to the innovativeness of grassroots action nor to the interconnectedness of social and technical regimes (Seyfang & Smith, 2007. pp. 586-588).

Although established under the previous Labour Government, these policy strands remain current and relevant. During the time of the Coalition Government an increasingly active role was anticipated for citizens, within the localism agenda (HM Government, 2010). New Conservative Government policy is yet to be defined. Understanding the current workings and potential of citizen groups will help to define and support roles and actions within the new political climate.

Another motivation for focussing on citizens, or inhabitants, is their potential ability to activate levers of change that may be less easily activated by other change agents. These are the levers that work on mindset, values and culture, and that have the potential to bring about a paradigm shift in the way humans behave and relate to each other and the world around them. Citizen groups arguably have greater ideological freedom than government or markets and can frame problems and solutions in alternative ways. Seyfang and Smith (2007) describe this type of activity as *'grassroots innovation'*. They suggest that sustainability experiments in society in which participation is widespread and the focus is on social learning may be recognised as *'green niches'* where alternative approaches try to resolve contradictions in the dominant system (ibid. p. 589). Whilst these may not be blueprints for wider diffusion they are valuable sources of innovative ideas.

The ability of citizen groups to adopt new and potentially transformative approaches to sustainability is also recognised in future scenarios work (Raskin, Electris, & Rosen, 2010). This claims that continued conventional development could cause genuine socio-ecological descent, but that a *'Great Transition'* to a civilization of enhanced human well-being and environmental resilience remains possible. The Global Scenario Group state that *'civil society and engaged citizens become critical sources of change for the new values of Great Transitions'* (Global Scenario Group, 2002. p. 49). This view is supported by Michael Carley who argues that one role for civil society *'must be to*

encourage more visionary thinking and policy commitment on the part of politicians, national and urban' (Carley, 2001. p. 11).

The systems approach to sustainability action proposed by Donella Meadows (1999) also supports the idea that one of the most powerful levers for change is the mindset or paradigm out of which the system arises. Meadows argues that although societal paradigm changes are extremely difficult to bring about, the mindset of an individual can be altered very easily. Based on the theories of Thomas Kuhn she argues that the process to bring about paradigm change is thus:

'keep pointing at the anomalies and failures in the old paradigm, you keep speaking louder and with assurance from the new one, you insert people with the new paradigm in places of public visibility and power. You don't waste time with reactionaries; rather you work with active change agents and with the vast middle ground of people who are open-minded' (Meadows, 1999. p. 18)

Although Meadows does not mention citizen groups explicitly, the description above suggests they could be ideally placed to create new systems and ways of doing things that highlight the problems in the dominant system and demonstrate the practical alternatives.

What is meant by citizen groups or civil society merits further elaboration. Three key sectors are frequently identified in urban development partnerships: state/local government; market/economy/business; and civil society/communities/households (Carley, 2001. p. 3). However, the boundaries are often blurred and there is considerable debate, principally around the relationship between state and civil society; the relationship between market and civil society; and the normative role of civil society. Fundamentally, civil society is the realm of non-governmental activity (Day, Dunkerley, & Thompson, 2006. p. 3). Interpretations also often refer to the way in which individuals come together by voluntary association to achieve goals that are social rather than individual. In some interpretations business is included in civil society, whilst in others the absence of commercial or economic interests or constraints is essential. Some see civil society as a *'mediating influence'* over political and economic processes (Day et al., 2006. p. 11).

It is widely agreed that civil society, often referred to as *'the community'*, should participate or be involved in shaping their local environment. This is now a well-established discourse in conventional urban planning and development, and is becoming increasingly important in sustainability issues. Numerous strategies exist for engaging citizens, and although it is not the intention to engage in discussion about their effectiveness here, sufficient critiques of standard participatory methods exist to suggest that alternative models still need to be developed (Carley, 2001. p. 13).

Within what might be described as *'bottom-up'* or citizen approaches to development, this study shifts the focus from what citizens may express when consulted to what citizens will initiate without being consulted. The interest is in how desires for change are expressed outside of formal consultation processes, what groups will self-organise to achieve, and how they show what they want through actions rather than words.

Action by people within the environment where they live is not always referred to as *'citizen'* action. There are longstanding vernacular traditions in the built environment. Examples of inhabitants creating responses to local environment problems can also be found beyond the sustainability

literature. Documenting strategies to address development and urban poverty issues in squatter settlements globally, Diana Mitlin and David Satterthwaite argue that interventions that are developed by local organisations and self-organised groups can be highly effective and long-lasting but often do not receive the attention they merit (Satterthwaite & Mitlin, 2004. p. 11).

Within the UK, across Europe and globally there are examples of self-organised alternative systems and practices created by people who may or may call themselves designers. These examples range from small scale socio-technical systems within existing communities to entire new communities. Small scale socio-technical systems have been the focus of attention from a range of design researchers. For example, the EMUDE project (Emerging User Demands for Sustainable Solutions) catalogues a range of cases from across Europe in which 'creative communities' use existing resources in an original way to bring about system innovation (Manzini & Jegou, 2003; Meroni, 2007). The cases cover a range of social and environmental issues relevant to the neighbourhood scale, and include examples of local materials recycling projects, community childcare arrangements, time banks and local currencies, co-housing, swap-and-share systems and food growing. The focus throughout is on social innovation, with an aim to understand its relationship with, and potential for, related technological and production innovation. There is, however, very little consideration of the way space is used in these cases, and to the implications that may have for the development or replication of cases in other contexts.

On a larger scale, research on intentional community and eco-village projects reveal a different focus. These range in scale and objectives, but include such projects as Findhorn in Scotland¹, Lammas in Wales², and a range of communities, kibbutz and settlements across the world (Bang, 2005). Research on these, particularly with reference to UK cases observed so far, tends to be split between the social and physical science disciplines. Architecture and design focus on the buildings, materials, and alternative technologies, whilst social geography and planning consider the land use, social innovation and political motivations (Chatterton & Pickerill, 2010; Dawson, 2006; Fairlie, 1996; Pickerill & Maxey, 2009a, 2009b; Scott, 2001). The Permaculture literature approaches these spaces more holistically, discussing the social and physical aspects of change, but analysis of cases tends to be more descriptive than critical (for example: Bang, 2005). The radical geography approach of (Pickerill and Maxey 2009a) presents these projects as '*radical spaces of innovation*' in contrast to conventional rural planning, which forms a useful basis for this study's approach to alternative systems in sustainable design. A useful development on the work of Pickerill and Maxey would be to understand the projects in terms of motivations and, in more detail, understand how space is used to make the design a reality.

To summarise, the particular benefits of citizen, or inhabitant, action reported in the literature are as follows:

- Responses are designed in context and are locally-relevant;
- Solutions are devised to match the needs and willingness to change of those involved;

¹ Findhorn is a spiritual, educational and ecological settlement of around 300 people. See Findhorn Foundation. *Findhorn Spiritual Community, Education Centre, Eco Village* [Online]. Available at: <http://www.findhorn.org/> [Accessed: 14.01.2011].

² Lammas is a cluster of 9 new eco-smallholdings in Pembrokeshire which aims to develop as a community and educational centre. See Lammas Low Impact Initiatives Ltd. 2007. *Lammas Eco Village* [Online]. Available at: <http://www.lammas.org.uk/> [Accessed: 14.01.2011].

- Local negotiation of solutions enables building of local social capital;
- Active participation develops personal skills and capacity;
- Consciousness raising and active involvement may engender more lasting behaviour change;
- Action can focus on issues mainstream actors ignore;
- An alternative infrastructure can be created and demonstrated on a small scale.

1.5 People and foraging in the urban environment

There is a large literature on the role of parks and green spaces in cities, which I will not elaborate here. This research is more concerned with collective action towards sustainability, and the procurement of food from plants in the built environment is a route through which to explore it. As yet no scholarly attention has been paid to the practice of urban fruit harvesting or foraging, this research could therefore offer new insight purely on that basis. As an organised volunteer group, the urban fruit harvesting project has many parallels with other UK urban growing projects, such as community gardens, and in some ways forms part of the urban food-growing revival of recent years. Whilst many parallels can be drawn between fruit harvesting and community gardens, there are important differences. Within the design literature, studies of food growing and connections with nature focus on physical interventions and on creating and reclaiming space for planting. My research takes an approach that considers the role of physical space and how it is used, but also considers the non-physical elements of the overall project and how the two are integrated. This could broaden understandings not only of how to consider space for growing food in cities, but also how to establish activities and practices that connect people with it. Also, foraging involves a more spatially disperse and informal set of practices so is likely to have different implications for urbanism generally, and for urban design, urban planning and ways of thinking about food-growing and green space in cities.

1.6 Space, Place and the Human Environment

Sustainability, as both a concept and a practice, is deeply connected with meaning and values, indeed it could be said to be constructed from the worldview of each individual or group. In order to understand and practice sustainability it has to mean something to you. A theme of central importance to this study is how this (sustainability) meaning is constructed through the use of 'space' or 'environment' by inhabitants of existing urban environments. It is also interested in what the 'environment' or 'space' in which people currently exist affords them in terms of bringing about the change they seek. In an age of assertive corporate and state-sponsored place marketing and the dominance of the 'ecological modernisation', or 'eco-efficiency' narrative of sustainability, the creation of alternative meanings within the human environment is both necessary and important. This study seeks to understand how these alternative meanings are constructed and experienced.

Space and place are contested concepts. Yi-fu Tuan (1977) states that 'space' and 'place' require each other for definition. The common interpretation is that places are spaces people have made meaningful, that they are attached to in one way or another (Cresswell, 2004. p. 7). 'Space' relates more to geometry, to areas and volumes, whereas 'place' refers to meaning. In planning terms, a

description of a '*space*' may include its function, or land use, whereas '*place*' may describe its qualities, meaning and value to the people who use and occupy it.

From an ecological perspective, James J. Gibson (Gibson, 1979) offers an alternative understanding of how people experience and find meaning in their environment. He does not use the terms '*space*' or '*place*', but talks of an '*environment*' in which humans exist. The way that people experience meaning in the environment is through what he refers to as '*affordances*'. An affordance is what the environment offers, provides or furnishes the person, in a way that takes account of the characteristics of both the person and the environment, and the '*complementarity*' between them. Unlike the distinction between '*space*' and '*place*', an affordance is both objective, in the sense that it refers to physical properties, and subjective, in the sense that it refers to values and meanings (Gibson, 1979. p. 129).

The discussion of how space, place and environment interrelate with sustainability will be ongoing throughout this thesis.

1.7 Approach to the inquiry

Drawing on the ideas discussed above this thesis seeks to explore the knowledge that comes through inhabiting a place and creating solutions *in situ*. It strikes me that such knowledge may not be well captured by '*top down*' approaches to planning and design in which the knowledge of inhabitants is sought almost entirely through consultation exercises, text-based representations, and in situations removed from the living of everyday life. This may not only be limiting the ability of designers and developers to deliver appropriate solutions, it may also be limiting the capacity of inhabitants to learn to create grounded solutions to problems or to imagine and inhabit the world in ways that align with their ideas about sustainability. The research is directed towards what can be learned from people who are active doing something around sustainability in their own existing urban areas.

For the purpose of this study, the collective project I identify is an urban fruit harvesting project called Abundance, run by a group of the same name in Sheffield. The project began in 2007, is not-for-profit, and brings together volunteers and coordinates various activities related to finding, harvesting, preserving, distributing and celebrating fruit in the city.

The interpretive ethnographic approach I take is discussed in detail in **Chapter 3**.

1.8 Aims and objectives

The overall aim of the research is to contribute to the debate on improving sustainability in existing urban environments. Action in this area takes many forms and can be initiated within government, business, or civil society. The latter is seen by many as a source of untapped potential but whilst the ideas and action generated within civil society are recognised and documented, there is very little written that elaborates on the detail of the cases. This study seeks to address that gap. It focuses on

a group of inhabitants seeking change in an existing urban environment; and whose intentions fall within the broad remit of sustainability.

Without detail and context, those engaged in urban sustainability have limited material with which to reflect on the nature of action and interventions. Limited too are the opportunities to consider how to engage with grassroots groups, and whether aspects of their practices could be implemented in other areas. This study provides detail to prompt such reflection. It will enable readers to complement their own particular and local knowledge of urban sustainability with understanding drawn from a different case. It does not provide definitive answers or guidelines, but looks in-depth at a project and offers an interpretive analysis that accentuates themes salient to the researcher and the participants at the time of the study. Given the academic context of the study, themes relevant to urban design and sustainability in the built environment are of particular interest.

To address the overall aim, the research has five main objectives:

- 1) to expand understandings of what counts as sustainability by exploring how members of the project frame the issues and principles that inform their practice;
- 2) to contribute to understandings of how sustainability is practiced by looking at what the group do in their city through the lens of social practices;
- 3) to develop understandings of how fruit harvesting practice is produced in existing urban areas by taking an holistic view of the project and exploring relations amongst the elements involved in practice;
- 4) to contribute to understandings of how fruit harvesting, as a collective urban practice, can be understood in terms of its contribution to change in existing urban areas;
- 5) to consider the broader implications of this research for the design and governance of sustainable projects in existing urban areas, and to consider their 'critical' role with regard to development and urban change.

The first objective involves asking and observing how people in the group understand the issues their practice responds to and how principles inform action. Despite the difficulty of defining the term, I use sustainability to imagine a broad range of possible action towards a more socially just and ecologically sound urban environment. I aim to bring the literature on sustainability together with perspectives of participants to situate their action within the broad range of understandings of the term, even if the term itself is not always used by participants.

The second objective involves a focus on social practices to describe the ways in which urban fruit harvesting is practiced in Sheffield. The social practice lens focuses on collective rather than individual action and is concerned with what people do. The focus on action complements the understanding of intentions in the first aims and seeks to draw out how perceptions, interpretations and actions in the world are shaped beyond individual attitudes or values.

The third objective builds on the holistic understanding of action through the perspective of practice and seeks to understand how elements align and relate in fruit harvesting practice to produce what could be seen as outcomes that contribute to sustainability

The fourth objective shifts the focus from practice to consider how urban fruit harvesting as a collective urban practice could be conceptualised in terms of its role within urban environments and

processes of urban change. The intention here is to take a more speculative approach to situating this emerging practice within the literature, and suggesting how findings illuminated through the study of Abundance might inform other similar projects.

The final objective is to think more broadly beyond the project and to consider how this type of research and way of seeing could influence the design or governance of sustainability projects in existing urban areas. The intention is to consider the potential 'critical' role of such projects with regards to development and urban change.

1.9 Structure of the thesis

The thesis begins by reviewing relevant literature. It proceeds to discuss the approach to this study and the research methods. Empirical material follows, leading into discussion of the findings and conclusions. This section sets out the detail in each chapter.

Chapter 4 gives an impression of how Abundance participants conceptualised the issues that were relevant to their participation in the project. This addresses one of the main aims of the overall study, which is to broaden understandings of sustainability by exploring what a particular group, in this case participants in the Abundance project, perceive to be problematic in existing urban areas. It demonstrates the ways in which Abundance practice stands as a critique of contemporary urbanism.

The Abundance project began in 2007 and has evolved as a collaborative and collective endeavour drawing on the perspectives of a range of participants over time. **Chapter 5** introduces the principles that underpin the Abundance response to the issues presented in **Chapter 4** and that inform the practices discussed in later chapters. It discusses how principles are negotiated as they meet the opportunities and challenges of practical action and how nuances could be interpreted and elaborated through the experience gained running the project. It presents a collection of voices to reflect the breadth of experience within the project and the discourses and narratives that it draws on. It also refers back to the sustainability literature to indicate how the Abundance principles resonate with and depart from other approaches.

Chapter 6 shifts the focus to what people do. It considers the activities of the Abundance project in Sheffield through an analytical focus on practices. This draws on the idea that changes to how the built environments functions and is lived will necessitate new relationships amongst the elements that constitute it. This means changes not only in social relations amongst people but also amongst the myriad of other living and non-living elements of the environment (see Ingold, 2011). Whether or not these relations are understood in the framework of *sustainability*, it is important to consider what new relationships may be formed and from them what new potentialities may emerge. The theoretical concept of practice allows insight into how mind, body and environment interrelate (Pink, 2012). The chapter considers the following Abundance practices: scouting for fruit trees; harvesting fruit; distributing fruit; storing fruit; public fruit giveaways; workshops; and creating 'hubs' in the city. It concludes with some observations on the concept of place.

Chapter 7 explores the nature and qualities of practices in more detail and identifies more general themes about how practices are enacted and how through them people learn and share different

ways of relating, understanding and engaging with and in the built environment. The central theme is how people learn to inhabit the city in different ways. I draw on concepts from the fields of anthropology, ecological psychology and human geography to explore this, through the empirical example of urban fruit harvesting. Each Section in this Chapter illuminates a particular aspect of practice in terms of how it functions to engage and shift broader relations in the built environment. The themes are: learning through the body; the education of attention and the development of skill; discovering new potentialities; challenging cultural convention; and the affective atmosphere of practice.

Fruit trees and bushes are central to the Abundance project and people and fruit trees are brought together on a number of occasions through the practices of scouting and harvesting. In **Chapter 8** I consider the particular interrelations between people and fruit trees in terms of what perspectives and possibilities for learning and relating are opened up through them. The central theme of this chapter is how interrelations between people and fruit trees influence not only the Abundance project itself and its activities, but also the way that participants perceive and use the city more generally. I work with the idea that interactions with fruit trees correspond with a realization or understanding that aspects of urban life do not have to be as they are, that there are other possibilities and ways of doing things. New perspectives are opened up that afford new possibilities. Vistas from fruit trees open up new and intimate aspects for visual perception. Following the cycles of fruit trees sets a rhythm for activity that is in tune with the seasons and takes account of non-human timeframes. Patterns of the past emerge through tracing the places where fruit trees are found. In sum, interactions with trees open up an urbanism with a different rhythm, different cues, different clues to the past and future, and different types of connection and association.

In **Chapter 9** I draw the findings of the study together into the four key areas identified by the research objectives. I highlight how perceptions and practices shift how the city is perceived and lived, suggesting a re-orientation from conventional urbanism to a more eco-centric, or ecological, focus. In terms of what produces the practice I draw attention to two key aspects: the role of socially engaged arts practice and collective action by inhabitants; and the interrelations between people and fruit trees. Finally, I conceptualise Abundance as a critical urban learning assemblage that contributes to an alternative formulation of the city. I position this study in relation to other emerging work on urban foraging and reflect on some of the limitations of my own research.

Chapter 2. Review of the Literature

2.1 Introduction

The intention of this study is to explore how sustainability can be better understood in practice and how sustainability could be improved in existing urban areas. There is a large literature on sustainability and a long history of urban development and change. To begin, I conduct a review of the literature with three main intentions, and this chapter is set out in three sections to reflect those intentions. First, I seek to establish an understanding of definitions and interpretations of sustainability and to contextualise the research (**Section 2.2**). Second, to develop sensitivity to the substantive area of research, which is collective initiatives by inhabitants in existing urban areas (**Section 2.3**). Finally, I aim to assess what research has been done to date on the specific type of activity I propose to study, which is urban fruit harvesting (**Section 2.4**).

This approach to the literature supports the research design of this study, which takes an inductive approach to the relationship between theory and research. I intend to work from observations towards generalizable inferences and theory. This means that at the outset of the study the full extent of the relevant literature is not known. There were clear indications that certain literatures would be useful but not at what level of detail. In other areas it was not clear whether the literature would be relevant or not. The problem of how to approach the literature in inductive research has been the subject of controversy in the grounded theory tradition. I engaged with that debate to guide my approach.

Grounded theory was originally conceived by Glaser and Strauss (1967) as a challenge to social research approaches that focussed on deductive testing of theory. Grounded theory aims to generate new theory by beginning with a topic of interest and a research situation, rather than with a hypothesis. Researchers allow ideas to develop as they generate data, and then test those ideas through an iterative process involving further data collection, analysis, and conceptual theorising. Disagreement emerged between Glaser and Strauss as to when the literature should be reviewed. Glaser stated that much of the literature should not be reviewed until the researcher was in the field and had begun to develop their own ideas, whilst Strauss argued for an early review of the literature (McGhee, Marland, & Atkinson, 2007). An early review of the literature is said to be useful for the following reasons: to satisfy ethics committees; to help make final decisions on the general focus and specific method of the study; to demonstrate the justification for the study (McGhee et al., 2007). The main argument against an early review of the literature is to enable the researcher to effectively generate categories from the data. It is suggested that if the researcher reviews the literature too soon they may focus the research problem on areas that the literature has highlighted rather than the emerging data (Dunne, 2011; McGhee et al., 2007). There are benefits as well as disadvantages to doing an initial literature review. Strauss and Corbin suggested that on the one hand familiarity with relevant literature could enhance sensitivity to subtle nuances in data, and on the other it could block creativity (Strauss & Corbin, 1998).

I do not take a purist approach to grounded theory, but draw on the idea that the literature review can be tailored to some extent to suit the research design. I knew I wanted to do inductive,

ethnographic research about sustainability in existing urban areas, looking at collective, emerging, or 'bottom-up' approaches, by existing inhabitants. I was interested in the relationship between ideas, principles, philosophy and practice. I was also interested in the relationships between people and the environment. At the outset I wanted to contextualise the study within the broad literature on sustainability, to familiarise myself with different approaches to studying emerging action and to see how others had operationalised concepts such as 'place' and 'community'. I wanted to ensure that I was not replicating existing work, whilst at the same time not becoming overly focussed on a particular approach, framework, or set of concepts. Following Blumer (1969. p. 148), I sought 'sensitizing concepts' as a basis on which to begin empirical research. He describes these as:

'a general sense of reference and guidance in approaching empirical instances [they do not] provide prescriptions of what to see, sensitizing concepts merely suggest directions along which to look'

This meant striking a balance between depth and breadth in my initial review of the literature on collective action in urban areas (**Section 2.3**) and reviewing enough of the literature to ensure I was aware of any research on my specific area of interest (**Section 2.4**). As the study progresses I draw in relevant literature and include it in later chapters as the discussion unfolds. This is consonant with the overall aims of inductive research, which aims for an iterative, ongoing engagement between data and theory. It also meant that I could hold open the question as to whether the study sat within and was oriented towards, for example, the design, policy, anthropology, or urban planning literature.

2.2 Sustainability and Sustainable Development: definition and interpretation

2.2.1 Background to the ideas

It is often said that the Brundtland Report established the concept of sustainable development as the framework under which the twin requirements of environmental protection and economic development could be integrated (Jacobs, 1999. p. 21). The terms sustainability and sustainable development had been introduced previously, but it was in the context of the Brundtland Report in 1987, and subsequent Rio Earth Summit in 1992, that they gained political authority and widespread recognition. Several studies have traced the evolution of the concepts of sustainability and sustainable development (Dresner, 2008; Rogers, Jalal, & Boyd, 2008; Wheeler & Beatley, 2009). It is not necessary to elaborate those studies here, except to indicate the intentions associated with the terms, which I do below.

First, the term 'sustainability' originated in the context of renewable resource management and was widely used in the environmental movement to mean '*the existence of the ecological conditions necessary to support human life at the specified level of well-being through future generations*' (Lele, 1991). Lélé equates the term sustainability with ecological sustainability.

'Development' is itself a contested concept. It can refer to human development through education and health, or to material consumption and economic growth (Dresner, 2008. p. 74). Usually it is assumed to refer to economic growth (Sachs, 1991. p. 46), though the possibility of qualitative change in economic development is also accepted (Daly, 1990. p. 33).

'Sustainable development' emerged from attempts to integrate conservation and development, first in the World Conservation Strategy in 1980 and later, with wider support, in the Bruntland Report in 1987 (Dresner, 2008. p. 33). Two commonly used definitions of sustainable development are:

'development that meets the needs of the present without compromising the ability of future generations to meet their own needs.' (WCED, 1987. p. 43)

'improving the quality of life while living within the carrying capacity of supporting ecosystems' (IUCN (The World Conservation Union), 1991p. 10)

Although the concept of sustainable development has gained widespread political support, it is often argued that it is a vague concept, a contradiction in terms, or sometimes that its multiplicity of meaning has rendered it meaningless (Robinson, 2004. pp. 373-377). The wide scope of the concept is certainly hard to pin down to a precise definition, but certain agreement is evident. Although it could be said that agreement does not exist on what sustainable development *is*, we do have an agreement on what it is *about*. Consensus has emerged about which concerns must be brought together for consideration, providing a conceptual framework in which to operate. The values involved have not necessarily been defined, but have been identified. The core ideas, according to Jacobs (1999) are: *'environment-economy integration; futurity; environmental protection; equity; quality of life; and participation'*. Alternatively, Haughton (1999) summarises five key principles, based on equity: *'futurity (inter-generational equity); social justice (intra-generational equity); trans-frontier responsibility (geographical equity); procedural equity (people treated openly and fairly); inter-species equity (importance of biodiversity)'*.

2.2.2 Sustainability and sustainable development: contested concepts

Sustainable development is a contested concept, for which meaning exists on two levels (Jacobs, 1999. p. 25). On the first level sustainability is a concept which, like the concepts of democracy, liberty and social justice, has basic core ideas that are now widely understood and agreed on. On the second level, sustainability has various conceptions in practice, over which there is not agreement. Jacobs argues that this lack of consensus over the second level of meaning in practice derives from the different interests and values of different users and is part of the essence of sustainability. Nitin Desai, speaking of his involvement with the Bruntland Report, commented that *'the issue is not defining sustainable development, but understanding it [...] definitions are useful only for the clue that they give you for the premises on which somebody works'* (quoted in Dresner 2008, p. 70).

The idea that what is understood and practiced in the name of sustainable development depends on the political and philosophical position of those proposing it is taken up in the work of Bill Hopwood et. al. (Hopwood, Mellor, & O'Brien, 2005) and Desta Mebratu (Mebratu, 1998). Mebratu states that an unambiguous scientific view on the definition is unlikely. Hopwood et al. map approaches to sustainable development to demonstrate the diversity (**Figure 1**).

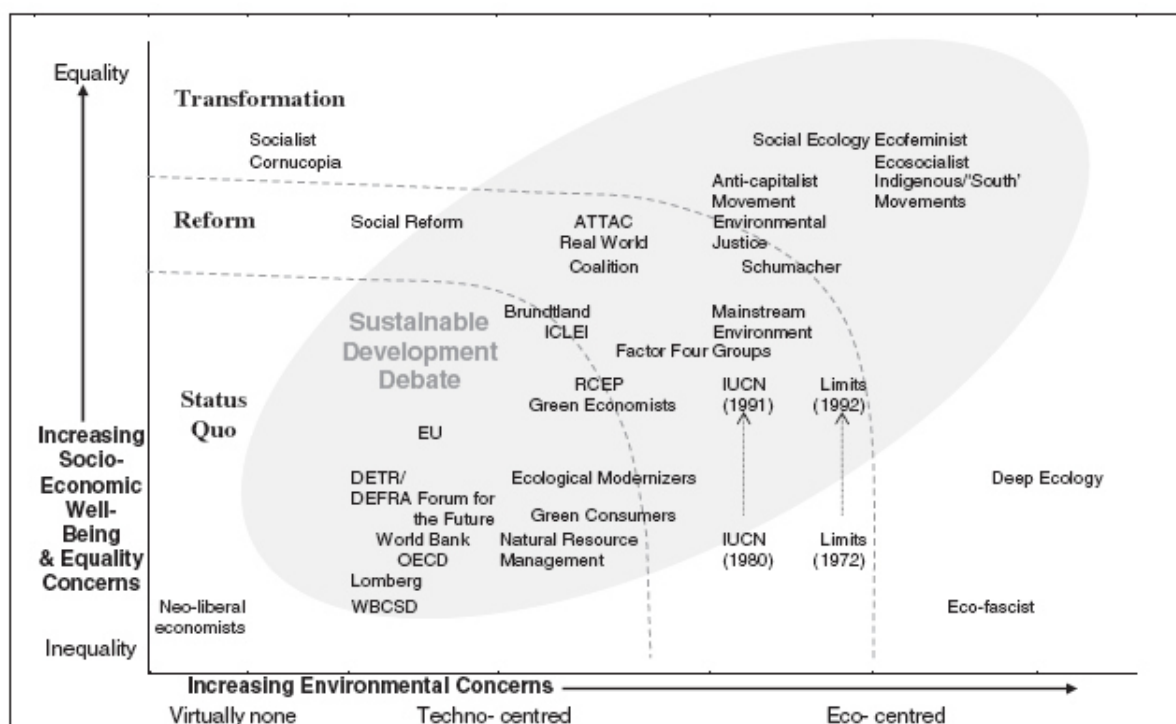


Figure 1 (Source: Hopwood et al., 2005. p. 41)

In their discussion, Hopwood et al. identify three broad views on the nature of the changes that are needed to achieve sustainable development: the status quo position believes that it can be achieved within present economic and social structures; the reformist position states that fundamental reform is necessary but without a full rupture with existing arrangements; and the transformation position holds that existing economic and power structures are the very root of the problem and so a radical transformation is needed (Hopwood et al., 2005. p. 41). This relates to a key debate in sustainability literature and practice over the extent to which it is radical or simply reformist, and how far it encompasses fundamental social and political change (Robinson, 2004).

According to the 'three pillars' model of sustainability, sometimes referred to as the 'triple bottom line', or 'weak' or 'shallow' sustainability, there are three key aspects of sustainable development that need to be balanced or traded-off against each other. The three aspects are: economic growth, environmental protection, and social equality. This idea is often represented by a diagram with three overlapping circles, which represent three objectives that are thought to need to be better integrated. However, critics argue that the three pillars model is flawed because it assumes that trade-offs can always be made between the environmental, social and economic dimensions of sustainability. This has led to a distinction being drawn between those advocating 'weak' sustainability (in which natural and manufactured capital are interchangeable and technology is seen to be able to account for lack of resources or damage to the environment) or 'strong' sustainability (in which natural processes cannot be replaced by human effort and, further, that non-human species, natural systems and biodiversity have rights and values in themselves) (Hopwood et al., 2005. p. 40).

Another key debate in the sustainability literature is sometimes conceptualised as a distinction between anthropocentric and eco-centric orientations (see for example Imran, Alam, & Beaumont,

2014), or as a problem of the perception humans hold of nature and their position within it (Capra, 1996). This in some ways reflects the 'weak' or 'strong' sustainability argument. An anthropocentric perspective is seen as weaker in terms of the way it encompasses ecological concerns. This critique picks up the Bruntland report's emphasis on meeting *human* needs. Anthropocentric interpretations of sustainability are associated with the view that nature is instrumental to and infinitely exploitable for the satisfaction of human needs. Technology is seen as the solution to resolving the problems of environmental limits. In this debate, eco-centric or bio-centric perspectives on sustainability are seen as 'stronger' because they include a stronger environmental or ecological ethic. Many within what is referred to as the '*deep ecology*' movement hold this view (for an account of ecological perspectives see Perez de Vega, n.d.). They argue that human life depends on the same biophysical factors that support all life forms, and that the planet, in which all life is interconnected, is not something to be exploited but something with its own intrinsic value (Suzuki & McConnell, 1997). They state that a new ethic, a new set of values, and a new way of relating to the natural world are needed. This position is summed up by Fritjof Capra as a 'crisis of perception' (Capra, 1996. p. 4) in which humans subscribe to an outdated '*worldview*' or '*paradigm*' (a basic way of viewing reality and of creating value and meaning). A shift in perception, he argues, is what is needed to shift how people act in the world towards more sustainable ways:

'The new paradigm may be called an holistic worldview, seeing the world as an integrated whole rather than a dissociated collection of parts. It may also be called an ecological view, if the term 'ecological' is used in a much broader and deeper sense than usual. Deep ecological awareness recognises the fundamental interdependence of all phenomena and the fact that, as individuals and societies, we are all embedded in (and ultimately dependent on) the cyclical processes of nature' (Capra, 1996)

2.2.3 Scale and boundaries

In the literature there is considerable scope in terms of what the concepts of sustainability or sustainable development are applied to and at what scale. The socially constructed boundary that is chosen will to a large extent determine which factors are considered and how they are compared.

Daly (1990. p. 36) provides some insight into how sustainability defined at the national scale may be reconciled with trade that draws on ecological carrying capacities at the international scale. He argues that two countries, whilst not sustainable individually, could be sustainable in their symbiotic relationship. This is based on the concept of 'strong' sustainability (explained above) in which natural and man-made capital are interchangeable. He states that:

'a single country may substitute man-made for natural capital to a very high degree if it can import the products of natural capital [...] from other countries that have retained their natural capital to a greater degree'.

Similarly, the Bruntland Report states that trade-offs can be made across different areas:

'a forest may be depleted in one part of a watershed and extended elsewhere, which is not a bad thing if the exploitation has been planned and the effects on soil erosion rates, water regimes and genetic losses have been taken into account' (WCED, 1987. p. 45).

In terms of the built environment this tension is again evident. For example, high density cities generally concentrate activities and reduce travel distances whilst also increasing efficiency in infrastructure and providing opportunities for closing resource loops. However, a high concentration of certain activities means that carrying capacity thresholds for resources are likely to be reached sooner on a local or regional scale. Therefore dense cities may be positive for sustainable development at the global scale but negative in terms of regional and local impacts (EC, 1996. p. 136).

A range of terminology is currently in use that aims to add precision to what is under consideration in terms of spatial or functional referents, for example: sustainable city; sustainable community; sustainable neighbourhood; sustainable place; sustainable building; sustainable landscape. Whilst these terms may be helpful in delineating and organising efforts towards sustainability, the use of such bounded terms can risk neglecting essential influences outside those boundaries and thereby undermining the possibility of a holistic sense of sustainability. It is also important to note that terms such as neighbourhood and community can be conceived of as spatial as well as functional entities. The focus on practice in this study partly reflects an attempt to move from conceptions of sustainability based on pre-determined functional or spatial categorisations.

2.2.4 Sustainability as a process of social learning

A final dimension to the sustainability question that is important to highlight for this study is the extent to which it exists as an end-state or a process. A number of measures and indicators of sustainability have emerged over the past decades, suggesting a scientifically definable set of conditions that, once achieved, will result in sustainability. Alternatively, sustainability can attempt to capture both scientific and socially constructed elements within practice, and be thought of as a process of social learning. As suggested by Robinson et al.:

Sustainability can usefully be thought of as the emergent property of a conversation about desired futures that is informed by some understanding of the ecological, social and economic consequences of different courses of action (Robinson, 2003 and Robinson and Tansey, 2002). This view acknowledges the inherently normative and political nature of sustainability, the need for integration of different perspectives, and the recognition that sustainability is a process, not an end-state. It must be constructed through an essentially social process whereby scientific and other 'expert' information is combined with the values, preferences and beliefs of affected communities, to give rise to an emergent, 'co-produced' understanding of possibilities and preferred outcomes (Robinson, 2004. p. 381)

As a social learning process, sustainability is experimental and experiential. It is where different approaches are tested in different socio-political and environmental circumstances. It is a concept through which capacity can be built to live more sustainably (Scott & Gough, 2004).

Importantly for this study Robinson et al. (2004. p. 374) suggest that it is from the attempts at implementing sustainable development that definitions of what it is might best emerge:

'it makes sense for definitions, perhaps many of them, to emerge from attempts at implementing sustainable development, rather than having definitional rigor imposed from the outset'.

What I take from this is an important perspective on the relationship between the theory and practice of sustainability. This is that to explore a range of practices that work towards improving quality of life and the environment could offer new suggestions as to how sustainability can be understood both in theory and in practice. Further, that to predefine what is meant by sustainability could mean excluding from consideration a range of promising possibilities for action. It is for this reason that I do not define what I mean by sustainability from the outset in this thesis. Instead, the research is informed by the discussion in this chapter and looks to the empirical example to ask what can usefully be added to the question of sustainability in existing urban areas. It is to potential cases of sustainability in practice that this chapter now turns.

2.2.5 Sustainability in the existing built environment: logics of eco-urbanism

There is a large literature and range of actions in the built environment oriented towards sustainability or sustainable development. My intention here is not to review all of it, but to draw attention to some key aspects related to how development happens and who drives it, or what might be called different logics urbanism.

In what they refer to as urbanism in the anthropocene, Mike Hodson and Simon Marvin (2010) identify two *logics of eco-urbanism*'. These are: the development of '*new-build eco developments*'; and '*alternative [...] bottom-up community-based approaches around relocalisation*' (Hodson & Marvin, 2010. p. 310). New build eco-developments are described as belonging to a neo-liberal tradition of urban development in which large cities can be produced based on a technocratic model without changing the organisation of society or the economy. Examples at a range of scales include the proposed Thames Gateway eco-region; the eco-cities of Masdar and Dongtan in Abu Dhabi and China respectively; the eco-towns proposed by the UK Government in 2007; and smaller scale eco-blocks and buildings. The 'eco' element of this logic of development is that they are able to transcend conventional notions of ecological constraint (such as climate change and flooding, and resource constraints such as energy and water) by building in their own ecological security in the form of integrated infrastructure such as food, energy, water, and waste. The authors highlight the assumption that developers seek to anticipate and manage these ecological conditions on behalf of users, and critique the approach for operating in a '*socially regressive and market-oriented*' way that does not confer benefits beyond the bounded eco-development (Hodson & Marvin, 2010). The other logic of eco-urbanism identified by Hodson and Marvin is '*alternative*' responses. These include movements such as the Transition Network, on which Transition Towns are based, and small communities of Low Impact Development. These community-based initiatives also seek to internalise infrastructure and resource flows to some extent but with the important difference that

they seek local and community control and involvement as opposed to the more commercially and governmentally oriented eco-developments. The authors argue that the type of innovation practiced at this level is more collective and more socially and culturally oriented, and critically it is designed in context and focuses on resource reduction. This distinction offers a useful way to distinguish between urbanism controlled and delivered by the state or private interests and urbanism generated from the 'bottom-up' by local groups. It also reflects broader trends in approaches to sustainability between those that seek technical fix solutions and those that propose wider social and cultural change.

Another logic of eco-urbanism rests on theories of behaviour change. It has been suggested, for example by Katie Williams and Carol Dair (2007), that certain sustainable behaviours can be enabled and supported through the technical design of neighbourhood-scale developments. Williams and Dair base their framework on literature drawn from studies covering sustainability, behavioural and design theory, urban sociology and psychology, design guidance, and planning and design policies, although they note that very little empirical evidence exists to support the claimed link between design and sustainable behaviours. They also acknowledge a link to the disputed history of architectural determinism (ibid. p. 162). Williams and Dair suggest that the following behaviours could be supported or enabled by specific physical elements of the built environment at the neighbourhood level: using less energy in the home; using less water in the home; recycling waste; maintaining and encouraging biodiversity and ecologically important habitats; making fewer and shorter journeys by fuel inefficient modes of transport; making essential journeys by fuel efficient modes of transport; taking part in local community groups, local decision making and local formal and informal social activities and use local services, amenities and businesses (ibid, p. 168). As the authors recognise, the list includes only those behaviours that could contribute to sustainability in a relatively 'mainstream' built environment. It therefore omits behaviours common only to groups of people with particular philosophies of sustainable living (e.g. communal living, ecological design devotees). They state that the framework relates to a built environment that supports a modern society and economy, and an interpretation of sustainability that may require some lifestyle adjustments, but not major philosophical or practical changes (ibid. p. 163). The framework proposed in this study assumes developer or local authority intervention to provide the infrastructure. This picks up on the discussion in Hodson and Marvin's work above about the relationship between local communities and the state or private interests. The assumed relationship is one of provision *for* local communities, in which local innovation and involvement may be limited.

Finally, forms of urbanism exist in which interventions are primarily generated by residents. Recent academic interest in this has adopted the term '*DIY urbanism*' (Deslandes, 2013; Douglas, 2014; Iveson, 2013; Sawhney, Klerk, & Malhotra, 2015; Talen, 2014) to refer to small-scale, incremental improvements that are often low-budget and designed to be temporary. In her study of the history of DIY urbanism, Emily Talen associates the term with '*tactical,*' '*pop-up,*' or '*guerilla*' urbanism that '*are in direct opposition to top-down, capital-intensive, and bureaucratically sanctioned urban change of the kind most often associated with urban planning*'. Although common in many parts of the world, unauthorized use of public space in advanced capitalist democracies like the United States takes on political significance for operating outside of neoliberal redevelopment policies when linked with the 'rights to the city' ideas of theorists such as Henri Lefebvre and David Harvey (Talen, 2014). DIY urbanism includes interventions with both physical and social aspects, for example: '*guerrilla and community gardening; housing and retail cooperatives; flash mobbing and*

other shock tactics; social economies and bartering schemes; 'empty spaces' movements to occupy abandoned buildings for a range of purposes; subcultural practices like graffiti/street art, skateboarding and parkour; and more'(Iveson, 2013) . However, the spirit of DIY urbanism is not new. Talen links it to a longer-standing tradition of interventions that seek to make urban life more *'humane, authentic, and liveable through the actions of individuals and small groups'*, including the *'everyday urbanism'* of the 1990s and nineteenth century civic engagement. A key discussion in Talen's research is the relationship between large-scale master-planned projects and scattered small-scale efforts. On the one hand it may be argued that planning control hampers the vibrant spirit of bottom-up urbanism, and on the other that ad hoc interventions do not necessarily add up to an effective answer to systemic change. Talen notes that small-scale improvement efforts in the nineteenth century had similar objectives to today's DIY urbanism but that the former sought to build toward a larger, government-backed approach to urban improvement whereas the latter is seen as a way of working around an entrenched system that failed. The qualitative difference in the sense of participation and engagement is noted, with DIY urbanism potentially contributing to a collective spirit at the neighbourhood level and improving everyday lives of residents through the process of generating physical change.

This section has drawn out some key themes in urbanism related to the ways in which development is conceived and delivered, who is involved and to what extent, and what assumptions are made about the responsibility for change to a more sustainable city. In terms of a broad-ranging and contested concept such as sustainability it is to be expected that a range of approaches will be taken and likely that a number of different approaches are needed. The literature does not suggest that a particular area needs more urgent attention so because my interests lie more with collective, community-led activity I will focus my study there.

2.3 Collective sustainability initiatives in existing urban areas

This section highlights several empirical examples demonstrating different ways research has been conducted in the substantive area of collective, or community-led sustainability in existing urban areas. It is not exhaustive but aims to give a flavour of the range of ways this type of activity has been conceptualised and the possible research approaches.

2.3.1 Sustainability and skills

In their study of community sustainability initiatives, Marsden et al. (2010) draw on case studies from the UK, Iceland and Brazil to explore how communities can be engaged and motivated to participate in developing sustainability strategies, actions and activities, and what that would mean in terms of skills and knowledge. Their approach is mixed method and includes in-depth interviews, participant observation and focus groups. Their findings help to move beyond abstract conceptualisations of skills, and beyond the specific and specialist skills that dominated literature and policy on sustainability skills to that point. The Egan Review (Egan, 2004), part of the 2003 Sustainable Communities Plan, identified the importance *generic* skills. These are skills that may be labelled *'informal'*, and that may be acquired through *'lived experience'* rather than *'taught'*. Marsden et al. found a lack of corresponding attention given to the processes of acquiring skills and knowledge and to the particular social and institutional contexts in which this takes place. Their

research also identifies that literature and policy tends to emphasise skills as ascribed attributes, rather than the processes of learning, acquiring and transferring them, and also that it tends to focus on practitioner rather than community skills. The case studies chosen by Marsden et al. therefore identify situations in which communities might have identified their own solutions and their approach seeks to focus on learning that is situated, experiential, active and *'by doing'*. Their findings state that new *'webs'* of sustainable eco-economic development can come together through specific combinations of people, places and skills. These *'webs'* are what materially produce and construct sustainable initiatives ranging from energy to cooperative housing. The notion of webs relates to Doreen Massey's idea of *'relational space'* (2005) and Amin and Thrift's idea of a *'hybrid entanglement'* (2007). In this sense, *'place'* is not as a fixed, stable, single location with a defined set of skill sets, but as a sum of its social relations. This exploration of skills in sustainability initiatives helps to reveal the nature and scope of learning that falls outside of formal and practitioner frameworks. The linkages with a more plural understanding of place also helps to illuminate the spatially embedded and situated nature of learning. Some limitations of this work may be found in the social focus of the conceptualisation of the *'web'*. Whilst *'place'*, which includes material elements, is seen to be part of this web, a more extensive, material-semiotic analysis of what constitutes place, or the social/skill *'webs'* could reveal more about what motivates, sustains and inspires action and learning around sustainability. The study concludes with an agenda for future research that includes a working re-definition of the term eco-economy. This is stated as:

The effective management of environmental resources (as combinations of territorial, natural, social and economic capitals) in ways designed to mesh with and enhance the local and regional eco-system rather than disrupting or destroying it. The eco-economy thus consists of a 'web' or viable businesses, economic activities and ascriptive and relational skills that are capable of utilising the varied and differentiated forms of environmental resources of urban and rural areas in sustainable ways. They do not result in a net depletion of resources, but rather provide net capacity benefits which add value to the environment and to the community (Marsden et al., 2010. p. 560)

The suggestion made by the authors is that future planning and social design (for example of new eco-towns and eco-neighbourhoods) could bring together similar initiatives within an eco-economy as a cluster of viable self-sustaining initiatives, but that further research was needed to understand the socio-spatial and economic life of a community that would foster such development. This thesis could contribute to such a research agenda.

2.3.2 Grassroots innovations for sustainability

The work of Gill Seyfang and Adrian Smith (2007; 2013) takes an approach to community-led sustainability solutions based on innovations theory and the study of niche emergence and development. They characterise community-led solutions as *'grassroots innovations'* that may constitute *'niche spaces'* for experimenting with alternative sustainabilities. These are *'networks of activists and organisations generating novel bottom-up solutions for sustainable development; solutions that respond to the local situation and the interests and values of the communities involved'* (Seyfang & Smith, 2007. p. 585). Examples include furniture-recycling social enterprises, organic gardening cooperatives, low impact housing developments, and farmer's markets. The

research seeks to understand whether these niches represent the emergence of alternative pathways for sustainability, and whether they may be scaled up, replicated, or translated into mainstream settings. The findings highlight the challenges in finding resources, funding, and energy to sustain initiatives. The authors also discuss the question of influence, given that most initiatives are small-scale and geographically rooted. They question the extent to which niche alternatives can be congruent enough with mainstream practices that they catch on. It is recognised that some initiatives are addressing issues at a local level and do not see themselves as vanguards for wider changes. For those that are seeking wider change, the processes of scaling-up, reproducing similar groups elsewhere, or allowing elements of niche practices to be adapted into the mainstream can be ways of exerting influence beyond the niche. As with the research by Marsden et al. (2010) the emphasis is on social processes and social learning. Seyfang and Smith do not look in depth at skills like Marsden et al. do, focussing instead on the linkages between technical and social systems. They also note that diverse types of knowledge can be created through grassroots innovation, including that of ethnographic character, which is not captured in some of the more codified research techniques. This suggests that ethnographic approaches to future research could make useful additions to the literature.

It is notable that the two bodies of work outlined above are explicitly oriented towards implementing sustainability as a policy objective. The work anticipates that there will be ways in which the aims and methods of policy-makers and community groups will be compatible. The next two research areas outlined below are not oriented towards policy. First, the work of Sarah Pink draws more on the anthropological tradition. It is less concerned with the applied outcomes of research and more with developing methods and theory for understanding how practices and places are constituted and how they change. Second, work based on a more critical approach to urban geography, sees the state becoming less necessary as people appropriate space for themselves and gain confidence managing their own affairs. The idea is not to improve government institutions and policy but to render it obsolete. These different research approaches reflect the different relationships with the state discussed in the sustainability literature and theory above and confirm the political nature of the concept in both research and practice.

2.3.3 Everyday life, emplaced social practice and sensoriality

In this spirit, Sarah Pink's approach to understanding local sustainable development draws on anthropology of the senses and theories of place to look at how sustainability agendas are constructed and experienced in practice. She does this through case studies of the Cittaslow (Slow City) movement (Pink (a), 2008; (b), 2008; 2012). Her findings lead her to reconceptualise how agency is produced through the type of activism practiced in Cittaslow. She suggests a focus on the notion of '*emplaced sociality*' as opposed to '*community*', which she argues reveals more about the nature of local embodied social relations. In Pink's work the notion of place is also important, and she draws on Edward Casey's notion of place as a '*constantly changing event*', Doreen Massey's notion of place as a '*spatio-temporal event*', and Tim Ingold's understanding of the environment as '*a zone of entanglement*' (Pink, 2012. pp. 24-25). These '*places*' are '*not bounded zones that we live or engage in practices in but they are actually produced through movement*' (Pink, 2012. p. 25. emphasis in original). They are not just constituted through human involvement and movement, but

the involvement and movement of all types of things in ongoing constantly changing constellations, or '*entanglements*'. Thus the work of Pink brings greater consideration of the non-human in sustainability practices. It also opens up discussion of experienced and embodied practices and movements, and the role of the senses within them. Her approach, based in ethnography, social practice theory and theories of everyday life, seems to offer methodological promise for similar research to understand the agency and everyday experience of sustainability in practice.

2.3.4 *The right to the city*

Instead of conceptualising community-led action as necessarily compatible with or directed towards policy goals and systems of governance, Mark Purcell and Shannon Tyman draw on the philosophy of Henri Lefebvre to suggest community-led action may be perceived with more radical political and ecological potential (Purcell & Tyman, 2014). Their empirical examples are community gardens in New York and Los Angeles where inhabitants joined together in communities of mutual interest to build and maintain collective gardens. To draw out this radical potential Purcell and Tyman focus on Lefebvre's term '*autogestion*', which refers to self-management; the idea of people governing themselves. The term *autogestion* originated in proposing worker control of factories as resistance to property rights and the capitalist economy and has been extended to a general sense of people being aware of and in charge of their own affairs in other areas of life, including the family, the neighbourhood and the school. *Autogestion* is less about confronting the barriers that constrain people and more about developing people's own powers to manage themselves. It is a struggle *away from* alienation (from their labour; from other people; from their food; from ecological processes; and from urban space) and *towards* re-appropriating control. Purcell and Tyman highlight the ways in which inhabitants actively produced and managed urban space for themselves by clearing and planting gardens, managing cultivation, distributing food, and governing the everyday activities of the gardens. They learned about soil, water, nutrients and plants as well as the complexities of community governance and negotiating with city officials to produce their own ways of understanding and valuing urban space and encountering one another within it. Purcell and Tyman propose their study as one way of answering Lefebvre's call to identify where *autogestion* is happening, to '*seek out these spaces, narrate them, learn their contours, discover what inhabitants are doing, what they are capable of, and what spaces they are producing. The project must be able to help these acts of spatial autogestion to grow and spread, to proliferate so that they become the norm, so that they might constitute, one day, the world's primary motor of urbanisation*' (Purcell & Tyman, 2014. p. 14). Whilst there is much to be gained by viewing struggles to cultivate food in the city through the lens of Henri Lefebvre's concept of the right to the city, there are some limitations. As Purcell and Tyman accept, participants in the activity had diverse motives:

'some considered themselves activists in a movement, engaging in civil disobedience against private property or struggling against a capitalist economy of endemic crisis. Others were less overtly and consciously political. They saw themselves simply as taking necessary steps to meet the need for food and green space in the city' (Purcell & Tyman, 2014. p. 7).

Empirical work of a more ethnographic nature could explore these differences, hold open more possibilities, and give space and recognition to the multiplicity of voices and interpretations that exist around this type of action. Further, although Purcell and Tyman do not use the term

sustainability explicitly in their work, a consideration of how this type of action relates to sustainability discourses could be useful in situating it amongst other approaches.

2.4 Urban fruit harvesting

The specific focus of this research project is urban fruit harvesting. As explained in the Methodology chapter, urban fruit harvesting in the UK offers an empirical setting in which to explore the research themes. Urban fruit harvesting is the name given by those who practice it to a range of activity around locating, harvesting, processing, distributing, sharing, planting and celebrating fruit, and other forage-able plants and herbs, in the city. This is usually done collectively, amongst a group of local people.

As far as I am aware there has been no academic attention on the subject of urban fruit harvesting in the UK, in the form of published research. The activity came to my attention through local sustainability networks. I followed this up with a desk-based exploration of online community-generated articles and blogs about local activity in a number of UK towns and cities (see for example the Abundance Network¹). These highlight the nature of the activity; offer advice about how to get involved or set up a project; report on local activity; and highlight the benefits of the activity in terms of reducing fruit waste and air miles, being active outdoors, and socialising with a local community. Notable amongst resources created by local groups is the Abundance Handbook, detailing the first two years of the Abundance project in Sheffield (*The Abundance Handbook*, 2009). There has been recent media attention and a growth in public popularity of foraging (see for example Carrell, 2009), but this thesis is concerned with harvesting as a collective organised activity rather than informal or individual practices.

At the time of my initial review of the literature there was no published research on urban foraging in the United States either. Following the inductive research design I continued to check the literature as the study progressed. In 2012 a study was published by the United States Department of Agriculture Forest Service (USDA, 2012); a bibliography and review of the literature about human-plant interactions in urban ecosystems.

Much later, once my findings were at a late stage of development I uncovered three further studies from the US on the subject of '*urban foraging*' and the '*urban forest*' (McLain, Hurley, Emery, & Poe, 2013; Poe, LeCompte, McLain, & Hurley, 2014; Poe, McLain, Emery, & Hurley, 2013). Although these studies were based on individuals rather than a specific collective project, as my research was, it was interesting to note similarities in the findings. The findings from the US studies are set out briefly here to complete this section of the literature review, and they will be discussed again in relation to my findings in **Chapter 9**.

Based on extensive ethnographic research on human interactions with plants amongst gatherers of '*wild*' food in Seattle, Washington, the findings of these authors are published in three core areas: '*urban forest justice*'; '*relational ecologies of belonging*'; and the role of foraging in '*urban ecosystem planning and management*'. They use a definition of '*urban forest*' based on the 1978 U.S

¹ The Abundance Network provides information and advice about urban fruit harvesting in the UK. It can be accessed at: <http://www.abundancenetwork.org.uk/>

Cooperative Forestry Assistance Act, in which *'urban forests include all trees, associated understory vegetation, and fungi in urban areas on private and public land. This definition also includes trees and other plants historically or ornamentally cultivated, which may be found in diverse spaces such as natural areas, street edges, parks, and vacant lots'* (Poe et al., 2013. p. 1). *'Gatherers', 'harvesters' or 'foragers'* were individuals, framed as a community of practice who, although heterogeneous in their activities, cultures, and motivations, share common knowledge, interests and practices of gathering parts from plants and mushrooms (Poe et al., 2013. p. 5).

2.4.1 Urban forest justice

In terms of urban forest justice the research looked at the linkages between active wild food and medicine practices, local and traditional plant knowledge, and the ability to manage and procure these resources safely (Poe et al., 2013). The research found that there were important socio-cultural functions involved in gathering wild foods, including self provision of foods and medicines, maintaining traditions and social ties, and deepening connections with nature in the city in culturally-meaningful ways. The paper raises concerns around social justice given the official prohibition of these practices on public land, the disregard for the cultural meanings and values of foraging spaces, and the limited opportunities for foragers to engage in urban environmental decision-making.

2.4.2 Relational ecologies of belonging

In terms of what they refer to as *'relational ecologies of belonging'*, the research looked at the ways relationships with urban nature are formed, legitimated, and mobilized in discursive and material ways (Poe et al., 2014). Foraging becomes understood as *'bioculturally diverse and rooted cosmopolitan nature practice'*, reflecting the ways that foraging helped people to establish connections to place. However, it also reinforced differences between those who related with nature and places differently. The focus on relationships and networks between people and the more-than-human actors casts foraging, in this case, as a project of negotiation about how habitation is lived and organised, underpinned by interconnected notions of identity, place, mobility, and agency.

2.4.3 Urban ecosystem planning and management

Related to urban ecosystem management the research found that urban foraging is an important way in which urban residents actively relate with plants and fungi, thus signalling that these urban green spaces have are important for the provision of material products as well as services. They have aesthetic, recreational, and ecological values as well as blurring distinctions between urban and rural uses of nature. The paper makes suggestions for incorporating foraging practices in green space planning (McLain et al., 2013).

2.5 Conclusions

This chapter has justified and set out a review of literature appropriate to an inductive research project. It has contextualised the research in an understanding of definitions and interpretations of sustainability. The contested and political nature of the terms sustainability and sustainable

development has been explored and have been found to justify a range of interventions in the built environment of very different character and scale. Caution in the use of terms, and explication of what is meant by them is shown to be important. The review has given detailed consideration to collective, or community-led, initiatives in existing urban areas in field work, without tying the research to a particular conceptual framework at the outset. The range of empirical examples suggests that looking to community-led action will reveal innovative practice that can be understood in the context of a range of social and cultural frames. Finally, it sets out what research has been done to date on the specific type of activity studied here, which is urban fruit harvesting. There was almost no literature on this specific area when the study began, which in a way helped to facilitate what grounded theorists intend when they aim to approach the field with an open mind. The later discussion chapters will return to consider this and further literature as the study progresses.

Chapter 3. Methodology

3.1 Introduction

This chapter describes how the methodological approach was chosen, and what processes were involved in collecting and analysing data. I begin by discussing ethnography in general, and why it is an appropriate framework for this study. I discuss the specific qualitative research traditions on which this study draws, and what assumptions I make about what constitutes knowledge and how it can be accessed. I then move to the empirical ground to discuss how the research setting was chosen and how data collection and analysis strategies were used; how I represent participants in the account and how I navigate the ethical implications of research. Finally I discuss how the ethnography should be read, and to what uses it can be put.

3.2 Aims of the study and the interpretive ethnographic approach

This study aims to improve understanding of opportunities that do, or could, exist for collective, community-led initiatives to contribute to urban sustainability. To do this I use research as a means to understand and '*mediate between different constructions of reality*' (Aull Davies, 1999), exploring the reality constructed and enacted by participants in the Sheffield Abundance project. I aim to draw out the meanings and motivations, embedded in both tacit and explicit knowledge, that crystallise around the project. This type of information, referred to in ethnography as cultural knowledge (Geertz, 1973; Spradley, 1980), will shed light on what generates and gives meaning to such action. I will discuss it alongside other perspectives on sustainability in the built environment. As I am specifically interested in cultural knowledge that relates to urban space, place, and self-organised collective action, the ethnography is topic-oriented rather than a comprehensive documentation of a whole way of life (Spradley, 1980. p. 30). The academic aims of the study sit alongside a practical commitment to support the group studied. I believe these broad aims, discussed in more detail below, are well supported by an ethnographic approach.

This study takes a position in social constructivism (Berger & Luckmann, 1966). The idea of the social construction of reality is debated (Hacking, 2000): some positions advocate no objective reality whilst others believe in multiple subjective realities constructed differently within the minds of each person who participates in a particular culture (Grbich, 2013). The position I take is that whilst reality is socially constructed, and meanings are not fixed and inevitable, a research methodology can examine participants' subjective experience, perceptions and interpretations of what is going on and give an account that corresponds with a shared reality and enhances understanding of the social phenomenon in question.

My interpretive ethnography is directed towards accessing people's interpretations of their experiences and is based on Clifford Geertz's approach to culture and cultural analysis. This approach, informed by Max Weber, is stated in *The Interpretation of Cultures* as follows:

'man is an animal suspended in webs of significance he himself has spun, I take culture to be those webs, and the analysis of it to be therefore not an experimental science in search of law but an interpretive one in search of meaning' (Geertz, 1973. p. 5).

To construct valid cultural knowledge from what is heard and observed in the research setting, Geertz proposes a particular type of description he calls *'thick description'* (borrowing a term from philosopher Gilbert Ryle). Thick description goes beyond face value description of behaviour and contextualises it to make it meaningful to an outsider. It uncovers the *'structures of signification'* in symbols and determines their *'social ground and import'* (Geertz, 1973. p. 9). To illustrate this, I paraphrase Gilbert Ryle (quoted in Geertz: two boys rapidly contract the eyelids of their right eyes. The movement of both boys' eyelids is identical, but one boy is twitching, involuntarily, whilst the other is winking. Thick description reveals that the second boy is not twitching but winking, because *'contracting your eyelids on purpose when there exists a public code in which doing so counts as a conspiratorial signal is winking'* (Geertz, 1973, p. 6, emphasis in original).

The ethnographer's task is to create an account that portrays the meaning of a social world. This approach, now applied in a range of contemporary settings, has its roots in classical anthropology as a tool for understanding human motivations and behaviour through every-day events. Bronislaw Malinowski, one of the first to systematize ethnographic methodology (Gobo, 2008. p. 9), describes the task as:

*'drawing up all the rules and regularities of tribal life; all that is permanent and fixed; of giving an anatomy of their culture, of depicting their constitution and society. But these things, though crystallised and set, are nowhere **formulated**. There is no written or explicitly expressed code of laws, and their whole tribal tradition, the whole structure of their society, are embodied in the most elusive of all materials: the human being'* (Malinowski, 1922. p. 11, emphasis in original).

Although embodied in the human being, it is impossible to access this *'anatomy of their culture'* as *'natives'* know it. As Geertz states, we cannot know what others know, we can only access symbolic representations of other people's experiences. This involves:

'searching out and analyzing the symbolic forms – words, images, institutions, behaviour – in terms of which, in each place, people actually [represent] themselves to themselves and to one another' (Geertz, 1983. p. 58).

This is done over extensive periods of association with a group, to some extent on their own territory, doing what is referred to as participant observation (Agar, 1980; Geertz, 1973; Spradley, 1980; Van Maanen, 1988). Becoming a participant observer means doing everyday activities with people, talking to them, learning from their experience, and hoping to gain access to both the tacit and explicit elements of their conceptual world. By engaging directly with lived realities ethnography enables us to see holistically and to unpick social codes that would be meaningless in isolation. The sharing of the research setting shows up customs and values in-situ and in participant's own terms, enabling more complete understandings of meanings.

The aim of the ethnographic process is to produce an account (Agar, 1980. p. 81). The account, in this case, is not a positivist attempt to capture an objective reality about the world, but an

interpretive account of socially constructed knowledge. Participants construct their own subjective understandings of their experience of the project, and I do the same as a researcher. Combining the two, the account is inter-subjective. It includes participant's voices in direct quotes, with my voice as main narrator and shaper of content and themes. It is, as Geertz (1973, p15) suggested of all such studies, a '*fiction*', a unique account, in which my identity as the main '*instrument*' of research becomes relevant (Spradley, 1980. p. 57).

Reflexivity, therefore, is central to the data collection process. I reflect not just on what I observe, but also on how I receive and process data. Agar (1980. p. 6) suggested that when creating descriptions of what is seen in fieldwork a researcher may be drawing on conversations, casual observations, informal interviews, a previous ethnography, a novel they read, their general idea of the human condition, childhood experiences, and any number of other influences. By keeping a fieldwork journal I aim to become aware of and respond to these unavoidable biases, rather than assuming they do not exist or must necessarily be overcome. A more detailed discussion of reflexivity, roles and representation can be found in **Section 3.7** below.

To study a project like Abundance required a flexible research strategy, capable of adapting to the organic way in which the project is organised. The activities took place at a number of sites across the city and were often arranged at relatively short notice. Attending events and talking to people as and when opportunities arose was a much more appropriate expectation than trying to conduct research according to a rigid framework of timings and categories. In contrast to ethnographies undertaken in public settings, access to the events and activities of Abundance was largely out of my control, so the long time span allowed in ethnographic research accommodated unpredictable participation opportunities.

The intermittent nature of events with the Abundance project was also ideally suited to an iterative research design, common to ethnography. As illustrated in the diagram below (Spradley, 1980. p. 29). The iterative process involves interspersing periods of participant observation and interviewing with more reflective analytical writing phases. The process begins with broad questions that allow data to assimilate inductively into new themes and categories direct from the research setting. This proceeds with a search for patterns and themes in the data, is followed by more refined questions and more integration of data. Patterns and assumptions are checked deductively and compared with new data until nothing can usefully be added to the theme (Spradley, 1980. p. 73). This process allows a picture of what is going on to be built up over time (Charmaz & Mitchell, 2001; Grbich, 2013). It relies on cultural inferences, tested time and again, until one is confident of their shared meaning (Spradley, 1980, p. 10). It maintains distance between the researcher and researched, making clearer the difference between *emic* (insider) and *etic* (outsider) views, and constructing a meaning that is sensitive to both. It creates data that is checked in the field, reflected on, and refined.

Given my research interest in human relationships with urban space and place, these were given specific consideration in the methodology in two main ways. First, by giving attention to space and place as topics of interest in interview questions and during observation. Second, by considering the place of method. By *giving attention to*, I do not mean that I use an analytical frame as a guide in the field. Instead, I refer to a process similar to what Tim Ingold describes as the '*education of attention*' (Ingold, 2000, 2001). This, he argues, is the process through which novices learn from

experts, and through which human knowledge grows from one generation to the next, and it is through watching, feeling and listening that the perceptual system of the novice becomes attuned to picking up critical features of the environment. I take research participants to be the experts from whom I learn and I aim, therefore, to tune-in to their movements and interactions. In terms of the *place of method*, I draw on the geographic approach of Anderson, Adey and Bevan (2010), who acknowledge the agency of place in the social construction of knowledge. They consider the research encounter as a '*polylogue*'¹ between researcher, researched, and place. In this encounter, '*sedimented*' understandings of place and practice can be uncovered (Anderson, 2004). With this in mind I invested heavily in participant observation in the places where Abundance activity happened. In terms of talk, I paid particular attention to the conversations people had in those places, and I tried to ask as much about the activity as seemed reasonable. I also paid attention to the full sensorial experience of those places, drawing on an approach based in the anthropology of the senses, that suggests a link between emplaced sensory engagement and processes of local sustainable urban development (Pink, (b) 2008). Ethnography has been shown, in both the geographical (Anderson, 2004) and anthropological (Pink, (b) 2008) approaches, to be an appropriate tool to consider emplaced experience as a theme of research interest as well as an element contributing to socially constructed knowledge.

Ethnography also connotes a frame of mind, '*an intent to be open to everything: a suspension of disbelief*' (Charmaz & Mitchell, 2001. p. 160), to look beyond my own cultural bounds and pick up the different threads of meaning. The ethnographic way of studying, reporting and knowing about the world suits my research aims because the cultural knowledge I seek is as yet unknown to me. The language used to communicate it, the symbols in which it is embedded, the terms of reference that anchor it, are all unknown. Through extended participation and observation, ethnography provides time for themes and categories specific to the situation and social world to emerge (as opposed to using stock social science categories from the start). Some methodologists suggest that conducting ethnographic research in a society of which the researcher is part is more challenging than in societies alien to the researcher, such as in classical anthropological studies of tribes (Gobo, 2008, p9). Whilst it may be more difficult to maintain the '*immigrant*' perspective and to see everything as an outsider, I agree with Gobo (2008. p. 149) that cognitive techniques, such as '*estrangement*' can be used to mitigate this.

I aim to create an account of the Abundance project that can be related to current debates in sustainability, activism, design and the built environment, and which is accessible to those who have never participated in this type of activity. Ethnography turns a passing event into a consultable account (Geertz, 1973. p. 19) that can render cultural knowledge accessible to a wider audience in a way that is explicit about the way it was interpreted. I also intended that my research would impact outside academia and that it would in some way support the movement I studied. Some form of beneficence is considered an important ethical aspect of any research (Spradley, 1980). Ethnography allowed me some flexibility to find what I believe was the most appropriate way to do this, as discussed in **Section 3.8** on research ethics.

¹ This is contrasted with the traditional approach to research as a '*dialogue*', involving only the researcher and the researched.

In summary, this ethnography is an interpretive endeavour underpinned by a theory of culture. The methodology, generative of cultural knowledge, is needed in this research to provide detail, context and meaning to an understanding of urban fruit harvesting as an form of contemporary urban activism. In the following section I discuss how this theoretical approach to the construction of knowledge finds ground empirically in this study.

3.3 Theoretical approach meets empirical ground

Ethnography allows an emergent research path that can move from broad to narrow. This suited the consideration of setting in this study because as I learnt more about the nature of what I was studying, and specifically about Abundance, I could tailor the choice of setting to what I increasingly came to know as relevant.

I sought an identifiable, bounded, project in which action fitted within the broad concept of sustainability and collective action. To fit the aims of the study it was important that it should come from existing inhabitants, as opposed to within the institutions of government or business. These parameters are based on theories of transition that see specific opportunity and innovation in civil society. Urban fruit harvesting activity, as a collective project, fits these criteria and has not yet received academic attention. After hearing about Sheffield Abundance through my sustainability networks I read about it online, spoke to the project co-ordinator and decided it fitted the criteria for my study.

The Abundance project began in Sheffield in 2007 and, to my knowledge, is the first organised fruit harvesting project of its kind in the UK. There are now numerous projects in towns and cities across the UK, including Oxford, Leeds, Manchester, Durham, and several in London. Some of these were explicitly galvanized through hearing of the project in Sheffield. I considered including some of these other projects as separate cases within this research design, but for three main reasons I did not. First, the practical demands of ethnography hindered a multi-setting approach, especially given the large distances and travel times between cities. Second, it became obvious that Sheffield was the most well established and active project, which offered regular opportunities for participation and observation. Third, whilst I do not know whether all the other fruit harvesting projects in the UK have a connection with Sheffield Abundance, I realized that at least some of them did, and could be seen as off-shoots or replications of it. This, for my purposes, made it more useful to consider them as part of a study of a larger phenomenon (that goes beyond the bounds of a city) than to treat them as separate cases to be compared. I also felt that learning from the original project was the most logical place to begin.

Whilst exploring the possible case studies and methodologies I made contact with an urban fruit project in Cardiff, where I am based. The project, Orchard Cardiff, was partly inspired by Abundance Sheffield and there are many similarities between the two. I decided to begin exploring themes with Orchard Cardiff, to get a feel for how interviewing and participant observation would work in practice and to see whether Orchard Cardiff would be a case study. Although material from the interviews and fieldwork I did with the Orchard Cardiff project does not appear in this thesis, it was formative of the later work with Abundance Sheffield and was valuable in shaping my understanding of urban fruit harvesting and collective initiatives generally.

It is common for ethnography to deal with a single setting, which is in many cases microscopic (Spradley, 1980). It serves a similar purpose to what is often referred to as a '*revelatory case*' in the case study approach (Yin, 2003, p. 41). It represents a phenomenon about which little has been published, and about which exploratory questions are asked. The depth of the ethnographic account renders it useful in its own right, without need for comparison cases.

The setting of the study I define as the spaces in which Abundance activities take place in the city of Sheffield. The focus is on social processes within this setting (Gobo, 2008, p. 99), and of these there were numerous choices about which events to attend and which people to talk to. I attended as many activities as I could until I had identified all the types of activity and had at least a basic understanding about each one. This approach, known as purposive sampling (Gobo, 2008, p. 102), looks for key attributes in events and aims to include a representation of each type. So, for example, I attended at least three times the following types of event: harvesting; distributing; processing; scouting; public events; meetings; group celebrations; community events; workdays; and workshops. I then began to sample more specifically once the data indicated that I needed to pursue specific themes and activities, or that there was little more to be added in a particular context. I also used theoretical sampling (Gobo, 2008, p. 103) to maximise opportunities to observe the subject matter of the research questions. To follow the research theme about urban space, for example, I went to as many different locations as I could, and talked to volunteers about those places whilst we were there. This, I hoped, would develop the theme of place and the experiences people had of it in a way that was more tangible than through remote interviews.

I was also guided in the research setting by the needs of the project. I aimed to fulfil requests made of me as a volunteer, and I gave priority to these as opportunities for data collection.

I chatted informally with other volunteers when opportunities arose. I did this without a deliberate strategy so as to avoid disrupting the natural flow of events. Once I had built a rapport with people I asked some if they would be interested in giving a longer audio-recorded interview. Time did not allow me to interview everybody but I wanted to reflect a range of perspectives, so I chose people with different levels of participation or lengths of involvement in the project. Given the impossibility of a representative sample this theoretically guided one is as balanced as was practicable.

I also used texts (Gobo, 2008, p. 130), including web pages, emails and printed materials. I analysed them theoretically for their content and their reported accomplishments to identify topics for observation and to test assertions.

3.4 Before entering the field

Before entering the field I made a preliminary review of the key literature and set up a loose organising framework to guide the fieldwork.

The preliminary review of the literature illuminates what is already written in the key areas of sustainability and collective community projects. It refined the research questions and helped to develop '*sensitizing concepts*' (Charmaz, 2006, p. 133), that guide how those research questions are answered. According to philosopher William James '*you can't even pick up rocks in a field without a theory*' (quoted in Agar 1980, p. 23), so sensitizing concepts guide where and how answers to the

research questions are sought. Prior theory and sensitizing concepts are not tested, as in a deductive research design, but guide the search for an understanding in a specific situation, which emerges inductively.

As an example of the above, the literature suggested that '*grassroots*' projects might offer innovative approaches to sustainability. This helped to guide my choice of empirical setting. I found that very little had been written about the Abundance project and urban fruit harvesting generally, so my research questions began open and exploratory. One example of a *sensitizing concept* is about *replication* of grassroots projects. Questions on this theme were posed in work on the theme of *grassroots innovations* (Seyfang & Smith, 2007; Smith & Seyfang, 2013) which looks at community-led solutions for sustainability, so I entered the field with an awareness of this as a potential theme.

Whilst some qualitative researchers, particularly in the tradition of grounded theory (Glaser & Strauss, 1967; Strauss & Corbin, 1998) claim that the literature should not be reviewed before entering the field, I share with others (Charmaz, 2006; Creswell, 2007) the belief that a broad idea of what might be found is unavoidable, and that sensitizing concepts support an inductive analysis.

The ethnographic process is flexible. Researchers act as '*bricoleurs*', patching together the methods and techniques of representation and interpretation that fit the questions and the context (Denzin & Lincoln, 2000. p. 4). I entered the field knowing that I would gather and analyse data from participant observation, audio-recorded interviews and documents. I maintained a degree of flexibility in this to allow for the contingencies of the research setting. For example, I left open questions such as how many interviews I would do; whether other data sources would be used if found; and how long I would spend in each period of participant observation. I discuss these in more detail below.

3.5 Starting data collection: getting access

Many ethnographers encounter difficulty '*accessing the field*' and finding opportunities to talk to people (Gobo, 2008. p. 118). My experience of becoming a volunteer with Abundance was different. I contacted the project co-ordinator who, in qualitative research terms, I identified as the '*gatekeeper*' (Gobo, 2008, p. 121) to the project. I explained my research, asked how I could get involved, and how I could contribute to the project whilst learning from it. He said I was very welcome to attend events and let me know when they were happening. In early conversations I broached three elements of negotiating access: identity; guarantees; and beneficence (Gobo, 2008, p. 120). These are discussed in more detail below.

Two distinct phases of access are often distinguished in ethnographic research: '*getting in*', physically, and '*getting on*', socially (Gobo, 2008. p. 119). After several months of fieldwork I was heartened to find that other volunteers were introducing me to people first as a fellow volunteer and second as a researcher. I took this as some indication that after '*getting in*' I was also '*getting on*'.

3.6 Methods

Learning about Abundance involved three main elements of data collection: desk based document analysis; participant observation; and audio-recorded interviews. These were mutually informative within an iterative process of analysis, reflection and refinement, and all contributed to the overall interpretation. At the same time, there were specific reasons for using each method. Participant observation was essential for developing themes relating to the urban environment and place. It allowed me to see the range of spaces used and to watch people interact with and in them. Participation allowed me to ask questions in situ, to meet people, and to build a naturalistically informed understanding of the project. Interviews focussed on narratives of participation and interpretations of sustainability. Field notes and interviews moved from holistic to specific to enable the flavour and culture of the project to infuse the specific research themes. Finally, document analysis provided contextual material. Each method is discussed in more detail below.

3.6.1 Participant observation

I became a volunteer with Abundance and began participant observation in January 2012. The bulk of my fieldwork was done during 2012. In this time I made numerous visits to Sheffield, planning my visits to coincide with Abundance activities throughout the year. These would normally be one or two-day events. During harvest time the activity intensified, so I spent several weeks in Sheffield to attend events and talk to people more frequently. I maintained a much lower level of participation for a further year, until February 2014, via email, blog posts and the occasional field visit.

I intended that the field work period in Sheffield would span a full calendar year, to enable me to follow the activities of Abundance in each season. The study is a snap-shot in time, and I felt that it was important to reflect the project's strong connection to the seasonal cycle of the fruit trees. As the year progressed I realised that as well as the change in Abundance activities each season, activities also varied year-by-year depending on a number of factors, including climatic conditions and the scale of the harvest. There was no 'usual' year, and 2012 will not be representative of what happens in other years. It will, however, allow insight into the factors that influence the project's activities, and how they are modified accordingly. By continuing a lower level of participation during 2013 I am able to supplement the account with additional material, but I have been careful to note where this is the case.

During 2012 I recorded field notes relating to over 30 specific events. I wrote these notes in the evening after a day of volunteering, and occasionally scribbled reminders down in breaks. I wrote detailed field notes about specific artefacts and processes. I wrote memos throughout the fieldwork process that developed my ideas about what was happening. I wrote a reflective journal about the fieldwork experience and about my feelings during the process. I always noted the status of what I wrote: whether I recorded in verbatim, or in my own terms (Spradley, 1980. pp. 63 - 65). I kept names in field notes initially so that I could follow up on what I had observed with specific people in interviews. In later versions of notes, names are changed to respect the anonymity of participants.

Field notes have long been regarded as problematic in qualitative research (Agar, 1980; Denzin & Lincoln, 2000; Jackson, 1990; Wolfinger, 2002) and this study is no different. My early field notes

may resemble what Agar refers to as '*an attempt to vacuum up everything possible, either interrupting your observation to do so or distorting the results when retrieving them from long term memory*' (Agar, 1980. pp. 111 - 113). They included both comprehensive and salient recording (Wolfinger, 2002). Viewing field notes as indeterminate helps to move beyond concern over their content, especially in early work, and makes them useful rungs on an '*interpretive ladder*' (Agar, 1980. P. 113). I always sought to record with detail and accuracy, but maintained them open to re-reading, coding, and reinterpreting to proceed from one step to the next. Gradually they became more topic-focussed and, when combined with interviewing, moved towards more concrete and reliable interpretations. I aimed to record what seemed relevant to me and to the research participants. This I gauged through explicit and implicit cues from participants and from my knowledge of the research questions and relevant literature and theory.

Participant observation is a cornerstone of ethnography (P Atkinson, Coffey, Delamont, Lofland, & Lofland, 2001; Gobo, 2008; Spradley, 1980). It reveals three key aspects of human experience: what people do; what they say; and what they make and use (Spradley, 1980. p. 5).

Participant observation involves two cognitive modes. These appear contradictory, or even paradoxical, but participation and observation represent the distinction between the experiential subjective learning of a participant and the objectifying academic analysis of an outsider (P Atkinson et al., 2001. p. 32). They are juggled by the researcher to experience both insider (*emic*) and outsider (*etic*) perspectives (Gobo, 2008. p. 7; Spradley, 1980. pp. 54-56). My intention is to record both perspectives and identify any distinctions between them.

The insider (participant) mode is essential to what sociologist Herbert Blumer referred to as a '*naturalistic*' approach, which generates data true to the perspectives of people in the research setting (Gobo, 2008. p. 39). The belief that ethnography could '*grasp the native's point of view*' (as Malinowski, one of the founders of ethnography put it) has a long tradition, but is contested. Whilst I do not believe that a researcher can ever fully understand their research setting as participants see it (or even that one unified insider view exists) I do feel that participant observation gave me some degree of shared experience with participants. It enabled me to share first-hand experience of the activity with participants, it gave me the language to discuss it with them, and grounds on which to relate emotionally about it too.

The outsider (observer) mode is essential in maintaining distance as a researcher. It enables a distanced perspective in which events and behaviour remain foreign, things are noticed, and questions are asked (Atkinson et al., 2001. p. 32). It also requires a perspective of explicit awareness, challenging what Spradley (1980. p. 55) refers to as the '*selective inattention*' that we use to prevent overload in everyday life. An explicit awareness sees the big picture as well as the detail. It creates data that is rich as well as broad, and some of which, at least at first glance, may seem unnecessary. According to Gobo (p. 162), estrangement '*reveals the architecture on which society rests and whereby it reproduces itself*'. This tacit knowledge, embodied in routine behaviour, is taken for granted by insiders, and is difficult to make explicit once it becomes familiar. In a setting like the one studied here, that is not the foreign, exotic village of the early ethnographies, the researcher must cultivate these cognitive states deliberately. I did this in two ways. First, I regularly spent periods of time away from Abundance events and from Sheffield, to break the familiarity and to see the setting afresh throughout the fieldwork (Gobo, 2008. p. 149). Second, I used mindfulness

meditation to attune my awareness and mediate my actions and reactions during fieldwork. To guide my practice of mindfulness I drew on the work of Steven Stanley. He critiques the current focus on mindfulness to enhance '*subjective wellbeing*' and argues for a critical relational perspective in which '*keeping one's consciousness alive to the present reality*' is done for the purpose of engaged awareness, '*not a dispassionate detachment from social events*' (Stanley, 2012). Although Stanley's discussion focuses on mindfulness practice for engaged Buddhism and social activism, I follow the principle of engaged awareness to guide my research towards a considered, compassionate and relational understanding of the research setting. I found that mindfulness helped to bring appreciation to the seemingly ordinary and mundane, and to maintain a spirit of curiosity in investigation.

Participant observation offers empirical access to the symbol systems in three main areas of human experience: behaviour; language; and context and artefacts (Geertz, 1973; Gobo, 2008; Spradley, 1980). Direct experience and scrutiny of these enables an understanding of motivations and meaning that goes beyond superficial appearances.

Referred to as rituals, ceremonies, or social structures by sociologists (such as Durkheim (see Gobo, 2008. p. 164), what people do, in social practices and routines, is the first important area of cultural experience I attended to. Social practices give material form to conventions that are not directly observable (Gobo p. 163), and which may not be accessible as explicit knowledge. During fieldwork with Abundance I tapped into this in three ways (following Gobo p. 164): by classifying activities into types; by following a key-concept (such as *celebration*) and observing the behaviours around it; and by following the trajectory of an object (such as the *apple-picker*). Doing this created patterns in the data and organised my observations of behaviour. I could then make inferences about meaning to check throughout the research process.

Most action is preceded, accompanied or followed by talk, so attending to comments is a second important aspect of observing cultural experience. It is part of the action, and helps to construct reality, as well as interpret and communicate it (Gobo, 2008. p. 171). Listening to what people said enabled me to resolve ambiguities in observed behaviour, and to add thickness to thin descriptions (Geertz, 1973).

Context is the third important component of cultural experience, as actions and discourses are always situated (Gobo, 2008. p. 173). Context, which includes physical space and artefacts, provides resources for and constraints upon action, can reflect the ideology of the people using it, and mediates interactions. The study of space and artefacts enables consideration of the relative role of human intentionality, and opens the possibility for non-human agency (Gobo, 2008. p. 176). In this study the consideration of context, particularly urban space, is important, as it informs on the extent of human intentionality in design, and on the resources and constraints for (sustainability) action within an urban environment.

Many of my observations are based on what Spradley refers to as '*question-observation*' (Spradley, 1980. p. 73), meaning that what I saw was greatly influenced by the questions I had in mind. I began with basic descriptive questions about what was going on in the research setting (who, what, where, when, how and why questions). As themes of particular interest or relevance (to the group and to my overarching research questions) emerged, my observation questions became more focussed.

Participant observation is valuable for what it contributes in its own right, but is also used to compare insights gained through other methods. One example of this is to inform on what is referred to as the *say-action gap* (Gobo, 2008. p. 5), in which what people say and do does not always match up. I use this insight to understand the gap between intentionality and opportunity within the context of improving the sustainability of urban areas.

3.6.2 Audio-recorded interviews

The second main channel for learning about Abundance was through audio-recorded interviews. These are different from informal conversations during fieldwork, and take place away from the location of Abundance activity, usually in cafes or other relatively quiet locations. The main purpose of interviewing was to gather narratives about the Abundance project in Sheffield. I wanted to hear how people experienced the project, and how they related to it and to the urban environment it took place in.

I conducted 18 interviews with 17 people. I interviewed each interviewee once, except for the project co-ordinator who, because of their high level of involvement, I interviewed on two occasions to gain more insight. The interviews ranged from 20 minutes to 2 hours, most were about 45 minutes long.

I began each interview asking about the participant's involvement in the project. I asked them to explain how they got involved, and the sorts of things they did. This usually led to a natural flow of conversation about their experiences and what they felt was most important. I also asked people to describe in detail how they did things, often focussing on specific situations and events, and I used prompts to invite more information where appropriate. I had a backup list of questions in case the conversation ran dry. When preparing the list of backup questions I sought to phrase them in a way that invited the recounting of personal experience rather than rhetoric, and in a way that sought answers from the participant's frame of reference, in their own language, rather than mine. My main focus was on keeping a natural flow of conversation.

The use of interviews is debated in ethnographic research. Some suggest that the focus should be solely on participant observation and that interviews simply generate pre-rehearsed statements. Caution is also encouraged about the role of the interviewer and the potential for bias and leading questions. My approach falls close to that of Agar (1980. p. 83) in accepting the near impossibility of a '*non-leading*' question, and instead focussing on acknowledging how I phrase questions and with what intent.

The use of an audio-recorder is also questioned for the increased formality it brings to the interview situation, and the potential for people to feel less free in their speech knowing that it is being recorded. I believe that the recording is justified on the grounds of keeping an accurate record of what people said, so that I can refer back to it at a later date, and so that during the interview I can focus on the conversation rather than on note-taking. A main reason for conducting interviews was to check information and to gather accounts from participants that could not be observed through participation. Without an audio-recording the accuracy of the accounts would have been lost, and the reliability of the notes to check back on would have been compromised. I therefore explained

carefully to each interviewee how I would be using the material, and assured them that the transcript would be kept confidential and anonymous. All participants agreed to have their interviews recorded.

After each interview I transcribed the recording to familiarise myself with the material. I then analysed it as a text, using a process resembling life history and socio-cultural narrative interviewing (Grbich, 2013. p. 216). This meant focussing on content and context, keeping the data together in themes to avoid fragmenting it. This approach is based on the assumption that stories provide insight into how people construct meaning from life experiences using past, present and future linking. The story may also shed light on broader factors impacting on the storyteller's life.

It was difficult to know when to stop interviewing, as each participant's account was slightly different, and each had different perspectives to offer. As it was practically impossible to interview everyone who had ever participated in the project I decided to focus on interviewing a range of people who spanned different age groups and levels of participation. I also focussed interviews on themes that were emerging as important from participant observation and document analysis, and on reaching a level of thematic saturation alongside these.

3.6.3 Document analysis

The data collection process has its beginnings in desk-based document analysis. I began reading about Abundance on the Grow Sheffield website, the Abundance blog, and in the Abundance Handbook (published by Grow Sheffield, 2009). These texts inspired my early research and encouraged me that Abundance was an innovative, active and engaged project that merited further study. Material from these texts is used to contextualise the study, and contributes a historical perspective to the Abundance narratives.

The Abundance Handbook provides a particularly informative account of the first two years of the project, and in my analysis I draw on its content as well as its symbolic value as an artefact (an approach supported by several ethnographers, including Gobo, 2008, p. 237). The Abundance Handbook provided an orientation to my early fieldwork, indicating the range and flavour of activity I might expect, whilst confirming that it presented just one of many ways of doing an urban fruit harvesting project. I needed to use other methods to pursue the specific research themes I had in mind, and to create an updated account of the project through my own eyes.

3.6.4 Combining the data collection methods: the overall analysis strategy

The data collection methods are distinct but all proceed in tandem and inform one another. This trait of contemporary ethnography rejects the traditional separation between data analysis and collection, and creates an iterative process through which an account incorporates multiple perspectives and can be checked and verified over time (Charmaz, 2006).

I began the research process with document analysis, and quickly proceeded into participant observation. The audio-recorded interviews came later in the process, once I had built up an understanding of the project and had got to know people I could ask for interviews.

I began identifying codes and writing memos early on. After the first phone call with the Abundance co-ordinator, for example, I reflected on the positive welcome I received, the way we had talked about accommodating my research needs and my capacity to help the project, and on the relevant connections we could identify to help each other. This reflection became the seed of a memo about the way the group works, and was built upon over the course of the field work.

As the fieldwork proceeded I drew on the approaches of several methodologists as I worked with the data (Aull Davies, 1999; Charmaz, 2006; Fetterman, 1998; Gobo, 2008; Spradley, 1980; Wolcott, 1999) (Fetterman; Charmaz; Gobo; Spradley; Aull-Davies; Wolcott). My process involved three fairly distinct phases, closely resembling those of *'deconstruction'*; *'construction'*; and *'confirmation'* described by Gobo (2008, p. 234).

In the first of these, deconstruction, data is opened up to coding. I read over notes and assigned a code to sections with similar content. This code word represents a concept. The same code is assigned to notes with similar content, and the same notes may carry several different codes. The aim of this deconstruction is to classify events and actions, to de-naturalize them to such an extent that they can be connected to other concepts and given new sense in the context of the study.

The second process, construction, involves identifying relationships amongst codes, connecting concepts and re-assembling the data into new patterns. These new patterns begin to work towards addressing the research questions.

Confirmation is then used to check meanings and reliability. Codes are checked individually and data is sought selectively to test, add to, or discount their relevance to the study. It is important to note that the confirmation process does not seek to build veracity, as in positivist approaches, but to check meaning, reliability, and relevance of the emerging codes to the study's aims.

Codes are developed into memos, which are longer more involved reflections. These memos look for connections within and beyond the data and begin the shaping of the themes presented in the empirical Chapters of this thesis.

Alternative explanations and perspectives are considered for each code and theme before I settle on an interpretation and begin writing the account. Assembling the data into a single, linear account is not without its challenges, the nature of which have been discussed by methodologists in the post-modern tradition. Patti Lather, for example, states that to write in the postmodern is to be evocative, to replace extended argument with *'a much messier form of bricolage'*, in which an *'oblique collage of juxtapositions moves back and forth from positions and remains sceptical'* (Lather, 1991. p. 10). Although the postmodern approach to meaning is in many ways compatible with my research philosophy, for the purposes of this thesis I settle on a single account. I aim for the single account to offer a sense of clarity, whilst illuminating a flavour of the facets of what matters both to research participants and to the broader themes of sustainability and urbanism that guide this study.

3.7 Role, representation and reflexivity

This section digs deeper into my role as intermediary between data and the written account; how I approached the research setting and how I reflected on my interactions within it. The importance of this is well stated by Denzin and Lincoln:

‘the ethnographic life is not separate from the Self. Who we are and what we can be – what we can study, how we can write about that which we study – are tied to how a knowledge system disciplines itself and its members and to its methods for claiming authority over both the subject matter and its members’ (Denzin & Lincoln, 2000. p. 965).

I approached the research setting as a *student*, aspiring to ‘*a conscious attitude of almost complete ignorance*’ (Spradley, 1980. p. 4). I sought to surrender my expectations about the site and the study, and simply to learn from participants. This is intended to allow *insider* knowledge to be found inductively, and to keep the research open to new and unexpected findings. For example, there are many definitions and categories in the literature relating to sustainability. One could easily enter a research setting and look for evidence to fill those categories and definitions. Instead, I left those aside and focussed on hearing from volunteers how they framed questions relating to sustainability, and found that, as discussed in the later empirical chapters, the term *sustainability* was, in fact, rarely used.

I adopted a role of a casual but committed volunteer in the field. This meant that I would attend events regularly but would not seek responsibility. I aimed to be useful, to bring equipment or help with transport if needed, but I would not take a lead in organising or planning. I believe that this offered the best balance between my dual roles of researcher and volunteer. I could observe the project without directly shaping it. I was involved, but distant enough to step back and reflect. I could attend events and focus on observation and conversations rather than project responsibilities.

The influence of a researcher in the social world they observe is said to be unavoidable (Gobo, 2008. p. 125). I accepted that it would be impossible to predict or know the effect of my participation in the project, so did not try to engineer any specific outcomes through my research design. I became a volunteer for practical, ethical, and epistemological reasons, and reflected on the potential influence of my presence once I became familiar with the field. From the outside I consider it likely that there was no obvious difference between me and other participants at most events. Anyone can volunteer with Abundance so, to the public and to occasional volunteers, my presence would not look unusual. This, I hope, reduced disruption to normal patterns of behaviour, and enabled me to observe without looking out of place until I got to know people better and could explain what I was doing. To those inside the project the influence of my presence is likely to be greater. I explained my role to the project coordinator from the start, and was introduced as a researcher to several key volunteers. To those people, I can only hope that my presence did not cause discomfort or suspicion, and that they did not feel influenced to alter their behaviour. In terms of my account, I report on what I could observe, and have not given too much attention to trying to guess at my potential influence, which is in the end unknowable.

The interpretive research tradition recognizes and embraces the influence of the researcher as the primary filter of data (Denzin & Lincoln, 2000. p. 21). I state here the biases I believe I bring to the research, to acknowledge them and to highlight their influence in bringing to light what I believe to

be a useful study. As a researcher with a personal as well as academic interest in urban sustainability and collective community initiatives I chose to base this study with Abundance because I see value in their aims. I believe that learning their ways of doing things will shed light on the question of how urban space and resources can be used in different, possibly more sustainable, ways. I believe that change needs to happen in urban areas and that the role played by self-organised groups of inhabitants is currently under-heard and under-valued. I see parallels between community initiatives and vernacular architecture. I see expertise in those often referred to as *non-experts*, and a wealth of opportunity in local situated knowledge. I believe this knowledge will not only be interesting to others, but that others could usefully reflect on it and apply lessons from it too.

The Abundance project is embedded in contemporary British urban life which, in contrast to the early ethnographies of tribal life, falls within what ethnographers would describe as the researcher's own society. This raises questions around familiarity and difference, and to what extent the ethnographic process is one of '*mapping*' cultural territory, and by extension cultural difference (Wolcott, 1999. p. 133). Harry Wolcott argues that it is no longer seen as critical that ethnography is carried out in settings vastly different from the researcher's experience, although in familiar settings what stands out to ethnographers, and consequently what is mapped, may be more limited. Although familiar with similar settings, and joining the group as a participant member, I did not consider myself an '*insider*'. This gave me some distance with which to see the views and behaviours of those within the group as different to my own. Following Wolcott (1999. p. 92), I perceive Abundance not as a generalized, encapsulated entity in which everyone behaves in more or less the same way, but as a group of people who may share threads of commonality and who are also influenced from outside the group. I do not look for one insider view but acknowledge multiple voices within the group and nuances in how things were experienced.

More than being undertaken in my own society, I would describe Abundance as a project with which I have certain affinity. I am drawn to spaces like those of Abundance, in which mainstream cultural norms are questioned and in which alternatives are practiced. I make a conscious effort not to dismiss potential issues and inconsistencies within the project, and to acknowledge how another researcher may see things differently. My intent is not to promote or idealise the activity but to examine its character, its opportunities and challenges, and the factors at play shaping and directing it. I want to understand how this type of activity fits into the wider urban ecosystem and what it could tell us more broadly about approaching change in urban areas. My intent is to be perceptive to a range of stories about the project, capturing the perceived benefits as well as the challenges.

Research in one's '*own society*' is often said to bring challenges in seeing beyond '*platitudes*' (Gobo, 2008. p. 11), which may be amplified by affinity with the host group. I confront this perceptual challenge with reflective journaling and mindfulness meditation. These, I intend, raise my awareness during and after fieldwork and help to separate preconceptions from what I see and feel moment-to-moment in the setting².

² Mindfulness of breathing meditation, based in Buddhist tradition, is concerned with '*developing clarity of mind and becoming more aware of ourselves and the world around us*' (Kamalashila, 1992). This is something I practice independently of my research, but its application in the research setting became obvious when I contemplated my conduct and biases in the field. I used the techniques to prepare myself before interactions

Current socio-cultural circumstances heavily influence the topic and the people selected for this study. Awareness of the impact of human life on urban and natural environments is acute, and efforts to reduce negative consequences are seen as desirable. The problem of how to improve existing urban areas is particularly pressing in light of rising urbanisation and the awareness that, in the UK at least, most of the urban environment we will inhabit in the near future is already built. The term *sustainability* is widely used in relation to these problems and, despite its contested nature, I use the term to situate the study within these debates. However, I aim to present the account of Abundance in terms that will resonate with those working to improve urban environments, whether or not they frame their activity in terms of sustainability.

Ultimately, this account is '*an ethnographer's version of a people's story*' (Wolcott, 1999. p. 141). I exercise what Margret Mead described as '*disciplined subjectivity*' and use discretion to play up or down the relevance of topics so that the account makes sense in local as well as academic terms (Wolcott, 1999. p. 139). I seek to be explicit about my presence in their story, to declare how I chose what to include, who I came to work with more closely and why, and to be clear where views and enactments of culture I describe belong to individuals, and do not represent the group as a whole.

3.8 Research Ethics

The idea that social science can benefit society simply by '*uncovering facts about the human condition*' has been discredited, along with the belief in a '*morally neutral, objective observer*' (Denzin & Lincoln, 2000. pp. 147-8). How people are involved in the study, and for what purposes the research is used, are complex and pressing concerns, to which a standardised rigid approach is neither feasible nor desirable. This section outlines how I used the ethical guidelines of the UK Social Research Association (SRA, 2003) to uphold high general standards, as well as how I sought to negotiate dialogically with participants to address particular ethical issues in the research setting.

A key theme of ethical guidelines is the principle of '*obtaining informed consent*' (SRA, 2003. p. 27). This states that participants should be aware that involvement is voluntary and that at any time they can withdraw, and any data given can also be withdrawn. I felt that this principle was most relevant to the audio-recorded interviews, so I gave an information sheet about my research to each participant I interviewed. In this I followed SRA guidelines, aiming for clarity and comprehensibility and, to avoid overwhelming people, included only that information I considered material to a decision to participate. Before each interview I repeated the research information and asked participants if they were happy to be interviewed. Following the ethical guidelines of the Welsh School of Architecture, I also prepared a consent form for participants to sign to show that the issues of consent and confidentiality had been broached, and that the grounds for participation were understood. In practice, responses to the form were mixed. Some participants were unsettled by it, which created unnecessary tension. A few months into fieldwork I decided to stop using the consent form and focussed on the conversation about consent and on getting verbal agreements. I agreed

with people, and to reflect afterwards on what I had experienced. I used a reflective journal to record what I became aware of about myself and about the research, and to set out what issues I was working through as the research progressed.

this with the Ethics Committee at the Welsh School of Architecture. As noted by Fetterman (1998. p. 139), informed consent can be formal or informal; verbal or written. In terms of the participant observation side of the research, the question of how to obtain informed consent was less clear. As a volunteer project, open to anyone, the fieldwork setting was in some ways similar to a public setting. There were almost always new people at each event, and I felt that to introduce myself and the research each time would have distracted attention from the volunteer activity unnecessarily. I also considered the setting something akin to a public setting in that by being outside of their normal private space, people had already accepted a certain degree of observation from those around them. I decided to concentrate on making sure that regular participants were aware of the research, and my commitment to keeping them anonymous in the account.

In line with the guidelines, I sought to avoid undue intrusion and to protect the interests of participants (SRA, 2003. pp. 25-36). Participant observation and interviewing may be seen as more intrusive than other forms of research, but as there was very minimal data on this subject already available, and in order to answer my research questions, extensive fieldwork was important. Following SRA guidelines I aimed not to infringe on personal space, and looked to people's behaviour for signs of tacit refusal to be observed (SRA, 2003. p. 32). I tried to anticipate potentially stressful situations, for example in the interview situation, in which emotive themes may come up. I reminded interviewees that the all interview questions were optional, and allowed them to choose what we discussed. I also spent time with people in the research setting socially as well as in my researcher role. I hoped this would not cause people to feel uncomfortable, and sought to clarify that I was not in researcher mode at all times.

The SRA guidelines provided an ethical framework within which to take basic research decisions. However, some issues were more complex and needed to be tailored to the specificities of the setting.

I intended that this research would impact outside academia and that it would in some way support the project that I studied. Some form of beneficence is considered an important ethical aspect of any research (Spradley, 1980). The extent to which it is possible, practicable, or desirable to mix academia and activism is a subject of debate. Some who have sought to combine roles of researcher and activist and have found the experience to be '*messy, difficult and personally challenging*' (Chatterton, Hodkinson, & Pickerill, 2010). I wished to integrate my academic work with my personal commitment to social and environmental change but it was not easy at the outset to ascertain how best to reconcile these sometimes competing agendas.

The evolving methodology of ethnography allowed me to hold this debate open as I explored the research setting and searched for a way in which my skills and capacity could usefully contribute. I set out to balance participation and observation so as to be able to offer practical support when opportunities arose. I asked within the group what additional support was needed and in response I wrote for the project blog, and I helped to maintain links between harvesting groups in different cities. The blog was an important tool in communicating the activities of the group to a wider audience, keeping volunteers informed about what was going on, and demonstrating that the group was active. It contributed to the project's online presence and had value as an archive. During the interviewing process several people commented that they had enjoyed the opportunity to reflect on their involvement in the project and to have somebody listen to their story. I was pleased that the

research interviews, at least for some, offered a space for critical reflection and were of mutual benefit. With this in mind I aim to provide in my written account something of what Denzin and Lincoln (2000, p. 152) describe as *'that amount of depth, detail, emotionality, nuance and coherence that will permit a critical consciousness to be formed by the reader'*. This will offer participants, and other practitioners in related areas, an opportunity to reflect.

Whilst participating in activities with Abundance I felt I was learning a great deal about how to coordinate and engage people in an urban fruit harvesting project. I also understood that participants felt it was important to spread the word about the project and to see it grow. I decided that I could add additional beneficence to the overall Abundance Network³ by taking an active role in the urban fruit harvesting project in my home city of Cardiff. When I returned to Cardiff after the fieldwork period in Sheffield I took up a role jointly co-ordinating the Orchard Cardiff project for the 2013 harvest period. I aimed to disseminate to volunteers in Cardiff some of the practical project skills I learned in Sheffield. The in-depth practical experience gained through participatory ethnography meant that I had learned things thoroughly enough confidently to pass them on in a new context. Obviously, a volunteer project of this nature lends itself to this type of skills-sharing, but without the flexible and intuitive nature of the ethnographic strategy I may not have been able to be creative with how I managed my roles during the course of research.

Two final suggestions were made by participants. First, that a copy of my final thesis could be contributed to the Grow Sheffield office. I intend to do this, as well as making the thesis available online. As Spradley (1980, p. 39) highlights, a copy of the research can provide fresh insights and understanding to a group. Secondly, it was suggested that I could contribute to an updated Abundance Handbook, which I will do if the group takes it forward.

3.9 Quality, usefulness and applicability

Judging the quality of an interpretive account is a challenge on which many methodologists have commented. I draw again on Clifford Geertz's (1973) approach to interpretive ethnography, and the work of others in the interpretive tradition, to shed light on how this study should be read and to what uses it can be put.

To begin, the reader should keep in mind Geertz's assertion that all anthropological accounts are 'fictions' (1973, p. 15). Not in the sense that they are *'false'*, but that they are *'made'* or *'fashioned'*. He acknowledged the difficulty in knowing a better account from a worse one, but stated that ethnography should be judged on whether it clarifies what goes on in a setting and brings outsiders in touch with the lives of strangers. This, he said, was done not by isolating elements of a cultural system and seeking to abstract them from the specificities of the empirical setting, but by staying close to what the people in a specific place and time say and do (Geertz, 1973, pp. 17-18). In his own words:

³ The Abundance Network is hosted online at <http://www.abundancenetwork.org.uk/> and provides links and resources to urban fruit harvesting projects across the UK.

'the essential vocation of interpretive anthropology is not to answer our deepest questions, but to make available to us answers that others [...] have given, and thus to include them in the consultable record of what man has said' (Geertz, 1973. p. 30).

This role for ethnography is supported by Spradley (1980. vii) who, embracing ethnography as a tool for understanding cultural difference beyond the original exotic cultures of early anthropology, states that:

'in our complex society the need for understanding how other people see their experience has not been greater. [...] Ethnography offers us the chance to step outside our narrow cultural backgrounds, to set aside our socially inherited ethnocentrism, if only for a brief period, and to apprehend the world from the viewpoint of other human beings who live by different meaning systems'.

At one level, then, ethnography succeeds if it reveals what people think and shows us the cultural meanings they use daily; if it reveals regularities and diversities in human social behaviour. It is a grounded and unique account which, whilst hinting at universal human truths, is not intended to give representative or provide findings that can be generalised. It may suggest potential patterns of future developments, but is not intended to predict (Agar, 1980. p. 190).

My findings must also be read in line with interpretivist ontology and epistemology. Meaning is jointly constructed by ethnographer and participants. Findings must be judged as co-constructions, which are unique to the encounters in the time and place of the study. Another researcher, working in the same setting might produce a different account, based on different interactions, fieldwork dynamics and host participants (Agar, 1980. p. 7). What is important is that ethnographic accounts correspond with the studied reality and enhance understanding of human experience more generally.

The way that interpretive ethnography cultivates rigor is by using multiple methods in an iterative process, through which patterns and ideas can be checked using different techniques. This is often referred to as triangulation (Flick, 2002. p. 229), and in this study has involved following up questions about observed behaviour in interviews, and comparing interview transcripts back with observed behaviour. All participants were offered the opportunity to review interview transcripts, although few took this up.

Beyond cultural understanding, Spradley (1980. pp. 10-13) believed the worth of ethnography should be judged on how it serves humankind. In this light, I would like my findings to be judged on their potential to contribute to the improvement of sustainability in urban areas, particularly in terms of supporting collective efforts of existing inhabitants, and considering alternative understandings and practices of sustainability. Although the structure of the thesis does not lend itself to assimilation by any particular audience, I believe that the content could be adapted to do so. First, to assist groups to discuss and promote their projects, particularly to potential funders. Second, to assist other built environment practitioners to understand alternative perspectives on sustainable development and design. Finally, to contribute to academic debates about sustainability and the role for collective community initiatives within it.

Chapter 4. The issues according to Abundance participants

4.1 Introduction

This chapter gives an impression of the way that Abundance participants conceptualised the issues that were relevant to their participation in the project. This addresses one of the main aims of the overall study, which is to broaden understandings of sustainability by exploring what a particular group, in this case participants in the Abundance project, perceive to be problematic.

The issues are grouped thematically in **Section 4.2** below. Each section draws on material from interviews with participants, which I considered in light of observed activity and informal conversations. Each section presents interview extracts to demonstrate how issues were expressed in participants' own words, and each heading is an *in vivo* term that seems fitting to the section as a whole. It was neither possible, nor intended, that this Chapter would represent the views of all participants in the project. The Abundance project has evolved since it began in 2007, with many participants joining and leaving. As a collaborative and collective endeavour the discourses and narratives that sit within it draw on the perspectives of a range of participants over time. This Chapter aims to present a collection of voices and to reflect the breadth of experience and responses that sit under the umbrella of the project. The dual aims of **Section 4.2** are to present the issues over which there seemed to be a shared sense of relevance, and to indicate the range of issues that participants drew on to contextualise their activity.

In **Section 4.3** I consider the particular relevance of the issue of local fruit waste, and draw on the notion of *dirt* from the anthropological theory of Mary Douglas to explore in more depth how this issue could be understood. **Section 4.4** expands to consider the broader issues. The links with the sustainability literature are considered in **Section 4.5**.

4.2 The Issues

4.2.1 Fruit waste in Sheffield

A key issue that prompted the founders to initiate the project was the realisation that there was a lot of fruit growing in Sheffield that was neither being picked and eaten by people, nor used for soil fertility, nor eaten by birds. As these quotes show, the founders of the project became aware of this through their own knowledge of ecology and observations of the local environment:

'I made some maps, just for my pure...purely personal interest. And often they were like in public spaces, so I'd start to revisit them. Then for a couple of years I was just taking carrier bags along and sticking apples off public trees into my bags and cycling them home and being like 'hey look I found loads of free fruit!'¹

For the founders of the project, this abundance of fruit in the city became wasteful and problematic when considered in light of how most of the fruit for the city is sourced. Almost all fruit is imported,

¹ Interview AS 6

which impacts on the environment as well as the finances of those who buy it. It was also considered wasteful that fruit falling on concrete was not useful as organic matter or for soil fertility either:

'So, and we're importing 80-90% of our fruit, 70% of our apples...which is crazy 'cause apples grow so well here. So that was part of the awareness-raising...saying hey, stuff grows really well here, we really shouldn't be importing it, or certainly not for the month of October at least! Maybe if you really want apples all year round...'²

'In Sheffield what's really distressing is...ok... if it's falling on soil it's going back in...but a lot of the time in Sheffield it's falling onto concrete or pavement...so it's not being useful as organic matter, so it felt really wasteful'³

'So that's the basic message really, it was just simply here's loads of fruit, we shouldn't be buying it, we should be growing it and picking it'⁴

At its core the problem was about the idea of imbalance within the local environment. Fruit was being imported into a city in which it was already growing, and in which there was the potential to grow more. People in the city were unaware of the local resources and productive potential, which could be harnessed for free, and were dependent on purchasing fruit from an external supplier. The scale of the issue was first and foremost within the city of Sheffield, whose neglected networks and resources were thought to be in need of re-valuing and re-purposing.

4.2.2 Health and wellbeing

There was a perception that, particularly within an urban environment, maintaining a healthy diet was difficult. Barriers to healthy eating included cost, and distance and disconnection from food sources. People on lower incomes were thought to have more difficulty accessing fresh food, and what was available was perceived to be less than optimally nutritious due to the distance and time it had travelled from its source. Much of the fresh fruit that was available was thought to be sprayed with harmful chemicals. Disconnection from food sources was linked with adverse effects on mental health and well-being. Access to fresh fruit was a strong incentive for many participants to go on harvests with Abundance, and whilst they appreciated the privilege of being able to pick their own fresh fruit they saw access to healthy food as something that should be available to everyone. These selected interview extracts echo sentiments expressed by many volunteers:

'Yes, so certainly imports are going to get more and more expensive and the poorest people in society are going to be affected first. And already we've seen increases in food prices in the last five years, and the poorest people in society are really starting to feel it. There's a lot of stories of health workers going into very poor parts of cities and finding people and they're just eating like McCain's oven chips with mayonnaise meal after meal, that kind of thing'⁵

² Interview AS 6

³ Interview AS 19

⁴ Interview AS 6

⁵ Interview AS 6

*'I think even though in a way we're not desperate for food, we can access food, but we can't necessarily access good food and we can't...for example, Abundance, God, I love those apples that I picked locally from Sheffield! And to me they are so important. And in a way there is a desperation for those. It's not a desperation is it... When my apple store runs low I start feeling really sad... I think I don't want to go to the shop and buy some that are brought in from Spain. Then harvest comes along and I can go and get some. And it's like really exciting, I've got a fresh local apple. So I still think there is a food need... And things like salad and stuff. It's really hard to get good local greens, especially this time of year. So that for me is really important to be able to get that. So although food is easily accessible, right and good food isn't so there is still a need. And I also think there is that mental health element of like even if we don't need desperately to grow our own food 'cause it's all there and we can access it, I think there is some kind of thing in here that we still need to be connected to that, and we still need to be part of that process. 'Cause as soon as you're... I don't know, for me there's nothing more depressing than going to Tesco, buying a microwave meal and eating it. And I know that's what a lot of people do, but I think they're missing out'*⁶

*'And there are food deserts out there, in the UK, you go places where you can't buy health food. You can't buy food that boosts health...sometimes there's just corner shops selling chocolate and processed crap, which is probably half GM, and has very low vitamin, mineral content, high sugar, high processed fats, high salt, empty carbohydrates. Ok it keeps people alive but doesn't boost health. And so people are in some ways starved nutritionally, and that affects obesity and all sorts of things. And even intelligence'*⁷

Aspects of the urban experience were seen to be pre-determined, and expected patterns of behaviour were seen to be written-in through social norms and the physical landscape of cities. One participant described a pattern of:

*'living in our own sterilised little...get in your house, get in your car, go to the supermarket, get back into your car...'*⁸

Participants stated that they wanted greater freedom from pervasive influences such as television, advertising, and urban layouts, in order to redirect their attention away from activities such as driving cars and shopping in supermarkets, towards a greater connection with green space, trees, and other living beings. Participants were aware of how these influences affected them on a personal level, and also of the potential societal impacts. They raised issues such as isolation, lack of empathy, and boredom:

*'I guess I know that if I've had a week in watching telly every night it just affects your whole wellbeing you feel fat, lazy, like you've got no friends, all those things, but then you realise that if you just got out and did something different it could completely change your whole outlook'*⁹

⁶ Interview AS 12

⁷ Interview AS 6

⁸ Interview AS 1

⁹ Interview AS 9

4.2.3 Convenience and consumer culture

Participants lamented what they perceived as an attitudinal shift from resourcefulness to convenience and consumer culture. They saw it as a phenomenon of generations post-1960s, in which processed foods became widely available and understandings of how to grow and prepare food became, for many, less relevant. This way of living was thought to be wasteful, alienating, and unaffordable. As part of this broad issue, supermarkets were seen to have a central role in shaping public perceptions and expectations about food and were particularly criticized for their role in distancing people from their food by presenting fruit as *clinical* and *sanitized*, in uniform shapes and limited varieties. The quip ‘*food comes from a supermarket*’ was often used to sum up the problem. These interview extracts span the range of ages of Abundance participants (from early 20s to over 60s) and show a recurring discontent with *convenience* attitudes:

‘We have had a generation for whom it’s been so easy just to buy prepared food. We moved right away from that idea of being involved in the whole process of growing, preparing, cooking, eating, recycling, composting, growing again...and people...there’s been a whole culture over a generation or so of pre-prepared meals, microwaves, just throwing food waste into landfill, and ways of being that I find really awful, never mind the health effects of eating that kind of stuff’¹⁰

‘It’s something we’re so cut off from nowadays, we’re so far removed from our food, everything is packaged, everything is from the supermarket, everything is bought, we exchange everything for money, most people just don’t think about getting something for free, or getting something that’s in your garden or getting it or growing it or planting it or whatever. But once you’re introduced to it you can see when you’re telling people, when you’re juicing with people, it’s just a revelation!’¹¹

‘The consumer lifestyle kicked in and people were happy to be commodified, and that kind of information got lost. So you then have that generation that came after, which is a bit like we don’t know anything about what an apple tree is and what you’re supposed to do with it. And that’s partly what Abundance is trying to address to an extent. Yes, maybe it’s not the focus of what we’re doing but it’s definitely part of it. It’s kind of implicit in what we do’¹²

‘But coming back to the idea of why I’m interested in Grow Sheffield is because it seemed to accord with some of the things I’m interested in. The idea of gathering fruit that would otherwise be thrown away, and I think that that sort of... we lived through a very major war, and during that time we had to make do and mend rather than buy things new. But now we’ve got into a phase of keeping something while it’s useful then throwing it away and buying something else [...] But we still have the instinct to save things and don’t throw them away. Like even plastic bags we save and we actually wash them and use them again, hang them out to dry. But not many people do that. Well... Grow Sheffield is noticing the things that are neglected and could be of use’¹³

¹⁰ Interview AS 10

¹¹ Interview AS 17

¹² Interview AS 1

¹³ Interview AS 15

4.2.4 Lack of meaningful community

Participants described experiencing an insufficiency of social connection in the urban environment. For some it was difficult to find opportunities to meet people, especially in the suburbs, and without paying money, as this volunteer describes:

*'So I think there's a bit of a crisis there so people will look for alternative ways to express themselves and to connect with people...and do things that don't cost a lot of money as well. It's not like you can just go and join a golf club or something, I can't afford to. There's nothing prohibitive about getting involved in orchards...'*¹⁴

Certain patterns of behaviour that are pervasive in urban areas were seen to contribute to the sense of individualism, separation, disconnection, and un-awareness:

*'We live quite divided up lives, everyone lives in their garden and has hedges and fences whatever, not everyone but, and I'm not saying those people are wrong per se, but that's just what our culture is like isn't it'*¹⁵

For others the problem was a lack of depth in social connections, or a lack of the type of connections that foster the ability to work together as a community. As these two regular volunteers describe, their ongoing commitment to the project stems from a desire to create something different from superficial friendliness or collaborative working organised by institutions:

*'Like when you walk around a city... I suppose Sheffield is a friendly one as cities go, but people live their separate lives in close proximity and just get on with things within their life, sort of carrying on and don't talk to each other much, generally. People say hello, good morning, but people don't say oh can you help me pick all this fruit and then we can take it over here or whatever. But that's what I mean by a relief sort of, that oh actually yeah we can all just talk to each other and assume that we're all friends and on the same side and trying to do good helpful things. 'Cause that's sort of what everyone is doing, really'*¹⁶

*'I think we're losing a lot of our freedoms to act in ordinary basic ways together in community because a lot of this is being taken over by institutions. And some of those institutions I have to say are not what you'd expect, they're not necessarily Government institutions or business institutions, they're actually charities, but they're operating within such a controlled environment that you don't really feel free when you're working with them. So there is a kind of freedom about being able to go along with a group of people and harvest some trees and make something'*¹⁷

Participants generally recognised that creating local connections was challenging in an urban environment, and that even creating Abundance groups that corresponded to specific geographic localities was not easy.

¹⁴ Interview AS 11

¹⁵ Interview AS 18

¹⁶ Interview AS 18

¹⁷ Interview AS 10

4.2.5 *Unmet potential for edible landscaping*

Whilst Abundance had identified a range of types and varieties of fruit already growing in the city that could be harvested, there was a belief amongst participants that the productive capacity of the city could be vastly improved. Volunteers often talked about pieces of unused land that could support cultivation, and often lamented the prevalence of inedible planting in the city. There was also a perception that living in a city meant compromising the sustainability of your diet, as this comment from a core volunteer shows:

'Outside my bedroom window is a massive road with a concrete yard and just houses and road and i can't see anything green. There's a few dry inedible bushes in the church yard but that's really about it. And a privet hedge over there. That's just not good enough. That's just not the world I want to live in! And you shouldn't have to make the choice between living like outside of a community in the middle of nowhere with just yourself and then being able to have green spaces and food that you can grow or forage...yeah make the choice between having that and being in a city and buying everything in a supermarket. Like I want my community, I want my friends, and I want to be able to live in that way but also be able to eat sustainably and well'¹⁸

However, there was also a recognition that many contextual factors acted as barriers to food production in the city. In this interview, one participant talks about the tensions between inspiration and practice in terms of what could be achieved:

'We went to this film showing about the Venezuelan food revolution and it was about Caracas, so there are all these hills and the veg gardens were amazing, the urban growing was just amazing. And everyone was saying after oh we could do that in Sheffield and it would be amazing but I just know the reason that happened was out of desperation. They were saying like unemployed people are growing, and we could do that here, but actually unemployed people don't want to necessarily spend their days slaving over veg coz it's so cheap. And we're not at a point where people are that desperate for food that they would... they'd rather just go to Tesco. And I've found so much with community gardens, people don't even want to take the food, and they'll only take what they definitely need, or if they don't know something they won't experiment with it, they'll just take half a lettuce or... it's really weird'¹⁹

4.2.6 *Skills, employment, and obstacles to self-reliance*

There were a number of concerns expressed by participants which could be grouped as responses to the economic system. These include the way that work is organised on the basis of efficiency; the prioritising of profit over the needs of people; the monetisation of goods and services; inequality in

¹⁸ Interview AS 17

¹⁹ Interview AS 12

wealth and opportunity; and the de-valuing of traditional skills. These extracts reflect some of the ways these sentiments were expressed:

'The world's governed by efficiency, so hand picking an orchard rather than doing it with a machine is inefficient, efficiency only really works in that one limited ideal of like getting as much stuff as possible for the least amount of money. And actually if you think of it in terms of your whole life, and the fact that you're going to die one day then actually efficiency is not... there's all sorts of the social stuff and the joy of it and all that sort of stuff that you're getting out of it, which I think is, yes, when you stop thinking about it in terms of growth and getting as much stuff as possible for the least, and start thinking about it in terms of experience, it's quite interesting'²⁰

'We're so far removed from our food, everything is packaged, everything is from the supermarket, everything is bought, we exchange everything for money, most people just don't think about getting something for free, or getting something that's in your garden or getting it or growing it or planting it or whatever'²¹

'Yeah, a lot of people are going to fall through the cracks in the system so their skill set just isn't... even before you get out to the world of work...like that homeless guy...even in the education system he was probably deemed a failure 'cause he couldn't regurgitate facts, so yeah [...] and they can't find a place in the world...it's not a world that's practical anymore is it? There's no trade, so your skill is call-centreing'²²

'There's fruit around you, you don't have to buy it from the supermarkets. And the parents as well, that they realise they don't need to, you know there is stuff around you, you don't need to buy everything. And it doesn't always have to cost... you can just get it for free, for nothing, you just need to know where to find it'²³

These concerns seem to centre around what is perceived to be valuable in society. One participant expressed it as *'not being happy, feeling at home within structures and systems that dominate in this country'*. Another expressed frustration at the skills that are valued: *'it's not a world that's practical anymore is it, there's no trade, so your skill is call-centreing or something like that'²⁴*. In particular, the de-valuing of horticulture skills was a concern: *'one of the things that really upsets me is the way that horticulture is seen as a low value, low skill, low value occupation, which i think is absolute rubbish, coz if we 'ain't got horticulturalists we just die'²⁵*.

Many Abundance volunteers perceived a societal dependence on Government, institutions, and corporations to meet basic needs. They advocated a greater degree of self-reliance, but perceived a lack of support for the skills, tools, land and education that would enable it:

'For me the idea around access is fundamental in terms of sustainability. Because that is that thing that was lost...primarily. And it wasn't just lost in terms of access to land, in say the

²⁰ Interview AS 13

²¹ Interview AS 17

²² Interview AS 7

²³ Interview AS 2

²⁴ Interview AS 7

²⁵ Interview AS 10

Land Enclosure Acts, it was also lost in terms of access to knowledge because people don't know, and actually to find knowledge, to find information about [local food; growing; self-sufficiency] until recently, has been quite difficult²⁶

'So yes, access, for me access... you could write a book on how important access is. But it's not just a matter of saying to someone we're going to put up an organic market next to where you live, come and buy food here, we've given you access now. Or here, we're going to build an allotment site next to you. Or here's some seeds or whatever, that's access. It's also like - do you even know how to grow food? Do you know why it's important to grow? Do you know what the larger implications are? Do you know how it can save you money? Do you know how to cure this potential illness you're suffering from just from diet alone? Most people don't have access to knowledge. 'Cause we're not taught it in school, fundamentally. So at the root of access is information, 'cause once you start giving people information you start allowing people to access simple truths²⁷

'But pharmaceuticals having that much power is saying something. Which can't be ignored. And why do they have so much power? Well I think, ok there are lots of complex things, [...] this is my opinion, not fact, that one of the reasons they have so much power is people don't grow and eat their own food. Simple as that. 'Cause home grown, freshly picked food is so nutritious and does such benefits for your health that if you were able to do that every day you wouldn't need to buy loads of drugs and medicines, we need good food, good water, air...fundamental things²⁸

4.2.7 Peak oil and climate change

The problems of peak oil and climate change form part of the bigger picture that informs the thinking behind the project. Part of the problem was perceived to be the uncertainty that would accompany climate change, the way it would affect food cultivation, as well as the shifts from fossil-fuel based systems that would be needed. In this context, dependence on a global, industrial, petrochemical-based food system was a cause for concern, and something that would require people to grow more food locally:

'Cause we can't go back to how things once were coz we're living in the modern world now and people have reduced timescales, there's more challenges involved with whatever the modern lifestyle, you know, living in cities for example, we're not living in the countryside, we've got less access to land, so it's not as simple. But we have to reinvent these older ways 'cause quite simply we don't have a choice if you look at peak oil and climate change. So that was one of the contexts of Abundance, which Anne-Marie was very good at promoting and exploring was basically the context for this is peak oil, climate change, within the next 20-30

²⁶ Interview AS 6

²⁷ Interview AS 6

²⁸ Interview AS 6

*years we're going to have to start growing more local food. We don't actually have a choice*²⁹

4.2.8 Other sustainability narratives

In terms of how things could change, frustrations were expressed about many versions of the sustainability discourse. These referred to how they were structured, and the potentiality they offered for meaningful change. For example this participant reflected on noticing shifts in the focus of sustainability narratives, from *green technology*, to *apocalypse*, to what he described as a *joke*:

*'Using coke bottles to create shit benches, and bad quality fleeces, and road chippings is pointless. It's a big lie that people have swallowed. And I think a lot of the other stuff like M&S lorries being curved at the top to save 10% carbon emissions, all that sort of stuff is nonsense. It's just green-washing'*³⁰

Although this view was not held by all participants, I heard several comments along similar lines that expressed dissatisfaction with shallow interpretations of sustainability. The impression I got was that most participants saw sustainability-related issues to be deep and interconnected, necessitating holistic responses. This also relates to the discussion in above in terms of the perceived constraints on Government or corporations to successfully address sustainability issues.

4.3 Fruit waste as anomaly

As stated in **Section 4.2.1**, fruit waste is the central organising principle of the Abundance project. Preventing fruit waste in the city by locating, harvesting, distributing and celebrating it is the main focus around which activity is organised³¹. Before discussing the implications of the links with broader issues highlighted in **Sections 4.2.2 to 4.2.8**, I want to first consider fruit waste in more detail.

To help think about fruit waste and how it is perceived I draw on Mary Douglas's notion of *dirt* (Douglas, 2002). I borrow the notion of *dirt* from Douglas's discussion of pollution and purity, in which she considers how people come to categorise things as '*clean*' or '*unclean*', and I bring it to bear on the way that people come to categorise things as '*waste*' or '*resource*' in the Abundance project. Dirt, according to Douglas, is disorder, or *matter out of place* (Douglas, 2002. p. 2). It exists as such only in the eye of the beholder and where there is a system, depends on the interests and pattern-making tendencies, or *schema*, of the individual³² (Douglas, 2002. p. 45). This *schema*, she argues, is the underlying classification systems through which perceptions are filtered and experience of the world is ordered. *Dirt*, then, is that which falls outside of the order imposed on the world; that which is anomalous.

²⁹ Interview AS 6

³⁰ Interview AS 13

³¹ I refer to fruit here, but the Abundance project also encompasses other foods that can be foraged in the city, including herbs and nuts.

In Abundance, fruit waste is seen as an anomaly. Abundance participants are attentive to creating conditions for producing food in the city, and committed to making the most of what can be grown there. For them fruit that is not being used is, to use Douglas's terms, *disorder*, or *matter out of place*. When Abundance participants saw trees laden with edible fruit in the autumn, and fruit either falling on tarmac or not being used, it created a sense of discord and prompted action. The anomaly, the sense of *dirt*, of *disorder*, catalyses the project and is the central issue around which it is organised.

Anomaly, Douglas suggests, can be treated negatively (ignored or condemned), or can be treated positively (deliberately confronted) (Douglas, 2002. p. 48). Confronting anomaly positively is about creating new patterns of reality in which dirt, or waste, has a place. As I will illustrate in later chapters, Abundance confronts the issue of fruit waste and creates new patterns in which it has a place. Not only that, but as I set out in **Section 4.4** below, fruit waste becomes an anomaly around which other issues are contextualised and crystallised. Fruit waste becomes an organising anomaly in a practical and symbolic way.

4.4 Fruit waste connects with and contextualises broader issues.

In terms of Mary Douglas's notion of *dirt*, unused fruit is seen as waste. However, there is a broader context to it being categorised as such. It is not so much that the fruit itself is waste, but fruit becomes waste for two reasons. First, it is waste because it is grown inside enclosed private gardens where those who can access it do not use it. Second, it is waste because of the wider context of food poverty, food scarcity, and the economic and environmental impacts of imports. Fruit trees, then, laden with unused fruit in the summer and autumn, are perceived as anomalous by those attuned not only to perceiving fruit trees, but also aware of the wider context of food politics.

So, although the Abundance project crystallises around the issue of fruit waste, as **Sections 4.2.2 to 4.2.8** illustrate, participants link activity around fruit waste with a broad range of other issues. These issues are all in some way linked to the issue of fruit waste, but are not exclusive to it. For example, participants aimed to move as much of the fruit as possible around by foot or bicycle to reduce the need for vehicles and to reduce emissions. This connects to broader issues about sustainable transport, but is contextualised through the local issue of fruit waste. Similarly, the voluntary nature of the project prompted conversation about employment and skills, and raised questions about how to do volunteering and develop skills that are useful to a project like Abundance but are not valued monetarily. The issue of fruit going to waste in the city can illuminate a range of broad, interconnected issues. As participants regularly pointed out, urban fruit harvesting is a simple idea that "*most people can easily 'get'*". A number of participants said that once they started thinking about it they realised how that simple issue related to broader issues. The focus on fruit waste can provide a context for a holistic understanding of issues related to sustainability, and of the ways local and global issues may be related. Although my analysis cannot claim that participating in the Abundance project, or harvesting local fruit, *causes* people to understand issues related to sustainability in this way, it does suggest a link that will be explored further in later chapters.

4.5 Issues in the context of sustainability discourses

Overall a broad range of issues was raised by participants in terms of what they saw as negative aspects of contemporary life and which in some way related to their wanting to be involved in the Abundance project. The global issues of peak oil and climate change were discussed in the context of grounded local concerns such as health, wellbeing, and skills. The materiality of the city, social norms and cultural conventions were seen to be amongst the complex factors that influenced behaviour and determined how urban life was lived and experienced. The understanding of the issues was grounded in awareness and active engagement on a local level.

Awareness of this broad range of issues did not mean that participants believed that their activity in the Abundance project would address all of them. It was certainly not believed that peak oil or climate would be prevented through local fruit harvesting. However, it did mean that participants were aware of how these issues were connected and how their lives affected and were affected by them. They were also aware of the pervasiveness of influences such as consumerism, advertising, and other factors that limited their freedom to *'act in ordinary basic ways together'*. The basic ways they acted together were linked with global issues such as climate change, and they did believe that by changing what they did on a small, local level they could do something to limit the potential negative impact of their actions. Further, they could try to act in ways that produced more positive impacts. At a basic level, the issues they raised revealed a desire for greater connection within the local environment, more involvement in producing local sociality and resources, greater awareness and understanding of themselves and others, and more meaningful relationships not just with each other but with a wider local ecology (including the fruit bushes and trees).

I noticed that issues were expressed in terms of how they were experienced or perceived to be experienced. Participants rarely described issues in abstracted or quantified ways, with terms such as *sustainable transport* or *carbon-counting*. Instead, they contextualised them in terms of the impacts that might be experienced in human health, or in how people move around the city and relate to one another. I believe this is well illuminated through the presentation of verbatim interview extracts in **Section 4.2**.

What was notable was that participants rarely used the term *'sustainability'* when talking about the Abundance project and their involvement with it. Having begun this study imagining ways of thinking about and understanding sustainability, I was particularly alerted to and interested by the almost complete absence of this term in the notes and interview transcripts I wrote about the project. Many of the issues raised by participants fall within current discourses of sustainability, and this research could proceed here to attend to where the Abundance issues sit within the spectrum of definitions and interpretations. However, that is not my aim here. As the Literature Review demonstrates, sustainability definitions and interpretations are widely variable. Further, the Literature Review suggests that what may be more interesting when thinking about sustainability is to think about the basis on which people act, and how principles inform, but are negotiated through, practice. As a reminder:

'Sustainability, on this view, is not a set of future conditions of society [...]. It is not even a process of moving toward some predetermined view of what that would entail. Instead sustainability is itself the emergent property of a conversation about what kind of world we collectively want to live in now and in the future' (Robinson, 2004).

The discussion of the issues raised by Abundance participants in this chapter serves to contextualise the project and sets the scene for the exploration in the following chapters of how and what Abundance *learns by doing* and how principles and practices merge in an emergent conversation about the future.

4.6 Conclusions

This Chapter has given an overview of the range of issues raised by Abundance participants around the themes of sustainability and the built environment. The broad range of issues, some global in scope, are grounded and contextualised through the Abundance project. They are expressed by participants not in abstract terms, but in terms of their perceived relevance to the local, urban context. The issues raised revealed a desire for greater connection within the local environment, more involvement in producing local sociality and managing resources, greater awareness and understanding of themselves and others, and more meaningful relationships not just with each other but with a wider local ecology (including the fruit bushes and trees). Local fruit waste, as a focal issue, is the anomaly around which broader issues can be seen as tangible and relevant.

The notable infrequency with which the term *sustainability* was used in the Abundance project suggests that trying to locate the issues raised by participants amongst the various definitions and interpretations of sustainability would not be a useful avenue for this research. Therefore the discussion proceeds in the following chapters to explore the more experiential ways in which principles and practices were negotiated in the Abundance project and how the *anomaly* of fruit waste was confronted and recast within new *patterns of reality* (Douglas, 2002).

Chapter 5. Making the best of what we've got: Abundance principles

5.1 Introduction

This chapter discusses the principles that underpin the Abundance response to the issues presented in **Chapter 4**. It is about the intentions that inform the practices that are discussed in **Chapters 6** and **7**, and about how they are negotiated as they meet the opportunities and challenges of practical action. It was evident during the research that the relationship between principles and practice was dynamic. There were nuances in how principles could be interpreted, and the experience gained running the project continually informed how appropriate different approaches to action were seen to be. It is not my intention here to talk about putting principles into practice in terms of operationalising them, but in terms of how they informed practice.

The Abundance project began in 2007 and has evolved as a collaborative and collective endeavour drawing on the perspectives of a range of participants over time. This Chapter presents a collection of voices to reflect the breadth of experience that sits within project and the discourses and narratives that it draws on. It also refers back to the Literature Review to show how the Abundance principles resonate with and depart from other approaches to sustainability.

5.2 Overview of principles

The co-founders of the project describe how it emerged from a combination of localised knowledge and networks in Sheffield, including wild food foraging and growing, and creative ways of engaging people in community and environmental arts. Their ideas draw on permaculture and socially-engaged arts practice to respond to a broad range of environmental issues:

'I started thinking how do we address all the things that come into climate change... about industrial growth society, destroying ecosystems, and the stories we live by. And how can we create new stories to live by? And be an artist within society? Aiming to be a socially engaged artist, sharing the things I loved, and coming up with crazy ideas that people might just say yeah let's try that! And try to teach people to see world in different ways...'¹

In 2009 several volunteers contributed to writing the Abundance Handbook to share their experience of setting up the project in Sheffield. In it they set out nine guiding principles. As the list shows, the philosophy brings together narratives from a range of perspectives including: concepts from quantitative approaches to resource management such as food miles, 0% waste and carbon foot-printing; activities such as education, growing, and communication; interactions like gifting, networking, letting it happen, inclusion, and enjoyment; and human qualities such as care, awareness, and respect. The principles section of the Handbook is reproduced in **Figure 2** below:

¹ Interview AS 19

Our Philosophy

We set up **Abundance** with nine guiding principles in mind:

Gifting

The freshly harvested fruit is given away for free. **Abundance** is about getting fresh fruit to local people who otherwise wouldn't have access to it, and volunteers are rewarded with lots of fruit. We encourage people to eat it, juice it, cook with it, make jams, preserves etc. We are currently deciding whether gifts of various **Abundance** products, i.e., jams and chutneys, can be designed to encourage contributions to raise revenue for the project's needs, still holding to the founding principle that the initial harvest of fresh fruit is free.

Networking & letting it happen

Abundance works with lots of different organisations and individuals. The joy of **Abundance** is a simple and commonsense idea most people can 'get' easily, and it makes use of and connects with existing knowledge and networks. **Abundance** grows from human relationships. For us **Abundance** was about letting the project develop naturally rather than dictating how many trees, how much and how often. **Abundance** is not suitable for people who expect to hit 'targets'. It's wonderfully unpredictable!

0% Waste

Abundance aims to have zero waste, so fruit is either eaten, stored, preserved or pressed or composted or fed to animals.

Food miles & carbon footprint

One of the aims of **Abundance** is to highlight the huge distances our food usually travels before it reaches our mouths. Even when food is in season in this country, it is still imported or travels extensively around the country to processing and distribution points before reaching our plates. **Abundance** also aims to reduce the urban carbon footprint by making use of local food and encouraging more local growing, cultivation and harvesting. We aim to minimise car use and to use bike transport and trailers if at all possible to harvest and transport the fruit.

Care & awareness

Abundance makes sure that every tree harvested on private land is undertaken with permission of the owner and with respect for property. When trees are located on public land then the trees are seen as a public resource. If there is any evidence that a public tree is being harvested by others we do not harvest it. Care is taken not to damage the tree and some fruit is always left on the tree for wildlife and to drop and rot back into the soil.

Growing & permaculture

Abundance is keen to encourage food that is free from chemicals or pesticides. While we have no way of knowing the history of many of the trees, most of them are neglected and therefore are not subject to intensive growing techniques. We would not knowingly harvest a tree that had been treated with chemicals - see *Pollution* for more information on this subject. **Abundance** is informed by permaculture principles - in the words of Bill Mollison, "*taking responsibility for our own existence and that of our children*".

Education

Abundance aims to educate people about the value of fruit trees in terms of human health, nutrition and ecology. We aim to pass on the skills to create and maintain a fruit tree. Fruiting is only one part of a natural cycle that continues throughout the year. We aim to develop this understanding by running fruit tree pruning courses in winter and spring and increasing people's knowledge of the importance of soil fertility and tree propagation through grafting and cuttings. We also document the project through photographs so we can communicate the ideas and methods to others in a colourful and interesting way.

Inclusive

Everyone can take part in **Abundance** – whatever age or ability. There are many different parts to the project, and there is a role for everyone.

Fun!

We enjoy taking part in **Abundance**. This provides a major motivation for why we do it and why people get involved and become harvesters! For us it is about celebrating the harvest and bounty with others, along with all the other positive aspects.

Figure 2 (source: The Abundance Handbook)

The range of declared principles is broad, and each one loosely defined. This meant that they were interpreted and negotiated in practice, with different participants contributing their perspectives, and evolving their meanings over time. The following sections discuss each principle and how it was discussed and experienced during my fieldwork.

5.2.1 Gifting

Gifting meant that volunteers and people received fruit through the distributions could access fresh fruit regardless of their financial situation. Several volunteers commented that they would not be able to afford to buy the equivalent fruit that they received through harvesting. Centres for distribution were often chosen on the basis of enabling access to free fruit for those with limited resources. Distributing free fruit was seen to be socially beneficial, particularly at a time when government spending was being cut and support for vulnerable people was seen to be limited.

The principle of gifting aimed to establish a different order of values to those that predominated in society. By removing monetary values, a space was created in which the values of community, sharing and other forms of exchange, such as barter, could take priority. Some participants saw threads of communist and anti-capitalist principles in this, and suggested a need for more radical questioning of the socio-economic system. The principle of gifting was a springboard from which broader questions about money, exchange and values could be explored in practical terms.

Some participants commented that the distribution model was reminiscent of the Victorian approach to charity, by which provisions were given to the poor. Some said that ideally they would extend the idea of gifting into an exchange in which people receiving the fruit would participate in harvesting it, or collecting it, or in which donated fruit would become the focus of learning within the places of distribution. In practice this was difficult to achieve with the limited time available to both volunteers and those receiving the fruit. This is one example of how the principle of gifting challenged participants to question the social relations involved in their activity and to explore how, within practical constraints, they could apply the principle in what they considered to be the most ethical way possible.

Finally, the rarity of gifting was seen as an opportunity to draw attention to the project. Gifting of individual pieces of fruit in public places was used as a means to engage people in conversation about sustainability and the food system. Sometimes the gifting element of this interaction was greeted with suspicion by passers-by. In response participants had invented questions and games to make it seem like the fruit was not a free gift but a prize. Again, the principle had to be adapted in practice to accommodate how gifting was perceived by others.

As the project evolved two key adaptations were made to the gifting principle. First, funding was found to pay a part time coordinator to arrange harvests and to act as a central point of contact. Second, sales of chutney and jam were arranged to raise money for equipment. These were discussed before being introduced and were seen as compromises to enable the project to grow.

5.2.2 *Networking and letting it happen*

Abundance participants were keen to hold the control of the project lightly. They wanted people to be inspired to take up fruit harvesting and distribution in their own way. As one volunteer put it: *the thing that's free and accessible to share is the idea*². The intention was that people would take ownership of the idea, adopt activities in ways that fitted with their lives, and embed the practices in their local networks. In this way Abundance would not become an organisation that tried to control and manage harvesting activity, but an ephemeral materialisation of a concept that could disappear once it had communicated a message and established networks. Networking happened naturally by word of mouth, as well as more intentionally through Abundance stalls at local fairs and festivals, flyers, and copies of the Handbook. This principle is both practical, to keep the project flexible and adaptable, and ideological, to establish connections in local networks.

These principles served to enable the project to grow organically in Sheffield and beyond. The way that harvesting was coordinated in Sheffield changed several times as participants took

² Interview AS 18

responsibility for coordinating in their local areas, and the activity spread geographically. The idea also spread via the internet and word of mouth to other cities, such as Leeds, Manchester, Durham, Oxford and London, where local harvesting groups formed. Simultaneously, there was awareness amongst Sheffield volunteers that the practice spread more easily amongst like-minded people. Consequently efforts were made to work in specific areas of Sheffield, and with particular groups, who might not be so likely to hear of the idea or to take it up without guidance.

The principle of *letting it happen* was promoted in opposition to targets, planning and predictability. Uncertainty is seen as a key principle of permaculture, and considered to be important in resilient systems. For Abundance participants it meant not setting targets, for example kilos of fruit or numbers of volunteers, or expecting to achieve specific goals. Instead it meant being flexible and adapting the way things were done to suit the people, places and resources available. Whilst most participants enjoyed taking this approach, some noted that it may be more difficult to achieve with funders who may want to define specific outcomes.

For volunteers, the principle of *letting it happen* could be both enabling and frustrating. The openness of the project enabled participants to create opportunities and plan activities according to their interests and the groups, organisations, or areas they wanted to work in. For example, a volunteer could choose to become an Area Coordinator in a new area of town and could plan scouting and harvesting activities locally. In other ways, the sometimes unpredictable patterns of activity were difficult to combine with other schedules or expectations. Core participants needed flexibility to commit to an approach that was dependent on coordinating not only with several other people but also responding to the seasons and rhythms of the fruit trees. For some this was balanced with part-time employment or studies, for others it was part of a period of break from employment. Time spent volunteering with Abundance was generally seen by core participants as important, purposeful work, in which they could see a value beyond remuneration. Within that, however, some expressed a sense of tension with conventional approaches to work and career:

*'It's a decision to be out of the economy, outside of money and outside of work, and outside of your career, and so by the end of the season, it's a seasonal thing, you think I've done that, that's amazing, but at the same time I sort of feel guilty that I haven't done more work, haven't, I feel like it's a decision to make your life more part time, I think it's a really interesting one'*³

Some participants referred to the principle of *letting it happen* as an element of the philosophy of anarchism within the project. This refers to voluntary and non-hierarchical organising and the belief in the power of community to fulfil local needs and bring about change. This was not shared by all participants, but for some it was an important part of a wider philosophy that informed other areas of their lives too. Abundance is part of a broader not-for-profit food growing organisation called Grow Sheffield which has a voluntary core team who contribute to overseeing the project. Abundance has several longer-term volunteers who coordinate harvesting in different areas of the city and the structure is open to input from a number of occasional volunteers. An annual '*visioning*' event helps to keep the focus of the direction of the project, and several social events throughout the year bring people together.

³ Interview AS 13

5.2.3 *0% waste*

Waste was seen as a big problem by most participants. The principle of 0% waste is reminiscent of quantitative approaches to resource management, but Abundance did not quantify waste. They used the principle to draw attention to the issue and as a guide to saving as much as possible. The principle extended beyond the fruit itself and applied to reusing and up-cycling as many materials as possible in what Abundance did to make the most of what they had. For example, fruit was transported and stored in old fruit crates donated by shops, and fruit picking equipment was made from sticks and reused plastic bottles. This is an example of how participants tried to address problems holistically through the project, by cutting down on waste in all areas of activity. In practice it was impossible to prevent all the fruit waste in the city. The principle of 0% waste had to be balanced with the available time and resources, as well as access to property. Fruit could rot in a store if it was not be distributed in time, but mostly this was avoided by carefully sorting the fruit into grades according to ripeness, and making sure the bruised fruit was used quickly for juicing or chutney.

5.2.4 *Food miles & carbon footprint*

As with 0% waste, the concepts of food miles and carbon footprints originate in quantitative approaches to resource management but are not used quantitatively by Abundance. They were adopted as principles around which to consider how far fruit travels to and within Sheffield, and of the environmental impacts of transporting it. Sourcing fruit within Sheffield was seen to reduce food miles as an alternative to imports. Within Sheffield, the Abundance project aimed to connect people with the fruit trees in their locality so that the necessary food miles could be travelled by foot or bicycle. Although there were no rules about how to transport fruit, most core volunteers were keen cyclists and preferred carrying fruit by bike, sometimes with a trailer. However, transporting it by car sometimes became possible if harvest volunteers arrived by car, and often this was appreciated if the topography, distance or time made bike transport difficult. Transporting fruit by vehicle seemed to be an uncomfortable compromise for some, but one that often merited the compromise by enabling another principle, such as inclusion, to be upheld.

5.2.5 *Care and awareness*

Care and awareness are qualities that stem from a spiritual approach to sustainability practices. Several Abundance volunteers spoke of the importance of these as part of the process of social and environmental change. The practice of harvesting was not limited to collecting fruit from trees, but was seen as an opportunity to give attention to other elements of the local ecology and to treat each well: to learn about and care for the plant and animal life in gardens; to speak with and understand the people who live in the houses where harvesting took place; and to care for and provide fruit for people in the city who could not otherwise access it.

This focus on care and awareness created within Abundance a sense of doing things for love rather than out a sense of duty. The practices were ways of enacting concern for that which is beyond oneself and giving attention to that which is 'other'. This was seen by some as a way to shift perspectives from anthropocentric views of the centrality of humans in the world to a perspective of interconnectedness in which humans are part of a living ecology of plants, animals and other materials. Abundance, for example, intended that their activities would not prevent the soil from replenishing, and would not prevent the birds or other people from eating fruit. Awareness was also seen as an important step in generating a sense of responsibility, and asking people to consider the local and global impacts of their practices.

5.2.6 *Growing and permaculture*

Abundance seeks to explore possibilities for growing and picking food in the urban environment and enables people to participate through an organised project. In this way it has much in common with the community garden movement, but differs significantly in the way it uses urban space (see **Chapter 6**). The principle of growing or picking your own fruit in the urban environment presents a radical departure from conventional approaches to sourcing food. Efforts to improve the sustainability of these usually seek to change the way products are sourced or grown, which may include organic and local-sourcing, but maintain the principle of commercial exchange between the consumer and the supplier. Growing and picking your own does not intend to replace the commercial supply chain but aims to provide a non-commercial alternative and a qualitatively different experience of connection to food sources.

In terms of growing practices, the Abundance approach is firmly rooted in ecological values and linked to the principles of permaculture. This creates a focus on cultivating food that is not sprayed with chemicals, and on creating circular systems that consider soil nourishment and the needs of the wider local ecology. Abundance volunteers prune and maintain fruit trees over the winter and graft new ones to plant in the spring. This generates involvement in the full cycle of growing and harvesting fruit on a small, local scale. As a practice it also carries a more general statement against intensive, chemical-based growing techniques and promotes smaller-scale organic systems.

Amongst participants there is also a sense that permaculture and growing offer the basis of an approach to organising land use and urban growing activity. Permaculture evolved from organic growing and although it is usually applied in rural locations participants saw the urban environment as a potentially productive environment, and saw opportunities to apply permaculture principles within it. For example by reclaiming unused land for cultivation and to reconfigure small back gardens into collective growing spaces. Although permaculture and growing provided an aspirational guide to this vision it was acknowledged that significant societal and cultural conventions would need to be overcome to achieve it. In many ways Abundance fruit harvesting activity in private gardens was part of this endeavour to change attitudes about where and how food can be grown and accessed.

5.2.7 *Education*

Central to the Abundance approach is teaching, learning and sharing information and practical skills. This happened informally, through participants showing each other how to do things and sharing information, and in a more structured way through workshops. Workshops were usually free and covered aspects of tree maintenance such as pruning and grafting, and ways to use and preserve fruit such as making juice, cider, jam and chutney.

The principle of education was important because participants felt that access to knowledge and skills, particularly around food, was limited. Many were concerned that convenience culture had removed the need to know how to maintain trees and preserve food, and that losing these basic skills threatened people's ability to support themselves. For some, workshops were an opportunity to meet people with similar interests and to learn something new even if they were unlikely to practice the skill again by themselves. As one participant put it she was '*greening her brain*⁴' and enjoying the opportunity to learn. For others workshops were a way to develop skills that they would apply in their personal and perhaps professional lives. As one participant put it, she could *try her hand* at pruning and grafting with Abundance before committing to a more intensive learning environment in horticulture. Most workshops included a break to share food, in which conversations usually continued and extended the scope of material and discussion. Many participants said they enjoyed the practical and sociable approach to learning, which included staying in contact with other participants and sharing their experiences of trying out the techniques they had learned.

5.2.8 *Inclusive*

As discussed in the section on *networking and letting it happen*, the idea is that anyone can be involved in Abundance. There is no membership or payment requirement, and there are opportunities for people of all ages. Volunteers are invited to contribute as little or as much time as they want to, which in practice led to a spectrum of involvement from an occasional few hours to regular commitment of significant amounts of time. Decisions were made collectively and, without a formal decision-making structure, this usually meant that those involved the most and most regularly provided the most input. Whilst Abundance aimed to include everyone it naturally attracted similar types of people. Efforts to extend inclusion to less easy-to-reach participants were made, but not forced so as to balance inclusion with the principle of *networking and letting it happen*.

The principle of inclusion meant that a lot of occasional volunteers participated in Abundance. This was seen to be a success in spreading the message broadly, but also created a need to coordinate many small inputs. As the project grew, regular volunteers became volunteer coordinators to help to organise this. A structure developed in which volunteer Area Coordinators arranged harvesting activity in the parts of the city where they lived and an overall part-time project coordinator was paid for 3 years, through Big Lottery funding, to support this. Many volunteers were wary of introducing paid roles in the project, but overall this was seen as a positive way to increase inclusion generally and to support committed volunteers.

⁴ Informal conversation

5.2.9 Fun!

The purpose of Abundance was to enjoy the harvest and share the value of fruit trees with everyone. Each event and activity was infused with positivity: as one participant put it, the thing that contextualises it all is '*celebration*'⁵. This was evident in the way that participants described events, lovingly illustrated flyers, and created song, dance, poetry and painting as responses to the project. Many workshops involved playing games, guessing varieties of fruit, making equipment and decorations for market stalls and produce. The level of creative and artistic input exceeded a functionalist approach to sustainability and evoked a sense of pleasure, enjoyment, and love. The enthusiasm and commitment of core volunteers reflected a genuine engagement and enjoyment in taking part, such that the activity seemed less like a project and more like a way of life.

This approach differs from other common forms of action towards sustainability. As one participant put it, Abundance '*is like the positive side of campaigning and protest*'⁶. It focuses on what can be done and ways to enjoy doing it. This approach also differs from those based on a moral obligation to change behaviour and make sacrifices. The principle of fun shifts the focus away from giving up certain practices or renouncing pleasures and looks for ways to enjoy doing alternatives.

5.3 Abundance principles: overall themes

Following the discussion of how Abundance participants frame the issues and orientate their responses some overall themes can be drawn out that situate the project within a broader context of sustainability and design. These are: ecological design and permaculture; process and uncertainty; low tech and resourcefulness; and culture shift.

5.3.1 Ecological thinking, design, and permaculture

The Abundance approach has much in common with ecological thinking and ecological approaches to design. This is a field of practices that seek to integrate interventions with living processes and which draw on models of natural ecosystems (Code, 2006). Ecological design brings a specific slant to sustainability that focuses on interconnections, systems-thinking and holism.

Specifically, Abundance is inspired by permaculture, a branch of ecological design developed in organic food production and now theorised in relation to various systems at a range of scales (Holmgren, 2002; Whitefield, 2004). What is interesting in the case of Abundance is the attempt to bring permaculture design principles, which have mostly been tried in rural environments, to a small-scale urban system. Within the small-scale practice of urban fruit harvesting a system is created that brings together human health and nutrition, waste management, low-energy transport, economics, education, spirituality, culture and the arts. Although the limitations of a small-scale system are acknowledged, the aim is to focus on the connections,

⁵ Interview AS 1

⁶ Informal conversation

linkages and flows within that small system. Considered alongside ‘triple bottom line’, or accounting, approaches to sustainability that seek to trade-off social, economic and environmental considerations, the ecological perspective differs radically. It seeks to integrate humans in systems with other living elements in ways not necessarily done in anthropocentric approaches to design.

5.3.2 *Process and uncertainty*

The Abundance approach is characterised by a focus on process and the acceptance of uncertainty. The guiding principles are broad and loose, encouraging interpretation and negotiation. There is no envisaged end point at which sustainability will have been achieved, but the process is seen as an ongoing development of people and practices in line with ecological principles. This differs from prescriptive target-based and quantifiable approaches to sustainability as discussed in the Literature Review.

The process of creating and implementing the Abundance principles draws on ‘expert’ narratives (published and referred to by practitioners) in sustainability and design, but is practiced by people who would not be referred to as ‘experts’ in those fields. Those who set up the project referred to themselves as a ‘*community and environmental artist*’ and a ‘*food-grower, artist and wild food forager*’⁷. Both had their own expertise and could also be considered local experts. The project thus brings together various types of expertise in an experimental process, but the process is not implemented or directed by professional practitioners in design or sustainability.

5.3.3 *Low-tech and resourcefulness*

The Abundance approach draws on a vision of the future in which significantly less fossil fuel energy will be used. Self-sufficiency and resourcefulness are seen by many participants as necessary for this future; the statement ‘*making the best of what we’ve got*’⁸ was often used to sum up what the project was about. A resilient system is thought to be one that functions in a way that is understood by participants and in which participants are able to create and repair things themselves. The Abundance approach promotes small, localised networks in which understanding and knowledge are embedded with users.

Resources are used sparingly in Abundance, and most materials are reused or recycled. Computer technology is limited to the functions seen to be most important: email distribution lists; a blog; and the shared online fruit-tree map. This helps to keep the network of participants connected and enables communications to flow within and beyond Sheffield. The ideal removes reliance on corporations, government and funding agencies, and creates resourcefulness amongst participants.

This low-tech and low-energy approach sits in stark contradiction to the ‘*techno-fix*’ and ‘*smart city*’ approaches that propose digital technologies to control and monitor urban environments (Hodson &

⁷ See The Abundance Handbook

⁸ For example on blog posts and promotional material. This was also regularly expressed in informal conversations.

Marvin, 2010). The principles behind Abundance encourage citizens to be aware of and participate in how the local environment functions.

5.3.4 Culture shift and attitudes

The Abundance approach is firmly rooted in the belief that transformation to a sustainable society will require a shift in culture and attitudes. The project is as much about raising awareness as it is about the practicalities of harvesting fruit. Through workshops and conversation Abundance participants aim to change the way they and others think about society and their role in it, and about impacts within a wider ecology. It is acknowledged that this transformation will take time, but that by starting to change practices at the local level, ripples can be created that reach other areas of people's lives and other parts of the world. These quotes from two key participants sum up the Abundance approach:

'It's about a change in attitude, it's about connecting to where things come from, understanding what's involved in production of food for example or production of whatever things they need, consumable things, but then also it actually makes there be more food in the local environment to be able to have local food that's done, so like trees that we graft in that free workshop and then plant in public land, then pick for free and give away for free, it's just people sharing food, fairly automatic isn't it. It doesn't have to go through a market, it doesn't have to be... 'cause fruit and veg is expensive these days'⁹

'I suppose the idea is to make people aware of what resources are available around them, specifically fruit, and to make them aware that that is accessible really. And that we can create a lot of things around us in our local environment which mean that we don't have to go to the supermarket and buy fruit and spend lots of money and we can do it with a sense of community spirit and actually building communities round that, rather than living in our own sterilised little, get in your house, get in your car, go to the supermarket, get back into your car... and also the idea of waste I think is key. Because there is a lot of stuff around that many people are not aware of or maybe they're ignorant how to use something like that. Or feel like you know because we've been told that good fruit is shiny and imperfect, or doesn't have any imperfections, and has certain criteria to hit, that anything else is weird, strange or other and then that's hard for people to break away from that norm, just to go and eat an apple with a bit of scab on'¹⁰

'Yes, I think the idea is that with sustainability...where do you start? You start with what you've got. And you use what you've got. So there's that. And then you build on that, you learn the skills to develop what you've got and to look after what you've got, and then you progress'¹¹

A key element of changing attitudes was the creative, artistic approach to the practice. This is discussed in more detail in **Section 7.6**.

⁹ Interview AS 18

¹⁰ Interview AS 3

¹¹ Interview AS 3

5.4 Conclusions

This chapter has described the principles and philosophy behind the Abundance project and has related some of the ways that participants experienced interpreting them in practice. The approach could be characterised as drawing on ecological thinking, design and permaculture. There is a strong focus on process, low tech solutions and resourcefulness, and intent towards a shift in culture and attitudes. The statement '*making the best of what we've got*' was often used to sum up what the project was about. This chapter has sought to illuminate the intentionality behind the practices and the ways in which participants reflected on and adapted their approaches in response to experience. It establishes that principles are contingent and flexible, and anticipates a fluid and pragmatic relationship with practice. This sets the scene for the following chapters, in which practices are more closely explored.

Chapter 6. The Practices of Abundance

6.1 Introduction

In **Chapters 4** and **5** I looked at how issues in the urban environment were framed by Abundance participants, how they described the principles behind their activity, and how these related to ideas about sustainability. This chapter shifts the focus to what people do. I consider the activities of the Abundance project in Sheffield through an analytical focus on practices.

Changes to the ways that built environments function and how they are lived will necessitate new relationships amongst the elements that constitute them. This means changes not only in social relations amongst people but also amongst the myriad of other living and non-living elements that constitute the environment (in the sense that Ingold describes, see Ingold, 2011). Whether or not these relations are understood in the framework of *sustainability*, it is important to consider what new relationships may be formed and from them what new potentialities may emerge. The theoretical concept of *practice* allows insight into how mind, body and environment interrelate (Pink, 2012).

The approach I take in this chapter draws on the literature of everyday life, and in particular on Sarah Pink's approach to practice in the context of activism (Pink, 2012). In this context, everyday life is '*neither static nor necessarily mundane*' and activism '*not only involves dramatic public actions but is embedded in ordinary ways of being*'. Further, '*both everyday life and activism are located in, and indeed part of, dynamic and changing material, sensory and social environments, and shifting ways of perceiving, knowing and being*' (Pink, 2012. p. 14). Although the practices of Abundance are not daily occurrences they can be considered in the context of *everyday life* because they form part of routines, and are carried out in the sphere of everyday life activity such as gardens, homes and neighbourhoods. Following practice theorist Andreas Reckwitz, I conceive of practice as '*a routinized type of behaviour which consists of several elements, interconnected to one other: forms of bodily activities, forms of mental activities, 'things' and their use, a background know-ledge in the form of understanding, know-how, states of emotion and motivational knowledge*' (Reckwitz, 2002. p. 249).

I use the term practice in this chapter in the context of what has been referred to as the '*practice turn*' in contemporary sociology (Schatzki, Knorr-Cetina, & von Savigny, 2001). Although there is no unified theory of practice, the practice turn means conceiving of practice not just a descriptive term for things that people do but to define it, albeit loosely, along the lines of '*sets of human actions that can be associated with each other in some way and that can form a category for sociological analysis*' (Pink, 2012. p. 16). I follow Sarah Pink's approach that practices such as washing up or gardening can be considered related in such a way as to form suitable categories for sociological analysis. In terms of the Abundance project, I consider the practices set out below to be suitable categories for sociological analysis for two reasons. First, on the basis of the broad definition outlined above, what I observed in the field were sets of actions that were consistent enough for me to consider them associated in a way that could form a category. Second, directly through the words of participants, each of the practices below is related in the Abundance Handbook as a discrete

element of the overall endeavours of the project. The practices merit sociological analysis as such on the basis of having been identified by participants as categories suitable for describing and explaining activities to one another.

The set of practices I relate here makes up the most part of the activity of the Abundance project. Each practice is based around a particular task and is undertaken many times each season. Whilst there are variations in the way practices are carried out by different people and at different times, essential elements of the task remain the same. The practices discussed in this chapter are: scouting for fruit trees; harvesting fruit; distributing fruit; storing fruit; public fruit give-aways; and workshops. Each practice is described and discussed in a section below. The final section is a discussion of how participants aimed to bring some of these practices together in localities by creating hubs in parts of the city.

I have sought to relate the practices that make up the most part of the Abundance activity, but the scope of this study does not allow all of them to be discussed in detail. The Abundance practices not covered here for lack of space include: doing stalls at fairs, festivals and farmer's markets; organising and coordinating from the Grow Sheffield office; and organising and coordinating activities performed in the home.

6.2 Scouting for fruit trees

Before harvesting, Abundance need to know where the fruit trees in a local area are and check when fruit is ripe and ready to pick. Fruit trees may be found unexpectedly as volunteers travel through the city, but often a specific scouting trip is organised to explore an area systematically. Scouting involves walking or cycling as a group through an area, paying attention for evidence of fruit trees that may have a surplus of fruit. When a tree is spotted inside a private garden space volunteers try to make contact with the occupier of the house to ask if they are going to use all the fruit. This is an opportunity to explain the aims of the project and ask if any surplus fruit can be harvested for the project.

Scouting usually happens in residential areas, on streets lined with pavements and garden fences. It could also include other types of street where participants thought they might find hidden spaces with fruit growing. Streets with low traffic volumes were usually chosen as this enabled slower, more attentive, movement along the street. Participants developed an understanding of where they thought fruit might be found according to the age and type of housing.

Scouting represented a different use of street space from what is normally experienced, both in terms of the way people perceive the space and the way they behave in it. This elicited a variety of responses from participants. The next sections discuss this range of experience.

For some people, scouting created an interesting tension between the public space of the street and the private space behind houses, where most fruit trees are. Fruit trees are often fully or partially hidden from view by walls, fences, or buildings. For those scouting, this raised questions about how close it was permissible to get, and in which spaces it is acceptable to move in order to look for trees:

'A lot of the terraces are difficult to see, coz the gardens are at the back, it's difficult to see the gardens at the back to see if there's any trees in them, unless you're prepared to walk down the passageway'¹

On scouting trips I sensed that volunteers were aware that this way of looking, and moving through space, could be perceived as unusual, and possibly threatening, to others. There were often conversations about whether it was okay to climb up a fence, or to walk down an alleyway between houses. Volunteers made efforts to talk to people they encountered and to explain what they were doing. Some participants said they felt confident walking through alleyways and passageways because they could easily explain why they were there. Looking for fruit trees seemed, for some, to legitimise access to space that would otherwise be considered off-bounds and to permit behaviours that might otherwise not be acceptable.

Several volunteers described the enjoyment of scouting. For example, the context of scouting gave a purpose to climb trees and find different views and enabled the streets to become a playful space for hunting 'treasure':

'And you see, like that's my favourite, like scouting is fun. Looking for fruit trees, we go out on specific scouting missions if there's particular chunks of the city that we expect there to be lots of fruit in but we've not found any yet, we sometimes will go out for the afternoon either in blossom season or in fruit season, so we've done blossom time scouting missions, so it's the time of year you can't be picking so you can instead go and look for the trees while they're visible. [...] Yeh, it's like a treasure hunt. So you cycle around looking for fruit, well we cycle, but yeh you can go however you like i suppose. You just mission round as a little group and then you're like ok, you go that way, we'll go this way, then we split off down different routes and we find, then you look over and you'll see someone like climbed up something, and as soon as you find one tree I want to climb up it and from up that tree you can see a completely different view'²

My own experiences of scouting reflect many of the experiences described by other volunteers. I shared fears about behaving in an unusual way, I also felt confident doing something with others that I felt was positive and exciting. Looking for fruit trees involved looking at urban space with a different focus. This deliberate shift in perception was experienced by a number of volunteers, for example:

'So it still shocks me sometimes how I manage to miss trees, not see them, it's that kind of awareness thing or what you see and what you don't. It's interesting how this whole thing about observation, and how much we observe and what we see and what we don't see. Anyway, so I like to think I'm a little bit more observant than the average person is 'cause of my interest in fruit trees and my childhood experience really, of being aware of trees that have fruit and stuff'³

Scouting is often led by an Area Coordinator who may take a map to help navigate the area and to record the locations of trees. Abundance holds a shared fruit tree map on which the location and

¹ Interview AS 5

² Interview AS 18

³ Interview AS 5

details of each tree they know of are recorded. A Google maps base of Sheffield pinpoints the location of each tree and a linked database records the details useful to harvesting. These include: the address and contact details of the tree owner, the expected cropping time, the expected amount of fruit, the variety of fruit, and any additional information such as whether there are pets in the garden, or if the owner has useful equipment such as a ladder that can be borrowed. The map is held online and, to keep contact names and details private, can be accessed only by coordinators who have the password. Coordinators use the information on the map to plan when to contact tree owners, when to aim to harvest, and how many volunteers and fruit boxes to take on the harvest.

In summary, scouting involved learning to see the city, or to see in the city, in a new way. It involved learning to find new affordances in it. Going into the streets and looking for fruit is an experiential way of learning, which many volunteers enjoyed. Scouting involved questioning norms in the way space is used, and looking for acceptable alternatives that fit with the needs of fruit harvesting. Local ecological knowledge is created and added to collective fruit harvesting maps that can be consulted in future years. The next chapters will explore these themes in more detail.

6.3 Harvesting fruit

Volunteers are given the address of the house where the harvest will be. Many arrive on foot or by bike. Sometimes a volunteer comes by car, or arranges for a car to provide transport for equipment and apples. The equipment is unloaded, sometimes stacked up on the street ready to carry through into the garden. The group gathers there before knocking on the door and going through into the garden. The group look distinctive, because of the number of people, the amount of equipment, and the often colourful array of clothes, bicycles and kit. Sometimes people passing-by stop and ask what the group is doing. On occasions people recognise the fruit-picking equipment and ask if the group is from Abundance, having already heard of them. Gathering for the harvest created a sense of anticipation and excitement. The time in this space allowed people to meet: some volunteers knew each other already, others did not.

This form of gathering differs from the use of the street for movement. The space is appropriated for a short time, usually around 15 minutes. The group is visually notable, and acts as a marker on the street to show other volunteers where the fruit tree is. The pavement provides the group with a holding space in which to prepare to make contact with the home owner. Everyone moves from this space through into the garden together, which is more convenient for the home owner, and for the harvest coordinator.

Abundance harvest trees in a range of locations across the city. The majority are in enclosed private gardens, attached to terraced, detached and semi-detached houses. Many back gardens can be accessed through side-gates or, in the case of the terraces, via an alleyway between every two houses. Some gardens could only be accessed through the house. Arrangements were always made in advance with the occupier of the house. If the occupier was at home, the harvest leader would usually knock on the door first to let them know the group had arrived, and to be shown the way through to the garden. If the home-occupier was not in, they would have agreed in advance to leave a side gate open for access.

The doorway or gateway was a threshold. Crossing it elicited a range of responses from volunteers. Everyone I spoke to said they felt comfortable crossing it – either because they had done it before or because they were part of a group who had made a specific arrangement to do it. For some it created a feeling of nervous excitement, for others it represented trust and connection between strangers. There was a sense of anticipation and wonder as the group moved from the familiar environment of the street to the unknown private garden behind. It is a threshold that participants feel can and should be permeable in order to prevent fruit waste. Crossing it has the added benefit of creating contact, dialogue and trust between people who had not previously met:

‘Yes ‘cause you wouldn’t go up to someone’s house and knock on their door and ever ask them can I come into your garden sort of thing, apart from to harvest trees. And so most people would be like no you can’t come into my garden, but it’s ok ‘cause you’re harvesting the trees. Then most people have come and chatted to you... So when you stop and think about it, it’s quite a bizarre one... some stranger off the street has come up and I’ve let them into my garden! And then... people aren’t really... not unfriendly... but people are hesitant to speak to people in general... so it is a great one to kind of meet people and they do generally stop and chat to you and offer you cups of tea and stuff. And it’s really nice coz you just remember people are nice... The cynic in me!’⁴

Negotiating the threshold creates a new audience for the Abundance message. Home-owners may not otherwise come into contact with ideas about urban food growing. Talking to them about their fruit tree, and what could be done with the fruit if they are not using it, opens a conversation and enables a gentle exchange of perspectives on the subject. Messages about reducing food waste and helping others can cross new thresholds in a way that is qualitatively different to paper-based campaigns, information, and other media.

Crossing the threshold into private garden space generates anticipation, excitement and mystery for some volunteers. It is an exciting way of showing people that food grows in cities, and it enables an exploration of where and how this happens:

‘It’s quite sort of intriguing, often you’re going into places where you don’t know what it’s like, what are we going to find? Will there be fruit all over the floor? Or nothing there? It’s quite intriguing and it makes you realise, it’s food and it’s green space in a city. And it’s kind of like that’s not supposed to exist. But it does, it’s kind of secret. But we have to make sure everyone knows, ‘cause we need to use it rather than it being pushed away and forgotten about. And ‘food comes from a supermarket’. It’s kind of like a secret. It’s like people don’t know you can just eat fruit from the roadside, or that there’s all this fruit, there’s loads of cherries around that are going to be ready in a few weeks, hardly anybody knows that you can go and eat them! Absolutely amazing. And it’s a bit like a secret world. And hopefully we’re making it less secret, I suppose. But it still doesn’t lose that wonder’⁵

Moving through a physical threshold to reveal hidden productive spaces seems to open the imagination to the ordinarily invisible potentials of and within urban space. This shift in perception could contribute to seeing the city in a different way and as a productive landscape.

⁴ Interview AS 8

⁵ Interview AS 1

The designed intentions of the boundary of the home are to delineate and protect private property. Crossing this line is therefore richly symbolic and meaningful to some participants because it connects to historical and political changes to land rights:

*'What we're doing is attempting to restore the idea that resources, to some extent, some resources, we have common rights over, or there is a way in which having common access to these resources is actually good for everybody. So I like to think of these fruit trees spread about as being the new urban common, the common land, or the common resources, the rights that people had before in a rural Britain before the land was privatised in the 18th/19th century. And people were disenfranchised and in some very small way we're actually addressing that same issue'*⁶

These ideas about common land and resources seem to be part of a wider ethos in Abundance about sharing and community. Crossing the boundary between public and private was for some participants an important political statement, but this in no way seemed to detract from the sense of respect they held for the property and for the people who owned and lived in it. It was evident on harvests that people used and cared for their gardens in a myriad of ways, and harvesters were notably sensitive to this, as is discussed in the next section.

Most of the Abundance harvests take place in private gardens. This section from my field-notes describes a typical event:

We arranged the harvesting equipment on the patio: two fruit pickers; two picking bags; a tarpaulin; and a number of plastic supermarket crates. People began wandering onto the lawn to look at the trees and to pick up windfalls. Some tried the apples, commented on their flavours and textures, and discussed what variety they might be. There was a discussion about how best to access the fruit. There were three quite tall trees along the edge of the lawn, with few branches that could be reached from the ground. One of the trees was laden with huge cooking apples. We were offered a ladder by the lady who lived there, who suggested we could prop it up against her fence to climb into the tree. We decided to do that so we could pick as much from the tree as possible. This meant more un-bruised and longer-lasting fruit could be stored. We labelled boxes to separate different grades of fruit: 'firsts' were unblemished and would store longest; 'seconds' had small bruises or pest damage but were suitable for eating with the bad bits cut out; 'thirds' might be browned but could be used for juice or chutney. Sorting the apples was important so they could be distributed appropriately.

I felt relaxed. There were seven of us, so we could share the workload and people could do whichever tasks they preferred. One volunteer was keen on climbing trees, so picked from within the tree and called to other volunteers when he needed to pass a bag down to be stored. Apples were picked from the ladder and passed to people filling boxes on the ground. Then we held out the tarp below the tree and shook the branches to let the apples we couldn't reach fall into it. The lady who lived there brought tea and biscuits out for us and we stopped for a break to chat with her. She thanked us for coming to take away the apples. She told us that she used some of them to cook with but that she couldn't use them

⁶ Interview AS 10

all. She used to give them away but said that now she was too old to pick them. She hated seeing them go to waste. We made sure she had enough to store and took the rest away. We left some apples on the tree for the birds. We tried to avoid trampling on the lawn as much as possible, 'so it doesn't get too 'Glastonbury''. At the end we borrowed a rake and swept away the twigs and leaves that had fallen, and put all the rotten apples on the compost heap.⁷

Independent of Abundance activity, the private garden has a role as a productive and social space for the occupier of the home. It was created by a previous home owner (who planted the fruit tree), and the house builder (who enclosed the space). It offers the home-owner a supply of free, accessible, fresh, usually organic, fruit. Having a fruit tree in the garden can become problematic for residents if the tree produces more than they can use and creates extra work to clear the garden. Many residents were relieved that Abundance came to help clear the garden. The private garden can be a safe and protected space for fruit trees, and a potential resource for future generations, if home-owners realize their value and decide to keep them. Independent of Abundance, a private, productive garden offers a resource to the home-owner and the local ecology. In the context of limited resources, awareness of food waste, and the scarcity of local, organic food, it offers an additional opportunity as a resource.

As part of an Abundance harvest the private garden is recast as a different kind of place. The harvest gathers together several people, who may not know each other before the event. The shared, communal experience is distinctly different to a harvest undertaken by an individual tree owner. It recasts the garden as a shared social and productive space, for a shared event, as opposed to a private one. This involves some sensitivity to negotiate using the space in a way that is respectful of the privacy of the home owner and the care they have put into creating the space. For many volunteers, it is interesting to meet new people and work collaboratively. This can create a sense of trust and connection between people:

'It's definitely interesting all the different people you meet. All the different attitudes towards it they have. Generally people are very enthusiastic and say ah that's brilliant, all this waste, i don't know what to do with it. Some people... yeh people just offer you a cup of tea, whatever, just hang out in the back garden, get to meet all sorts of different people all over the city. And you're usually met with enthusiasm and friendliness. You get the odd unfriendly person who says yes anyway, which is a slightly strange dynamic or someone who seems annoyed that you're there but... that's only happened like once or twice, i just remember coz it's odd. Generally it's just a real, it feels like a, sort of like a release, a relief, like when you walk around a city, i suppose Sheffield is a friendly one as cities go, but people live their separate lives in close proximity and just get on with things within their life, sort of carrying on and don't talk to each other much, generally. People say hello, good morning, but people don't say oh can you help me pick all this fruit and then we can take it over here or whatever [...] Yes, but the thing is it barely is [a step up from saying hello]. It is in our culture, but that's what i mean by a relief sort of, that oh actually yeh we can all just talk to each other and assume that we're all friends and on the same side and trying to do good helpful things. 'Cause that's sort of what everyone is doing, really. So it's a nice sort of, you could be a bit

⁷ Fieldnotes 7.10.2012

*apprehensive, oh shall i... but you just go, yeh great, do you want a cup of tea? Yeh fine. And you just get on with it, it's just a very sensible, and that's a good thing*⁸

Other experiences of harvesting included the joy of climbing trees, for some in a nostalgic sense, and for others as an enjoyable, physical experience:

*'I think Abundance is a bit like that as well, like climbing trees, it's a very child memory thing isn't it. Kind of like going round a mate's house and just hanging out in the garden. You don't really get a chance to do that as an adult do you? It evokes lots of memories for me of being a kid*⁹

*'And it's just so much fun going on a harvest, climbing trees and picking fruit and riding bikes and distributing that around'*¹⁰

Each harvest is slightly different, but usually involves the following tasks:

- Gathering people and equipment at the start;
- Assessing the tree and deciding how to harvest it;
- Clearing the ground of apples that need to be composted;
- Collecting windfalls that can be used;
- Picking as many apples from the tree as possible by hand to avoid damaging them;
- Climbing the tree and picking apples into a bag;
- Climbing the tree and shaking the boughs, so the apples fall into a tarpaulin held by volunteers below;
- Sorting apples into containers for firsts, seconds or thirds, according to their condition;
- Sharing apples amongst volunteers and tree owner and allocating those to go for distribution;
- Leaving some apples for the birds;
- Eating apples;
- Having refreshments and chatting;
- Deciding where the apples are going to be distributed to.

Working through these tasks together, and adapting it to the needs of the particular tree and group, the garden becomes a space in which the methods of tree harvesting are discussed, learnt, practiced and performed, and in which the equipment relevant to tree harvesting is used. Volunteers stated that they considered it important to practice and share these skills so that more people could contribute to preventing fruit waste and increasing the supply of local produce available to themselves and to others who need it. It also means that more people within the local community can connect, learn about fruit, fruit trees and edible urban produce. Translating these desires into actions makes the private garden a place in which social and environmental goals are worked towards. Within this process people have agency, as individuals and as part of a group, to act on and in a space and change the environment around them. Many people eat apples while they are harvesting, opening a new sensory environment for consuming local produce and sampling different fruit varieties (often unknown and different to those available commercially). The garden could be

⁸ Interview AS 18

⁹ Interview AS 11

¹⁰ Interview AS 17

anywhere in the city, but would usually fall within one of the ‘hub’ areas coordinated by a particular volunteer and harvested by volunteers from the same area (see **Section 6.8**). This means that the garden becomes part of a local network connecting local people and places, and part of the city as ‘one giant orchard’¹¹.

6.4 Distributing fruit

After the harvest the tree-owner and each volunteer are given as much fruit as they want. The rest is taken out to the front of the house and loaded into bike trailers, or a vehicle, to be taken to a store or to a distribution place. The pavement usually provided sufficient space for loading the boxes of fruit. Sometimes we would carry the fruit a little way down the street to find a gap in the parked cars where we could load it. The preferred means of transport seemed to be by bike and trailer. Each ‘hub’ area had a trailer purchased with funds raised by the project. Some areas also had a communal bike. There was a custom-built trike, stored centrally, with capacity to transport several boxes of fruit.

Different parts of Sheffield presented different challenges to transporting fruit through the city streets by bike. For example, in the Hillsborough area, trams share the road space, meaning that bikes must negotiate tram tracks as they cycle through on the main streets. Also in Hillsborough, the Burton Centre, which receives most of the Abundance fruit locally, is accessed via a cobbled street. One volunteer expressed concerns about the fruit getting bruised on the cobbles and therefore not being storable for so long¹². The local topography means that almost all parts of Sheffield involve travelling up and down hills. For some volunteers this was not a problem. For others it meant choosing a flatter route, even if they had to share it with more traffic. Bike transport involved continual experimentation, as each harvest involved a different route and the quantity of fruit that would be picked was unpredictable, for example:

‘Moving 100kilos of fruit in the bike trailer, it’s the most I’ve ever tried to move, it was awful. It wasn’t very far, just in Broomhall’¹³

There was a performative aspect to travelling by bike or trike on the streets. It also created a visual statement that was seen to enable engagement with people and encourage interaction:

‘So when people see us coming to and fro their houses, moving loads of stuff by cycling and all just smiling having a nice time while we’re doing it, and getting them to try fruit that grows in their garden, and they go oh actually that’s quite nice’¹⁴

Loaded with fruit on the streets, the bikes drew attention. Some of this, volunteers said, felt positive. They would stop to offer fruit to people passing by on the pavement, and may stop to talk about the project if time allowed. On other occasions, volunteers noted that motorists responded angrily to the slower movement of the bikes.

¹¹ The Abundance Handbook

¹² Interview AS 8

¹³ Interview AS 18

¹⁴ Interview AS 18

The inclination to travel and transport fruit by bike wherever possible had evolved over the course of the project, and reflected a commitment to making the project's transport needs as sustainable as possible:

*'I think they just used vans pretty much in the first year. by the time I was getting involved there was more of a focus on cycling stuff around, coz more people got involved who used bike trailers and obviously it's got lots of overlap and shared ground with sustainability and using pedal power rather than cars to get everything around. So more of that started happening...'*¹⁵

*'Our first trailers and stuff were not bought they were made out of a tenner of scrap each by someone in Leeds... and he came down for the weekend and a group of us with his designs... also built around what we wanted to do... so the crates that supermarkets deliver to themselves internally, you know those 40x60cm plastic crates, stackable things. We started from that point and said these are really good for carrying fruit in and also what I call mushroom crates, the blue ones, 20x30cm mesh crates that soft fruits come in, they're half the size of one of the supermarket ones. So we built a trailer that is like a frame that either lets you put 4 big ones or 12 small ones stacked straight in. [...] so the mushroom crates especially they're made of a plastic you can't even recycle so the fruit and veg shops have to throw them away so they'll happily give them to you for free. And you often find the supermarket ones lying around. Or supermarkets even give you them in some places. So that became very useable for distribution'*¹⁶

The commitment to using bikes and trailers was flexible, and often involved compromises. Sometimes vehicles were used when they were available, for example if a volunteer was coming to a harvest by car anyway, or when this was more appropriate due to the distances, hills or time involved.

Streets are designed and intended for the movement of people and the transportation of goods. The way Abundance uses them mostly aligns with this, but has particular patterns, speeds and distances of travel. A car, bike, or trike carrying fruit travels slower than most other vehicles on the road. Quieter residential streets were usually chosen as routes, corresponding with the intention to connect trees, people and places within a small locality. Distances travelled are usually short:

*'The greatest journey any fruit travels from tree to mouth is five miles often by bike and trailer'*¹⁷

Abundance distributed fruit to a number of projects and organisations in Sheffield, including schools, nurseries, charities and community groups, based in a range of types of building. Sometimes we would leave boxes at the entrance, or with a receptionist. Other times we were invited to bring the fruit through into a kitchen or store-room, which allowed more insight into the places we were distributing to. The access to the building often determined how much contact volunteers had with the people receiving the fruit.

¹⁵ Interview AS 18

¹⁶ Interview AS 18

¹⁷ The Abundance Handbook, p. 2.

Fruit was often distributed by an Area Coordinator, or another core volunteer who was able to deliver at a convenient time. Most volunteers spoke enthusiastically about the projects they supported. For example, taking fruit to a Sure Start project:

'The different places we give the fruit to, it's quite diverse really, there's one or two Sure Starts we give to and one of those just near the school, they mash it up, coz its always the firsts we give away, they mash it up and use it for weaning the babies, as part of their weaning programme, 'cause they have weaning workshops in the Sure Starts. And if you look on the thing that Gemma did [film] on there is an interview, the man talking is from the Sure Start and he's talking about how it's like better than you get from the supermarkets, it's really useful for them weaning babies and you can quote him so that's really good. And there's a nursery we regularly give to and they use it in their kitchens to cook for the children and sometimes if we get little tiny apples the children can just eat them, or if they're just eating them they can chop them up and give them fresh. And some primary schools we give to, they can chop them up of they can use them in the kitchens, and that's really great 'cause it's in some small part educating the kids'¹⁸

Some volunteers also talked about wanting to have more connection with the people receiving the fruit. One suggested that recipients could come on harvests so they could have the same connection with the growing of the fruit as other volunteers. Alternatively, recipients could collect fruit from an Abundance store in order to make the distribution more of an exchange. Others expressed a desire for more time to engage with recipients and explain where the fruit had come from:

'Most of the places were really busy and just so grateful for the offer and what we were giving them, and I think that if I did it again I would find a way of having a bit more time with them explaining more of the context.' Cause in a way there was more of a, it could be quite quick. You were handing over this amazing thing. They would say thank you. But they just didn't have time to engage with us. We started to give them recipes, we thought maybe they didn't know what to do with the fruit, not everyone knows when its ripe, there's a knowledge gap, people usually get stuff that's completely ripe in the shops, or they tell you if its ripe or not, so there's a whole level there, if we'd had time I would have loved for that to be more educative. But I think a couple of times we did go in and meet the children they were making apple crumble and eating, and asking us like did this really grow on a tree? And you did get little moments. And we were so rushed off our feet, you want to do the deliveries quite quickly.... so it was a very different experience, much much softer. And there wasn't any potential confrontation or. They were just really grateful to have it. Probably short of money and couldn't buy it in'¹⁹

The interaction in these spaces is described as 'gentle', compared to the more stark juxtaposition of giving away fruit in public in the city (see **Section 6.6**).

Distributing fruit created an opportunity to think and learn about the needs of other groups in the city. Most places chosen for distribution were close to where trees were harvested, and all were causes or people that volunteers felt it was important to support. This suggests a link between the

¹⁸ Interview AS 2

¹⁹ Interview AS 19

places of distribution and ideas of social justice, in terms of who may be thought to need the fruit. Places that received the fruit included centres for the elderly, schools, homeless shelters, lunch clubs, and day care centres. The aim was that fruit would reach people who were through to be vulnerable or needing additional support. Fruit was also distributed to places that could offer fruit to a wider cross-section of the public, including public libraries and community centres. There was recognition amongst volunteers that nutritious food was a need for everyone.

In summary, the way that Abundance use city streets for transport reveals a commitment to make the transport of fruit through the city as sustainable as possible. Experimenting with bike transport has revealed the suitability of different routes, surfaces and equipment to transport fruit over short distances. It has also enabled the project to buy or make the necessary equipment with very small amounts of funding. Distributing fruit to selected projects and organisations gives the project a social justice role by supporting vulnerable people. Interactions between Abundance volunteers and fruit recipients in the physical spaces occupied by these projects enables some exchange of understanding about social needs and food provenance. It also forms part of a broader message about alternative forms of community support and food sourcing. Each of the places receiving fruit became a place in which waste was turned into a useful resource.

6.5 Storing fruit

After a harvest there is often a delay before fruit can be distributed, as distribution depends on the opening hours of centres and on the time volunteers have available. Fruit was stored in a range of locations including volunteers' homes, garages, and stores in community centres. Fruit storage needed to be convenient, as well as relatively cool, and spacious. This aspect of the project is invisible to most volunteers who join Abundance for harvests or workshops. The harvest leader usually decides where to store the fruit and arranges to get it there. The volumes of fruit and timings of fruit deliveries can be unpredictable and required a certain amount of flexibility on the part of coordinators. For example, early experiences of storing fruit at home:

*'That first year was amazing. It was really small scale. Not that small. But we had a pool of 25 volunteers. And we were harvesting about 30 trees. There was already a lot of fruit and it was all being stored in my house, in the living room [...] and then it started to go upstairs and my husband said we can't have it in the bedroom! We were like what have we done! It kept coming. And you know there's more out there...'*²⁰

Distributions were arranged to fit with volunteers' other commitments and the opening hours and storage facilities of the centres receiving the fruit. This coordinating was all the more pressing because of the fresh produce, as one volunteer explains:

*'I suppose it's difficult isn't it with fresh produce, there's a lot of worthwhile causes who just can't store it and they're only going to be open a certain time once a week when the community centre is open. That's quite an organisation to do that'*²¹

²⁰ Interview AS 19

²¹ Interview AS 7

Fruit stores provide holding space and time to allow different elements of the harvesting network to align. They can absorb unpredictable volumes of fruit until such time as other projects have capacity to receive it, or volunteers have time to deliver it. The way fruit is stored is particularly revelatory of the ways in which the project is enmeshed within the everyday lives of core volunteers, because it often involves using the space of the home and additional time over and above the time spent harvesting.

These overlaps with the space and time of the more everyday domestic settings of core volunteers is also evident in the way equipment is stored and prepared for harvest. The harvest leader is usually responsible for bringing the equipment to the harvest, including fruit boxes, a tarpaulin, and fruit pickers, and for putting in the additional time to gather and prepare it. Some volunteers stored equipment at their homes. Others asked around their local area and arranged to use spare space in garages. In one area, space within a Community Centre had been negotiated to use as a store.

The decision to use domestic space for storage seemed to be primarily one of convenience. For example:

‘What’s really convenient is if it’s at your house then you haven’t got to organise to go anywhere, so if it was someone else’s garage or a local community group then you’d have to make sure you could get keys or go at certain times and that would add an extra element of trouble and so it’s not been a hassle this year ‘cause we don’t really use our lounge and it’s convenient, really convenient to say ok we’re gonna do a harvest today - coz when you haven’t got lots of time and you kind of fit them in, so it would an extra pain in the ass, another component to think about, but yes, hopefully just like a friend’s garage or something or I’m on the scout, so thinking caps on, listening out, see who I’m talking to, looking for opportunities, do you fancy letting us keep apples...?’²²

The need for, and use of, convenient storage, often in volunteers’ homes, seemed to add to the sense of integration of the project with the everyday lives of volunteers, as discussed in the previous section. Where community centres were used this was negotiated through existing links between Abundance and other organisations in the city. Use of community space seemed to consolidate and expand links by bringing Abundance volunteers into contact with the community centre and its other users. These interactions added to the activity in community centres, and increased the possibility for local people and other community groups to get involved with fruit harvesting. Although using space in community centres enabled Abundance to contribute readily to local activities, obtaining storage space there for free was difficult, and using it often involved obtaining keys and access within restricted timeframes.

Core volunteers were proactive in looking for storage space for the project. This, as suggested above, involved using personal connections and asking around. Garages were considered by many to be ideal for Abundance as they had access straight onto the streets. They were especially useful if volunteers could have their own sets of keys. Volunteers often discussed empty buildings owned by the local authority, and expressed the view that if not being used they should be handed over for community use.

²² Interview AS 8

In summary, the use of domestic space for storage adds to the sense of integration of Abundance activity in the everyday lives of core volunteers. The commitment to finding space, without a budget to rent it, presents challenges and opportunities and can support integration with other local organisations.

6.6 Public Fruit Giveaways

Fruit was distributed in public through events called *public fruit give-aways*. These involved going into a publically-accessible²³ space in the city for a couple of hours and offering fruit to individuals as they passed by. As described below, giving away fruit in the city centre or shopping centres created a playful contrast with the commercial use of space, and used performance to work with that contrast and engage with people:

*'In 2007 we ran an Abundance Week where we commissioned local woodcraftsmen to make a mobile "Abundance Cart". The cart displayed a colourful range of varieties that had been harvested. This was at peak harvest time in the first week of October, which meant that we had a massive range of varieties and different fruits. We took the cart to the city centre, Meadowhall Shopping Centre and the Showroom Cinema, and we talked with people passing by about fruit, local food and the project and offered them free fruit and fresh juice. In exchange, we invited them to answer questions about fruit. It was helpful to have some kind of exchange happening because some people feel quite unsettled by getting something for free. The Abundance Queen, a performer, the spirit of the fruit trees, wowed the crowds and gave away fruit. Abundance Week got the local fruit message across to many hundreds of people of all ages'*²⁴

As acknowledged, the impact of the *fruit giveaways* could vary depending on the part of the city and the particular location chosen. The out-of-town shopping centre was a very deliberate choice to intensify the contrast between Abundance and the surrounding environment, and to make the message more prominent:

*'What I was really excited about was that we managed to get permission to take the trolley into Meadowhall shopping centre. It's a massive out of town centre that's pretty much decimated the heart of Sheffield. People call it 'meadowhell'. And I couldn't believe they said yes you can come in and just give away fruit. [...] It's the diametric opposite [of Abundance]. It's a very sanitised, international-based trading, slick operation. Very characterless and generic... and this was so about local, and things might not look perfect but taste amazing and there are probably more nutrients and ... and it just felt like a lovely contrast really. So that was the first bit of street stuff we did'*²⁵

In this case the contrast between the Abundance practice and its surroundings creates a particular kind of tension, referred to below as an '*activist*' position. This differs from the way I use the term

²³ I use the term 'publically-accessible' to refer to public space and to places that may be privately owned, such as Meadowhall shopping centre, but which are accessible to the public most of the time.

²⁴ The Abundance Handbook p.45

²⁵ Interview AS 19

activism in the rest of this thesis to refer to a range of activity that includes more subtle, less public, activity in more domestic or everyday spheres. To avoid confusion over the use of the term, my focus here is on the sense of contrast described in Abundance. It is the sense of contrast that sets the *public fruit give-away* apart from other Abundance practices that could be said to create more of a sense of blending-in with projects and in places that hold a similar ethos to Abundance. The importance of contrast is described as:

'So I would say, back to Meadowhall, shifted Abundance into more of a 'holding' action'²⁶, an activist position. We weren't confronting 'cause we were doing it in a really gentle way but [...] there's... it's almost like ... it's hard for people not to get it. It's in your face. And taking it there was directly about saying it's going to be really hard for you not to take something from this about how the balance is really different to the environment, how we're communicating with you, what we're offering you, [...] in that context. So for me, in Abundance, it had the potential to be, once you took it out there and placed it in certain positions, it could become an activist thing. So it was different to the feeling of the rest of the time when you're much more doing something that feels more... the people that you're with can see what you're doing... different community, different setting...'²⁷

So the *public fruit give-away* makes a statement because of contrast. In Henri Lefebvre's terms it contrasts with the *dominant codings* and practices where it happens and so *appropriates* the space according to a different ideology (Lefebvre, 1991). In Mary Douglas's terms it is matter out of place, or *dirt* (Douglas, 2002).

The particular elements of this contrast vary depending on where the *fruit give-away* happens. From what I observed they all shared certain characteristics. First, they were all on routes to popular destinations in the city and were therefore likely to attract lots of people passing by. In Lefebvrian terms, the dominant spatial practices include passing-through these spaces to get to somewhere else. The *fruit give-away* was an interruption in the flow of people to their destination, its static presence along the route interrupting the rhythm of passing-by with one of chatting and lingering. It asks people to divert their attention from their purpose, from getting to their destination, and to engage with an alternative, unexpected experience. Locations for *fruit give-aways* also shared the physical characteristics of hard landscaping (tarmac, concrete, and paving). By presenting and giving away fresh fruit or juice in these spaces, Abundance introduces fresh elements of living matter, creating another contrast for the mind and the senses, and making the *give-away* seem *out-of-place*. By juxtaposing materials, Abundance hints at the broader issue of what nature is in the built environment, and how and where trees and fresh food exist. The urban public spaces chosen for *fruit give-aways* are usually in city-centre locations that feature standardised signage and street furniture, and present an orderly aesthetic. The DIY aesthetic of the Abundance stall, adorned with home-made bunting and produce, contrasts notably with this precision. The re-used materials and free fruit draw a notable contrast with the commercial branding and signage that surrounds it. Each occasion of the *public fruit give-away* invites the public into a different experience of the city, and offers a different perspective on its potentiality. Fruit is

²⁶ 'Holding action' here refers to the work of activism and systems theory scholar, Joanna Macy. Holding actions are the more confrontational ways Macy identifies for working towards a life-sustaining society rather than an industrial growth economy.

²⁷ Interview AS 19

given away as a prompt, to open a conversation about the broader issues and aims behind the project. The intention is to initiate a conversation about the practices that dominate the urban environment and how alternatives might be explored.

As noted above, the nature of this intervention creates a type of contrast that differs from typical confrontational activism. The nature of how it is done in an engaging and celebratory spirit is discussed in **Section 7.6**.

6.7 Workshops

Fruit from harvests is also processed collectively by Abundance volunteers at group jam or chutney-making workshops. These happen almost every week during the autumn and involve using a kitchen for an evening. The kitchen may be part of a community centre, or may be in a volunteer's home (if it has been approved for food safety requirements). These field notes describe a jam-making evening at St Mary's Church, where we used the church hall kitchen one evening:

*'We gathered at the kitchen at around 6. I recognised several faces from harvests and other events. We chatted as we got the chopping boards and knives set up, washed the fruit, checked the recipe and that we had all the equipment we needed. Someone called out reminders that we must all put pinnies on, tie our hair back and wash our hands! By the time we got properly started there were about 12 of us. The kitchen was buzzing with chatter and the sound of chopping. We chatted a bit about jam-making, pectin, sugar content, and how to use the jam thermometer and test the set point. We also chatted about a whole range of other stuff, including food, music, and other volunteer projects in Sheffield. We shared food we had brought for dinner whilst the jam bubbled, and held a sweepstake to guess how many jars of jam we'd fill. I felt a tension between the event as a social occasion and as a learning workshop that needed to be finished on time. By the end the kitchen air was filled with sweet sugary steam and we raced to get the jars filled and the kitchen tidied before 9pm. Everyone took a jar home at the end, and we stored about 25 jars to sell at the market'*²⁸

Some volunteers came to workshops to learn skills that they would intended to use again, to supplement their diets, deal with surplus fruit they had, or to make gifts. For others it was a novelty and a good way to meet people with similar interests. Either way, spending time together in a shared space, working through the tasks of processing fruit, enabled volunteers to connect. Many described having fun at these events and enjoying spending time with like-minded people, even though sometimes it was hard work to get all the fruit chopped and to get all the work done within the time the kitchen was available. The practice generated sociality as well as a practical outcome of produce to sell at markets.

²⁸ Fieldnotes 6.11.2012

6.8 Creating 'hubs' in the city

The Abundance project began as a group of friends organising activities amongst themselves. As it grew it became necessary to think about how to coordinate an increasing number of volunteers and an expanding scope of activity across the city in a way that made the practices described above manageable.

Initially the project split into two teams, covering the north and the south of the city. When I joined the project in 2012 the focus was on creating 'hubs' in local neighbourhoods, of which there were about 10 at the time. The idea was that hubs brought together the practices described above and helped to connect the elements of harvesting, distributing and processing fruit at a scale that manageable amongst a group of people who knew each other and could work together in a relatively personal way. Hubs were described like this:

'There's kind of these four possible aspects to each hub. I think there's four: volunteers; space; trees; community groups. If you've got every one ticked then you're sorted. But some have two, some have more...'²⁹

'So those areas aren't necessarily plucked, they've come from relationships we already have. So St Mary's is a hub. St Mary's last year we were using to make chutney in their cafe, they were letting us store things there. Now we've got a growing space and a Community Grower there. We did the grafting workshops there, we'll be planting trees and things there as well. And hopefully it'll be a base for harvesting as well, so where the harvesting equipment will be stored'³⁰

The vision for the hubs emerged from a combination of existing relationships and imagination. Storage space had become integral to the spatial network of local harvesting groups in the city and seemed to offer a focal anchor around which harvesting was organised. In a vision developed by Abundance in 2011, stores were seen as integral to 'hubs':

'Wouldn't it be amazing if we had 12 containers, like metal shipping containers, across the city, each with a trike, harvesting equipment, tools for digging and stuff like that. As the hubs. And then obviously things like Community Growers and Abundance happened symbiotically in those areas. We're not going to have those containers but it's the same premis, they'll have those things, and will work in harmony'³¹

In 2012, when I joined the project, it was evident that some stores were already bringing some of these elements together successfully. The group was looking for more ways to adapt this vision into the existing urban environment, and to bring together the various elements they considered important in making them successful and sustainable.

²⁹ Interview AS 1

³⁰ Interview AS 1

³¹ Interview AS 1. 'Community Growers' is a sister project to Abundance, based on creating opportunities for growing, mostly annual vegetables, in Sheffield.

6.9 Abundance practices and the concept of place

The focus on practice in this chapter reveals interrelations between people and environment that can shed interesting light on the concept of place. Practices are always situated as part of an environment and, as Sarah Pink argues (Pink, 2012), a theory of place can support an understanding of practice as part of wider ecologies. In her work, place is an abstract concept understood as distinct from the notion of locality. It is not bounded or enclosed but, following Tim Ingold (2009) and Doreen Massey (2005), is constituted through '*entanglements*' that involve ongoing practices (Pink, 2012. p. 27). So, rather than being a material locality in which practices happen, place is performed through practice, it is a '*shifting intensity or a constellation of things, of which practices are a part*'.

This conception of place is particularly useful for understanding the way that Abundance practices interweave with environments. Abundance does not have a fixed locality in which activity happens. It is not a site-specific project based within an urban orchard, as one might think of a community garden. Instead physical spaces in the city are appropriated on an ad hoc basis for varying lengths of time, from a couple of hours in a garden for a harvest to months or possibly years for a fruit store in a garage. The place of the project is thus adaptable and flexible. It exists as and when the *entanglement* of '*things*' (which Pink (2012) refers to as: '*agencies; discourses; representations; materialities; persons; sensory and affective qualities; memories; texts; and more*') of the project come together. One participant commented that Abundance could '*happen anywhere*', in any physical space in the city, which supports the idea of place as indistinguishable from practice, and opens a new avenue for exploration of what constitutes the *place* of Abundance. Indeed, the Abundance ideas and practices have been taken up in other UK cities³², creating a similar *sense of place* in different physical settings.

What begins to emerge in this chapter is a sense of the way that practices can create a sense of place that can cohere or contrast with elements around it. For example, the *public fruit give-away* creates a sense of contrast where it is situated. In the shopping centre it interrogates and critiques the established sense of place in which it is situated. On the other hand the practice of distributing fruit often coheres within the environments where fruit is received. In community centres and support centres, Abundance practices suggest mutual support and empathy with projects with a similar ethos. The senses of coherence and contrast could be related to a discussion of practice and its relevance to processes of change. This discussion, again drawing on the work of Sarah Pink (2012. P. 16), picks up the theoretical literatures of Michel de Certeau (de Certeau, 1984) and Pierre Bourdieu (Bourdieu & Wacquant, 1992) on everyday life. In brief, de Certeau argues that practices of everyday life have potential for the generation of resistance, whilst Bourdieu contends that they are involved in the maintenance of normativity. Bringing these together, Pink argues for a consideration of practice as an open analytical concept that stands for human actions that may have multiple potentials: as everyday innovation; self-conscious resistance; or maintaining a sense of stability (Pink, 2012. p. 19). In this sense, Abundance practices could have potential to shift the sense of place and towards either resistance or normativity, depending on the coherence or contrast created.

³² These include Durham, Manchester, Leeds, Edinburgh, Oxford and London.

6.10 Conclusions

This chapter has discussed the main practices of the Abundance project in Sheffield. It has described what people do and has explored a range of their experiences. An analytic focus on practice brings to the fore how elements such as people, plants, and other living and non-living things are brought together in the built environment. It also raises questions about how they interrelate and how we can think about them as '*entanglements*', distinct from locality.

The practices of Abundance are not, to use the language of theorists of everyday life, about re-producing normativity. They are about creating new potentialities. As such the next chapter will explore in more detail the nature and qualities of Abundance practices and seek to identify how people learn to inhabit the city in different ways.

Chapter 7. Learning to inhabit the city differently through practice

7.1 Introduction

In **Chapter 6** I looked at the practices of the Abundance project. This chapter explores in more detail the nature and qualities of those practices and seeks to identify some more general themes about how practices are enacted and how through them people learn and share different ways of relating, understanding and engaging with and in the built environment. The central theme of this chapter is the how people learn to inhabit the city in different ways. I draw on concepts from the fields of anthropology, ecological psychology and human geography to explore this, through the empirical example of urban fruit harvesting.

The urban environment is complex. Within it many interrelations are disrupted, distorted or invisible. In the language of ecological psychology it could be said that certain *affordances* (Gibson, 1979) are hidden. This means that opportunities that could be possible do not show up to people as they might. Often this is because the relations that would enable those affordances are interrupted through physical barriers, social norms, legal structures, lack of skills and knowledge, and the patterns and rhythms that govern everyday urban life. These can obscure perception, disrupt access, and create social conventions that make new or different practices difficult to imagine and to carry out. The example of harvesting local fruit provides the empirical material through which I discuss how practices can establish different sets of relations that might enable other affordances to become available.

Each section in this chapter illuminates a particular aspect of practice in terms of how it functions to engage and shift broader relations in the built environment. The themes are: learning through the body; the education of attention and the development of skill; discovering new potentialities; challenging cultural convention; and the affective atmosphere of practice.

7.2 Learning through the body

The practices of Abundance involve immersed engagement in the built environment. The project was not, as one participant put it, about producing *'fact sheets explaining how many tonnes is going to waste, how many tonnes of this is equivalent to 3 double-decker buses'*¹. It was about developing ways of understanding in practice, through the body. As another participant explained: *'for most people it's about holding their hand and taking them to a fruit tree and going have a taste...'*². The physicality of practice was felt in the reaching for laden branches of fruit trees; in the pedalling of bike trailers up hills and along cobbled streets; and in the heat of a community kitchen whilst stirring a large pot of bubbling jam. The important commonality in Abundance practices is the knowing that comes, through the body, of what it is to, for example, obtain fruit and turn it into preserve through techniques that use a greatly reduced amount of fossil fuels and other resources. By incorporating

¹ Interview AS 13

² Interview AS 6

bodily effort in place of fossil fuels participants gain a different perspective on the energy and effort required to provide for basic human needs. It also generates a way of knowing the environment through being immersed in it and attuning the body to move through it in a particular way.

Through being immersed in an environment, and making selections about what to observe and attend to, participants become attuned with the environment and can develop specialised knowledge. This begins with the perceptual system ‘*picking up*’ critical features of the environment (Ingold, 2001). In the case of Abundance, one co-founder had been noticing and mapping fruit trees in Sheffield for 2 or 3 years before Abundance was set up as a community fruit harvesting project. He was a horticulturalist, with experience working with plants on allotment sites across Sheffield, had become attuned to clues in the urban landscape, and was practiced in spotting fruit trees. This attunement was based in part on knowledge of the trees themselves and in part on a sense of where they were likely to be found. James Gibson stated that the perceptual system of the skilled practitioner resonates with the properties of the environment (Gibson, 1979). The experience in Abundance seems to support this proposition:

‘You start to learn the patterns. So I very quickly had a real acute sense of where to find trees, and very often did. If it’s an old Victorian road, with old Victorian houses, there’s going to be fruit trees in one of every three gardens...guaranteed...wherever you are across the country. So you start to understand patterns like that. And if it’s a modern housing estate that’s been built in the last ten years you won’t find anything. No chance’³

Properties of the environment that are relevant to fruit harvesting come to the fore through repeated fine-tuning of observation and perception whilst moving through the city. The practice of scouting for fruit trees, which became a key part of finding fruit trees across the city, was developed through this attentive movement. Scouting missions were done by foot or by bicycle and would usually last for a couple of hours. The pace of movement provided time to attend to the details of foliage, to stop and take a closer look for fruit, to peer over fences as much as possible, and to knock on doors or talk to people in gardens. This slowing down was necessary to attune perceptions to novel details in the environment, and to take in information that might ordinarily be missed. The slower pace of travel was necessary to see beyond the walls, fences, doors, and other physical barriers of the built environment, and to attune the senses and perception to the idea that fruit trees do grow in urban areas. Both of these require effort, attentive looking, and focus.

As philosopher Maurice Merleau-Ponty stated, our bodies determine what shows up in the world, and embodied skills are acquired by dealing with things and situations (Dreyfus, 1998; Merleau-Ponty, 2005). These skills in turn determine how things and situations ‘*show up*’ as requiring responses. In this way, the relations between people and the world can be said to be transformed as skills are acquired (Dreyfus, 1998). The embodied skills of, for example, delivering fruit by bike around the city, causes the topography and surfaces to show up differently, to feel different, and this leads to a different understating of the city. There is a large literature on embodiment that is relevant to this corporeal way of knowing but that is not within the scope of this thesis to fully engage with. Future work could fruitfully explore this theme further.

³ Interview AS 6

7.3 The education of attention and the development of skill: seeing, showing and systems of apprenticeship

This section explores how practices in the Abundance project develop and how people learn to perform them. It is not my intention to engage in depth with theories of knowledge and learning. Instead, I discuss what I experienced in the Abundance project in light of concepts that seem relevant to understanding practice in that context. To do this I draw on the work of James G. Gibson and Tim Ingold, and the concepts of *enskillment* and the *education of attention*.

Tim Ingold argues that information, in itself, is not knowledge, nor do we become any more knowledgeable through its accumulation. Knowledgeability consists in the capacity to situate such information, and understand its meaning, within the context of a direct perceptual engagement with the environment. He argues that this capacity is developed by having things shown to us (Ingold, 2000. p. 21).

The term *education of attention* comes from James Gibson's *Ecological Approach to Visual Perception* (Gibson, 1979. p. 254). In Gibson's ecological psychology, the activity of the whole organism in an environment is the basis for perception. Ingold draws on this idea: the foundations of his studies of skilled practice are that perception is learned not by taking on board mental representations but by fine-tuning the entire perceptual system to particular features of the environment. This fine-tuning happens through processes of showing and copying in which an expert instructs a novice to '*attend particularly to this or that aspect of what can be seen, touched or heard, so as to get the feel of it for him-or herself*'. The novice '*watches, feels or listens to the movements of the expert, and seeks – through repeated trials – to bring his own bodily movements into line with those of his attention*' (Ingold, 2001. p. 37). This fine-tuning of perception and action, Ingold refers to as *enskillment*. Based on studies of hunter-gatherers, Ingold argues that novices learn by '*accompanying more experienced hands in the woods*' (2001. p. 37). Through being instructed in what to look out for, and having subtle clues drawn to attention, the novice is led to develop a sophisticated perceptual awareness of the properties of the surroundings and the possibilities they afford for action. Know-how is acquired by observation and imitation. It is not through '*enculturation*', or having '*information copied into one's head*', but through '*enskillment*', as a fine-tuning of perception and action, that meaning emerges in the context of engagement with the environment. This approach is a critique of classical cognitive science, and draws on ecological or phenomenological perspectives on perception and cognition. It suggests that the contribution that each generation makes to the next is not an accumulated stock of representations (as suggested most explicitly by Dan Sperber) but an *education of attention* (Ingold, 2000. p. 163). Learning, through *enskillment*, he says, is inseparable from doing (Ingold, 2000. p. 416). Ingold, drawing on Wynn 1994, goes on to suggest that the learning of technical skill depends on *systems of apprenticeship*, constituted by the relationships between more and less experienced practitioners in hands-on contexts of activity. It is on the reproduction of these relationships that the continuity of a technical tradition depends (Ingold, 2000. p. 37).

In the case of the Abundance project, the importance of the reproduction of relationships was observable in practice as well clearly stated in the comments of several participants. Members of the group not only inspired and motivated each other but also made up systems of apprenticeship through which more experienced participants showed newer members the practices.

To illustrate these ideas with empirical material I begin with interview extracts that discuss some of the reasons for setting up the project. These reveal a sense that previous generations had not set up systems of apprenticeship suitable to support the education of attention towards urban food growing:

'I mean, it's not a new thing. That's the other message of Abundance, really. As a kind of conclusion of it in some ways. People used to do this. For some reason we stopped. We're not actually starting anything new, we're actually trying to reinvent old ways for the modern world... 'cause we can't go back to how things once were coz we're living in the modern world now and people have reduced timescales, there's more challenges involved with whatever the modern lifestyle, you know, living in cities for example, we're not living in the countryside, we've got less access to land, so it's not as simple. But we have to reinvent these older ways coz quite simply we don't have a choice if you look at peak oil and climate change'⁴

'Suddenly it became not necessary for the majority of the population to have any connection with growing or in some cases even cooking, you could start to buy pre processed foods you could just stick in a toaster or microwave and heat them up and eat them'⁵

Participants suggested that a culture of convenience had developed since about the 1960s. They believed that the attention of post-World War II generations has not been directed towards food-growing, and that therefore skills and knowledge around fruit trees has been lost. Re-directing attention to fruit trees through the Abundance project was in part a purposeful attempt to make up for the generational gap in education and *enskillment*; the purposeful creation of a system of apprenticeship. Starting with personal foraging maps with over 80 trees on, Abundance was about sharing the knowledge and practice of fruit harvesting with others. This happened informally first, amongst friends, and was later given a name and publicised as a project in order to broaden the scope.

Within the *system of apprenticeship* in Abundance more experienced volunteers took on roles through which they showed others what to attend to in carrying out tasks. For example, for the purposes of scouting for fruit trees, Area Coordinators led groups on scouting missions around a neighbourhood. Most Area Coordinators had been involved in the project for a few years and usually had some experience in spotting trees. They were familiar with the features of leaves and fruit, and had often participated in scouting missions before with more experienced harvesters. They were able to point out where fruit trees might be found, how to gain a better view along a row of houses, and what to look for in terms of the shape and colour of leaves and fruit. I was surprised on my first scouting mission how difficult it first seemed to spot fruit trees. Even though I thought I had a fairly good idea what fruit trees looked like, it took a surprisingly long time to be able to differentiate them from amongst a mass of green foliage above street level. Having fruit trees pointed out by other members of the group helped to hone my perception to the intricacies of colour and shape that revealed fruit trees.

⁴ Interview AS 6

⁵ Interview AS 6

This extract from the Abundance Handbook sets out the type of information that was made explicit and shared amongst participants:

'It is helpful if someone in your group has some knowledge of harvesting and fruit trees. If you start from scratch, fruit trees are pretty easy to spot once you start looking. In early summer you can see the fruit on the tree, and you will start to become aware of the generalised shape and leaves of different fruit trees'⁶

And below, a description of an experience of harvesting in a garden, demonstrates how the systems of apprenticeship work informally amongst participants:

'It all starts off completely informally, standing around with people, you know you'll be in a garden and you'll be eating the apples, and obviously I know you can eat the apples, and I've always, like I like making the most of things, I don't throw anything away, I fix everything, and I guess it's the same mentality with the fruit that's going to waste - why waste something if you could use it. So I was really interested in how we could use the apples and things like that, and being around people, being in gardens or walking to a harvest or whatever, and you're with a small group of people and maybe someone will go ooh look at this and they'll just pick something off a bush and start eating it and be like these are actually poisonous if you eat the seeds but if you suck the juice and fresh off then it's really tasty and just talking like that, yeh, and spending a lot of time walking down the street with him and he just picks at everything. It's a good job he rides a bike 'cause if he walked anywhere he'd take forever 'cause he stops at every shrub and plant and tree and pulls a bit off and eats it or rubs it with his fingers and smells it or looks at things, and really for me, that's how I learnt things, like touching and smelling and informal chatting. And then I suppose since then I actively tried to find out more about what we can eat and what we can use, but it all started off as just like meeting people and conversations and picking up bits of food around me'⁷

Scouting for fruit trees could be likened to what Ingold referred to as *setting up situations* in which the novice is afforded unmediated experience:

'The process of learning by guided rediscovery is most aptly conveyed by the notion of showing. To show something to someone is to cause it to be made present to them. Here, the role of the tutor is to set up situations in which the novice is afforded the possibility of such unmediated experience. In such a situation, the novice is instructed to attend to this or that aspect of what can be seen, touched, or heard, so as to get the feel of it for him or herself (Ingold, 2001)'

The following quote reflects an experience expressed by many participants after they had been shown how to scout for trees by more experienced volunteers:

'He'd already done personal maps for foraging. So we went on our bikes I think one time. And I was like - oh my God! That whole way of seeing! I think that's a really key philosophical point around... without the information you can't even see. You can only see

⁶ The Abundance Handbook, p. 14

⁷ Interview AS 17

*what you know. As soon as he said look, and you'll see fruit trees now... and that was it. Now I can't not see them. I see them everywhere! And sometimes it's utterly overwhelming! So it's about the information that we have really. So Stephen opened that up to me and I was like ok, well you're doing this with your close friends - but there's so much here we could open that up much wider!*⁸

Through examples drawn from the practice of scouting for trees what I hope to have conveyed in this section is a sense of the ways in which practices in the Abundance project develop and how people learn to perform them. The concepts of *education of attention* and *enskillment*, and the processes of seeing, showing and apprenticeship are also applicable to other practices. For example the way chutney is made, the way apples are sorted on harvests, and the way coordinators organise for distribution all involve sharing and showing of tacit knowledge in informal ways.

7.4 Discovering new potentialities

Creating change means discovering new relations amongst elements of the environment and identifying and building on those that seem to create improvements. In this section I use the concept of *affordances* to discuss how participants explore relations within the environment through visual perception and action to uncover new potentialities.

The term *affordance* was introduced by James J Gibson in his *Ecological Approach to Visual Perception* (1979 p. 127). He uses the term to express a possibility for action. An affordance is a relationship, a complementarity⁹, between an animal and an environment, in which an animal is able to make use of what an environment provides. Affordances, in Gibson's conception, are objective and subjective; physical and phenomenal; visually perceptible, and also relate to meanings and values. They are only ever relative to the behaviour and posture of an animal.

Gibson's work has been taken up by many others. I want to highlight the work of Erik Rietveld and Julian Kiverstein (Rietveld & Kiverstein, 2014) in the field of ecological psychology and Don Norman (Norman, 1999, 2002) in the field of design, in terms of how I use the term affordance in this discussion.

First, in relation to skill, Erik Rietveld and Julian Kiverstein, argue that when considering the particular case of human interactions in the environment, more attention should be given to socio-cultural practices. In these practices, they argue, are embedded the acquisition and exercise of abilities relevant to specific contexts (2014. p. 326). Rietveld and Kiverstein argue that affordances depend on abilities, and are relevant to a way of life. Drawing on Tim Ingold's discussion of skill (Ingold, 2000 in (Rietveld & Kiverstein, 2014) 329), they add that the central difference between forms of life, or what might also be called cultural variation, can be attributed to differences in the embodied skills of practitioners. By skills, Ingold refers not to techniques of the body but the capabilities of action and perception of the whole organic being (indissolubly mind and body)

⁸ Interview AS 19

⁹ Gibson uses the term complementarity in his discussion of affordances (Gibson 1979 128) to refer to the reciprocity or relationship between organism and environment. It is important to note that this does not necessarily imply a positive association; affordances can be positive or negative.

situated in a richly structured environment. Skills, then, are essential to affordances as possibilities for action. By extension, according to Rietveld and Kiverstein (2014. P. 327), by acquiring abilities that flourish in different socio-cultural practices than one's own, one can come to see new possibilities for action provided by the material environment.

Don Norman, in his work on affordances in the field of design, stresses the difference between real affordances and perceived affordances, and the important role of cultural convention (Norman, 1999). Norman's work highlights how affordances can be learned through cultural convention. He stresses that affordances may exist but not be perceived, or that perceived affordances may not be real. He argues that cultural conventions are what guide people to perceive affordances as such. In the discussion below I will focus on real and perceived affordances. Cultural conventions will be explored in more detail in **Section 7.5**.

In terms of Abundance, I want to suggest that harvesting fruit is an affordance of the urban environment. Surplus fruit is a resource that is available to people, and there are people in the city who have gained the abilities, or skill, to harvest it. The practice of scouting for fruit trees is an example of how affordances are discovered as new potentialities of the urban environment. The skill of harvesting is something more than solely technical competence; it is a product of the whole *being-in-the-environment*. It entails an education of attention, a process of *enskillment* (Ingold, 2001, 37), that results in that affordance being made available.

For many people, the affordance of fruit harvesting in the city is not a perceived affordance. They do not know it is possible. This was evident when we talked to people at fairs and festivals and on the street whilst doing public *fruit give-aways*. Many people said that they imagined fruit growing in orchards in rural locations but not in the city. People often responded with surprise when we told them where the fruit came from. Abundance participants often commented that people had lost the connection of where food comes from and what to do with it. This was evident on scouting and harvesting trips when we talked to people who had fruit trees in their back gardens. Although many people did use some of the fruit that grew on their trees, we often met people who hadn't thought of using it, and some who weren't sure what to do with it. We also met people for whom harvesting local fruit was a perceived affordance, but cultural constraints meant that they did not know where to find it or how to access it. This was evident when we talked to people who said that they knew where fruit trees were in the city. It was common for people to suggest fruit trees that they thought Abundance could harvest, but that they didn't feel that they could or knew how to harvest themselves.

Scouting is dedicated time and attention to looking at and moving through the environment in a way that is different to how it is normally seen and experienced. It is a way of learning that the affordances of urban fruit trees and urban harvesting exist, and of learning how to make those affordances available.

The discussion of relations amongst people and the environment can be seen in some ways as similar to the discussion of relations between people and technology. Tim Ingold, for example, in his work on technology and skilled practice raises the question of whether, in modern industrial societies, the technological project has triumphed in binding practitioners to the execution of step-by-step sequences of determinate motions already built into the design and construction of their equipment, thus sweeping away the heuristics of technique and impoverishing the conception of

skill (Ingold, 2011. p. 61). Ingold does not necessarily believe this to be the case, but there is a useful parallel in this discussion with how the built environment is inhabited in modern industrial societies. Is the city seen as a technological project, in which determined motions are already built into its design and construction? And by extension, are patterns of human behaviour becoming automatic, thus impoverishing the skill of inhabiting, understanding and engaging with the environment? In his discussion of tools, Ingold argues that skilled handing is anything but automatic, it is '*rhythmically responsive to ever-changing environmental conditions*' (Ingold, 2011.p. 61). The awareness inherent in this responsiveness intensifies as the action is repeated and becomes more fluent. Likewise, it could be said that living in and moving around a city can be done in a way that is rhythmically responsive to ever-changing environmental conditions. To do this, as with skilled practice, would require awareness and attention in practical, perceptual activity. Scouting, then, could be seen as one such example. As a skilled practice of movement through the environment and attention to the details of features relevant to finding and harvesting fruit is responsive to changing conditions and could increase the capacity of practitioners to engage with and understand the environment and find new potentialities within it.

Interestingly, in terms of human interactions in the environment, Tim Ingold has suggested that humans tend to make alterations to the environment to make more accessible that which benefits humans; that which affords them their needs (2000. p. 129). What is made evident through this research, and particularly through the exploration of the practice of scouting, is the often unnoticed ways that certain human alterations to the environment to meet one need, such as the enclosure of property with walls and fences, actually makes another need, that of harvesting local food, more difficult. These tensions between human interventions in the environment lie at the core of sustainability. Research and practices such as those discussed here can help to bring the intricacies of those tensions to light and suggest ways of resolving them.

7.5 Challenging cultural conventions

In Don Norman's work on affordances he explores the idea that cultural conventions are what guide us to perceive affordances as such. Affordances, he says, are learned through cultural convention and cultural conventions are slower and more difficult to change than real or perceived affordances. He states that:

Affordances reflect the possible relationships among actors and objects: they are properties of the world. Conventions, conversely, are arbitrary, artificial, and learned. Once learned, they help us master the intricacies of daily life, whether they be conventions for courtesy, for writing style, or for operating a word processor. Designers can invent new real and perceived affordances, but they cannot so readily change established social conventions (Norman, 1999. p. 42).

Following this idea, I wondered what cultural conventions prevented the affordance of urban fruit harvesting from being perceived by people in urban areas, and what conventions contributed to fruit going to waste on trees across the city. I wondered how the practices of Abundance participants overcame cultural conventions to make urban fruit harvesting both a perceived and real affordance. Considering the practices of scouting and harvesting offers an empirical route into this.

On Abundance scouting missions most of the fruit that was found was in private gardens, usually at the backs of houses. This meant that conventions around ownership, property and privacy were central to the harvesting experience. To perceive the affordance of urban harvesting required some reinterpretation of assumptions about food sourcing. Several participants suggested that shopping in supermarkets was a pervasive cultural convention. On a couple of occasions residents with fruit trees in their gardens commented that they bought fruit from the supermarkets because they didn't know that the fruit in their garden was edible, or when it was ready, or what to do with it. Part of the scouting mission was talking to people about how they used the fruit in their gardens and how they might be able to use more of it. This interview extract describes the experience of one participant encountering this difference in convention:

'The amount of people that see you picking fruit or ask to pick fruit off their tree say - oh no you can't eat them! So many people say - oh no you can't eat these apples. And you say why? And they say oh you just can't - they mean they're inedible! And I'm always shocked and I say there aren't really any inedible apples...a few of the wilder types are a bit bitter or whatever, but so many people who we knock on the doors to pick their fruit don't want any. I reckon it's the majority. 'Cause they think you can't eat them. It's common. That's not the majority, but a substantial proportion of people tell us you can't eat the fruit off the tree when we knock on the door and ask if we can pick them... 'cause it's so foreign the idea that you could...'¹⁰

Abundance volunteers offered residents as much of the crop as they wanted; they had the first pick. Sometimes residents hadn't tried the fruit in their own gardens. If they were at home when volunteers arrived to harvest the tree, volunteers would ask them if they wanted to try any and would suggest ways they could store or use the fruit. There was a performative element to scouting and harvesting that contributed to changing conventions around local fruit. Sometimes residents were encouraged to try the fruit when they saw Abundance volunteers do it. However, the extent to which the performance of harvesting and eating fruit in gardens transferred to influence was unclear. As this participant suggests, the performative element could also create a sense of separation between Abundance and others:

'That's true, it can be a real positive, as long as they don't see Abundance as 'those people' who come round...and we're not... you know? As in they're the people who do that and we're behind the doors, we don't pick the fruit, we don't... But potentially it could work the other way, that they're maybe eating the fruit for the first time, a lot of people have trees they just don't use, they don't think of and wouldn't think of eating it, maybe they're thinking oh they're all eating it maybe I want to eat it'¹¹

Another cultural convention that was negotiated during scouting was about interpersonal interactions. When a fruit tree was spotted in a garden we would work out which house it belonged to and where the front door of the house was so that we could ask whether the residents used the fruit and if they didn't whether we could go in to harvest it. We took informative flyers, with project contact details, with us to post through letterboxes and to leave with people as a reminder. Ideally, we wanted to talk to residents, so the first step was to knock at the front door. The way participants

¹⁰ Interview AS 18

¹¹ Interview AS 12

described their experiences of knocking on doors suggests that they were aware that the practice was unusual and that it in some way challenged cultural conventions. For example, as one volunteer reflected:

*'Yes, 'cause you wouldn't go up to someone's house and knock on their door and ever ask them can I come into your garden sort of thing, apart from to harvest trees. And so most people would be like no you can't come into my garden, but it's ok 'cause you're harvesting the trees. Then most people have come and chatted to you, so when you stop and think about it, it's quite a bizarre one - some stranger off the street has come up and I've let them into my garden... And then people aren't really, not unfriendly, but people are hesitant to speak to people, in general, so it is a great one to kind of meet people and they do generally stop and chat to you and offer you cups of tea and stuff. And it's really nice coz you just remember people are nice. The cynic in me!'*¹²

The front door was an interface between public and private space, and becoming comfortable knocking at front door was something that, for many participants, was learned through being shown and doing it with others. This interview extract expresses something that a number of participants said they experienced when knocking at doors, which was that going with others, and repeating the practice, increased their confidence:

*'Sometimes knocking on the doors is nerve-racking. Just 'cause you don't know how they're gonna respond. But in general it's been fine, the more I've done it it's like that's fine and loads of people respond positively... and even if they've said, coz this year obviously there's been lots of trees that haven't done as well, so even if they've just said no sorry, no one's been rude. So I guess that doesn't put me off. Then in general I've been with people and I've not felt uncomfortable in any situations...'*¹³

*'Yeah, I think I feel more comfortable now. 'Cause I've been with him and seen him do it... knocking on the door... and yeah I think maybe I wouldn't have done but [...] then I would feel more comfortable knocking on a door, 'cause of the good experience of seeing it happen and people being friendly and so there is a kind of learnt experience'*¹⁴

*'I think in some cases when people get involved with it for the first time, like if I remember when I first did that, it's like what's the protocol here, on what basis do I go to this other person's garden and pick their apples? [...] so people may not have a lot of confidence in terms of climbing a tree, or the etiquette of going into somebody's garden, but very quickly everybody is very happy with that. Once they understand the basis on which it's done, which is that either somebody's requested it, or they've said actually what we want you to do is come and harvest our fruit, because it's actually helping me, a) 'cause it saves me some trouble and b) cause I don't like seeing things go to waste, which is another natural human thing. So I don't think really it's a problem at all'*¹⁵

¹² Interview AS 8

¹³ Interview AS 8

¹⁴ Interview AS 12

¹⁵ Interview AS 10

Overcoming cultural conventions around private space and resources enabled the affordance of fruit harvesting to be realised. Many participants expressed a sense of confidence about knocking on doors based on the rationale that harvesting fruit was of benefit to people and to the environment. Doing it in the name of the Abundance project gave a sense of legitimacy that facilitated the challenge to convention, and generated, as one participant put it, a sense of *relief*:

'Generally it's just a real, it feels like a, sort of like a release, a relief, like when you walk around a city, I suppose Sheffield is a friendly one as cities go, but people live their separate lives in close proximity and just get on with things within their life, sort of carrying on and don't talk to each other much, generally. People say 'hello, good morning', but people don't say 'oh can you help me pick all this fruit and then we can take it over here' or whatever [...] that's what I mean by a relief sort of, that oh actually yeah we can all just talk to each other and assume that we're all friends and on the same side and trying to do good helpful things. 'Cause that's sort of what everyone is doing, really. So it's a nice sort of, you could be a bit apprehensive, oh shall I... but you just go, yeah great, do you want a cup of tea? Yeah, fine. And you just get on with it, it's just a very sensible.... and that's a good thing'¹⁶

Cultural convention also governs many aspects of behaviour around physical elements of the built environment. These can be particularly sensitive in residential areas, and had to be carefully negotiated during scouting. Abundance scouting missions happened in parts of the city where at least two factors coincided: there were volunteers to lead them; and there were houses of an age that fruit trees were likely to have been planted in the garden. This resulted in two housing types making up the bulk of the areas that were scouted: Victorian terraces; and semi-detached houses built in the 1920s and 1930s. Both of these are usually laid out along a regular street pattern. In urban design terms, they have strong frontages that demarcate ownership and responsibility, and the type of image and visibility that contribute to a sense of *defensible space* (Newman, 1972).

Fruit trees were usually located in back gardens, so to identify them often required creative ways of looking through gaps in the buildings, into the spaces where two terraces backed onto one another. The ideal way to do this was by finding and accessing one fruit tree in a back garden, and from there being able to see along the whole row of gardens, as this participant explains:

'The view from the top of a tree on a terraced road is a very interesting view. It's a view in everyone else's back gardens. Not in a spying way, but you see all the other fruit trees that are often on the road but that you didn't know were there'¹⁷

As suggested in the use of the word *spying* above, cultural conventions around the gaze in the built environment mean that looking for fruit trees had to be carefully negotiated so as not to be interpreted as threatening. The journey through the streets on a scouting mission was interspersed with exchanges amongst members of the group as to whether it was ok, for example, to climb up a wall to get a better look into a row of gardens, or to linger along a pavement taking in the details of the tree-line. In some cases, participants suggested that behaviour that might ordinarily seem suspicious was justified on the basis that they had a defensible reason for doing it. As one volunteer

¹⁶ Interview AS 18

¹⁷ Interview AS 18

put it, *'there's nothing wrong with it, I mean I can easily explain why I'm there'*¹⁸. Negotiating the threshold between public and private was particularly interesting in the case of alleyways. Many housing terraces in Sheffield are notable for the narrow alleys that cut through the rows of houses and connect the street with the back gardens. These alleys, positioned every four houses along a row, offer access to the back doors of four houses: two on each side of the alley. The alley is not gated, but convention suggests that the alley is only used by residents of or visitors to one of the four houses that the alley offers access to. On some occasions participants made use of alleyways to look along a row of back gardens, and on other occasions they did not. There was no rule about this; it seemed to be decided by the feeling of the group on each occasion, and perhaps by the sense they got from the particular area. Occasions on which Abundance activity generated a suspicious response from local people were notable by their exception to the norm. The situation described below is one such case:

*'When we first went to Greenhill [...] we were walking around looking for trees, knocking on a few old people's doors, they called the police! it's quite well to do round there - you know people are funny... we probably looked a bit subversive, a bit communist, yeah we look a bit shady, maybe students at best, but dangerous subversives at worse, knocking on people's doors trying to frighten people [laughs]. 'Do you know you don't have to go to Tesco, there's an apple tree in your garden!' - and they sent the law to stop us! [...] Yeah, but we explained we're a charity and they said that's fair enough, they gave us that suspicious look...'*¹⁹

On the whole, Abundance, as a traceable named project, seemed to give participants a sense of legitimacy on scouting missions. The unconventional use of space on public streets, which was necessary in order to find fruit trees, was made acceptable because it could be explained and justified. If, as Ingold (2000. p. 9) suggests, ways of acting in the environment are also ways of perceiving it, then the practice of scouting is an important process through which perception and action become congruent in order to realize new affordances.

Perceiving and acting in the environment are important aspects of overcoming cultural convention. There is also an aspect of categorisation to this that may be articulated by drawing on Mary Douglas's work on anomaly and her notion of *dirt* (Douglas, 2002). *Dirt* is that which falls outside of the underlying classification systems through which perceptions are filtered and experience of the world is ordered; it is that which is anomalous. In this sense, it could be said that to act in the way that Abundance participants do involves a process of re-categorising. Fruit is often described as *'waste'* before it is picked but each piece of fruit, once picked, becomes either a *'first'*, *'second'*, or *'third'* depending its condition. This categorisation is relevant to what happens to the fruit next. *First*s are in good condition and may be stored for longer or given to people to eat. *Second*s may have a bruise or some scab on them and need eating more quickly. *Third*s, sometimes described as *'manky'*, may be heavily bruised or need sections cutting out of them. They were often used for making juice or chutney. The new terms given to harvested fruit confirmed that it was no longer *waste* but something useful. The conventional categorisation was overcome by creating new terms that fit within a different context. The notion of *dirt* highlights the contingent nature of categorisation. In this case it helps to reveal the combination of physical and societal constructs

¹⁸ Interview AS 5

¹⁹ Interview AS 7

through which matter can become problematic and *out of place*, and opens the stage for creative ways to challenge the boundaries of preconceived categorisations.

The sections above have mostly focussed on the experiences of Abundance participants. Effort to overcome convention was also made on the part of residents of the city who encountered the Abundance project. Although many people were unhesitatingly enthusiastic about the idea of a communal harvest in their garden, it was evident during conversations at front doors that others were unsure about letting strangers into their gardens. By its nature, urban fruit harvesting takes a message about fruit waste and local resources beyond the usual audience of environmentally-active volunteers to an audience selected on the basis of them having a fruit tree in their garden. By agreeing to let Abundance come and harvest apples, residents are asked to look beyond the convention that private garden space is solely for the use and benefit of residents, and to consider that resources in private gardens could be released to benefit others. Arranging access to the garden and allowing volunteers to harvest there requires trust: some residents were at home and met us at the time of the harvest but many others were not and agreed to leave a side gate open so that the harvest could happen whilst they were out. As the comment above suggests, this level of trust goes beyond a friendly *'hello'* and helps to create a sense of shared endeavour and local helpfulness. Learning how to talk to people on doorsteps, knowing what to say to put them at ease, and how to answer concerns, was another practice shared amongst participants. Many people understood and were supportive of the idea of fruit harvesting in gardens. As one participant put it, *it's a simple idea that most people instantly get*. Many residents expressed interest in the Abundance project and in where the fruit would be taken to. However, conventions around safety, litigation and risk were relevant to some residents that the project encountered. The most common concern I experienced was about the safety of volunteers in the garden. As the comment from a participant below indicates, the response to this concern had been learned over the course of numerous visits to gardens, and was based on Abundance being a registered, named project, with a recognised organisational structure and insurance:

'So often when I try to climb people's trees, not often, but sometimes people say - oh I don't want you to climb it, I'm scared you'll hurt yourself - I'm scared you'll sue me, sort of. They don't say that but they say 'I'm scared you'll hurt yourself'. And we say 'oh we're insured' and they say 'ok that's fine'. That happens'²⁰

In summary, to realize the affordance of urban fruit harvesting, Abundance participants and members of the public worked around cultural conventions of property, privacy and ownership, and created new shared meanings. The Abundance project changes assumptions around waste fruit, and represents a form of learning based on re-ordering patterns of perception and systems of categorisation. By identifying trees in the urban environment whose fruit can be used, Abundance shifts perceptions of those trees, and recasts them as useful parts of an interconnected ecology.

7.6 Affective Atmosphere: Celebration, enjoyment and playfulness

²⁰ Interview AS 18

The rationale for the Abundance project is rooted in issues around climate change, peak oil, local resilience and sustainability. Participants took these issues seriously and saw them as pressing concerns. In interviews with the co-founders we explored these issues in depth, and they were often discussed in conversation amongst participants to varying degrees during activities. They are articulated in the *Guiding Philosophy* set out in the Abundance Handbook. The *bigger picture* that contextualised the local action was relevant and important to participants.

At the level of practice, however, the weight of the bigger issues was moderated by a lighter atmosphere of celebration, optimism and playfulness. This was evident in most of the activities of the group, as one participant put it, *'most of the time whenever any Abundance activity is going on there's an element of celebration within that. It kind of contextualises it'*²¹. The practices of Abundance described in this chapter and **Chapter 6** were not carried out with a sense of obligation, but with a sense of doing things because people wanted to. This section aims to draw out the quality of the atmosphere of Abundance practices.

Abundance was set up through the collaboration of two artists and had a very intentional creative, artistic, and enjoyable quality to it. Decorative materials were used to adorn stalls and equipment; the Abundance Handbook included poetry and illustration; and celebrations included song and the dance. In an interview, the bigger picture and how it could be communicated was explained to me:

*'And the second thought was how do you get people into this? Well, I think don't flood them with loads of scary information like I've just done. For most people it's about holding their hand and taking them to a fruit tree and going have a taste, and making sure it's like ripe, and... it has to be fun, it has to be creative [...] so bringing a quality, it wasn't just a matter of here's some information, we need to do this, and let's pick the fruit and do it. It was also, have a creative artistic side, and the creative artistic side drew people in'*²²

To discuss how the playful, celebratory atmosphere in Abundance functions in terms of messaging, motivation and values, I draw on empirical material about the *public fruit giveaway*. The Abundance founders believe that the creative, artistic energy communicates on a deeper level. Messages, they believed, should not just be about information, or what needs to be done, but about changing cultural perception. Through the arts, a piece of fruit can be transformed into something magical and special, worth valuing beyond its monetary value. Here, one of the co-founders explains why the *fruit give-away* at Meadowhall was special:

'She dressed up as the apple lady and she stood in town displaying apples as like this mine artist... And people were coming and she had all these questions tied on little bits of paper, we were giving away free fruit and free apple juice but you only got the free stuff if you answered a question about fruit. So you had to answer a question on this bit of paper that might say what's your favourite piece of fruit or how far does the average piece of fruit travel, or balance a piece of fruit on your head... And once you'd answered the question you'd write it down and tie the bit of paper on the string to the Abundance queen's dress, and she's there standing holding this fruit. And we're all there, dressed up in costume. So it

²¹ Interview AS 1

²² Interview AS 6

*attracted people. And that's the way to do it. That's the way to get information across to people, 'cause it's making it like a piece of culture, rather than just a bit of information'*²³

Celebration and positivity combine in Abundance to create an attractive and performative message:

*'it's the positive side of campaigning [...] it doesn't say 'no don't do this', it always says 'do this' 'yes, let's do this, let's celebrate this'. I'm not sure there is space for it to say 'don't do this', but just to be positive around what's happening. And their act of using it is that kind of mechanism [...] it's a feel-good kind of thing'*²⁴

The spirit of celebration creates a lightness that suggests possibility and hope. Whilst critiquing the status quo, it does not condemn it. Neither does it make a definitive statement about change. Through the celebratory suggestion of an alternative, the Abundance message holds ambiguity, possibility and creativity, which invites engagement and contribution from others, and detaches it from the specificities of quantification and of locality. When I asked one core participant about the spaces in the city where Abundance exists he said that within the sphere of celebration: *'I suppose it can happen anywhere'*²⁵. This lends further to the discussion of place in **Section 6.9**. The positivity also fosters motivation and seems to be central to attracting attention to the project, and in catalyzing and sustaining action on behalf of participants. Many described doing it *'for the love'*²⁶, because they enjoyed it, and because they wanted to. The project has run for nearly 10 years on an almost entirely volunteer basis.

In terms of values, there is a strong link in Abundance between celebration and gratitude. The message in Abundance, expressed through practices like the *fruit give-away*, is that the practices that dominate in the locations chosen have become too dominant. They do not necessarily need to be completely replaced, but they need to be re-balanced. What is expressed in the *fruit give-away* is something about what can be provided for free by natural processes, which we should be grateful for, and we should not eradicate through destructive human endeavour. Here, passing on what a tree has given for free, establishes a sense of the value and worth of something beyond its monetary value. It is intended that the fruit will be seen as something to cherish because of knowing how it grows, how we relate to it, what it is in and of itself.

In previous sections of this thesis I have described how scouting for trees and harvesting them involved attention and focus. It is important to add that alongside the attentive focus, scouting and harvesting also created an emotional energy of excitement, enjoyment, wonder, amazement and delight. This is well expressed in the language used by one participant in an interview, and which resonated with what I experienced in person:

'And you see, like that's my favourite, like scouting is fun. Looking for fruit trees, we go out on specific scouting missions if there's particular chunks of the city that we expect there to be lots of fruit in but we've not found any yet, we sometimes will go out for the afternoon either in blossom season or in fruit season, so we've done blossom time scouting missions, so it's the time of year you can't be picking so you can instead go and look for the trees while

²³ Interview AS 6

²⁴ Interview AS 1

²⁵ Interview AS 1

²⁶ Informal conversations

they're visible [...] it's like a treasure hunt. So you cycle around looking for fruit, well we cycle, but yeah you can go however you like I suppose. You just mission round as a little group and then you're like ok, you go that way, we'll go this way, then we split off down different routes and we find, then you look over and you'll see someone like climbed up something, and as soon as you find one tree I want to climb up it and from up that tree you can see a completely different view, like I was saying before we live quite divided up lives, everyone lives in their garden and has hedges and fences whatever, not everyone but, and I'm not saying those people are wrong per se, but that's just what our culture is like isn't it. But when you climb up a tree in someone's garden you're in a really different place'²⁷

As this comment suggests, the reward of the *treasure hunt* is not just about being able to get the fruit, it is also about seeing a different perspective on the city, and the place of humans within it. The joy of finding new green space in private gardens, and creating new relations that connect people with trees, is part of the atmosphere that contributes to energy and agency in this project. These qualities seemed to encourage participation; the playful exploration generated a sense of collective endeavour and seemed to support the creative re-imagining of urban space. A similar sentiment is expressed by this participant:

'It's kind of like a secret. It's like people don't know you can just eat fruit from the roadside, or that there's all this fruit, there's loads of cherries around that are going to be ready in a few weeks, hardly anybody knows that you can go and eat them! Absolutely amazing. And it's a bit like a secret world. And hopefully we're making it less secret, I suppose. But it still doesn't lose that wonder. Even for someone like me who's known about it for a few years'²⁸

Part of the playfulness of the project seemed to relate to childhood memories. As this participant suggests, there is a quality of care-freeness and a lack of inhibitions that accompanies fruit harvesting:

'I have got that kind of impulse as well, that kind of foraging impulse, it's just another way of doing that, just wandering, mooching around, like when I was a kid i used to really like just walking down alleys, you know like these little passages behind houses and things [...] Yes, or even just little paths between hedges, and when we were kids we used to live in a row of houses and there used to be an adjoining wall that used to run across and they were like back to back the houses and as kids we used to run along these walls and they were quite high and we used to run along and it was completely exhilarating to run through [...] So i've always enjoyed that, it's almost like a childhood thing isn't it. [...] Yes i wouldn't do it now, but it's just the exhilaration of it as a kid and we used to. I think Abundance is a bit like that as well, like climbing trees, it's a very child memory thing isn't it. Kind of like going round a mate's house and just hanging out in the garden. You don't really get a chance to do that as an adult do you? It evokes lots of memories for me of being a kid'²⁹

As well as motivating participants, the playful and celebratory atmosphere in the project seems to be conducive to shifting perceptions and re-imagining the built environment. It is not tied to any

²⁷ Interview AS 18

²⁸ Daniele, date

²⁹ moya

particular people, locality, object or time, but emerges from a collection of entities. This is similar to what Charlotte Lee identifies in her thesis about the potential for action in climate change activism. She states that *'it is not that they [certain practices, presences and spatial arrangements] literally increase a tangible or quantifiable thing called energy, but rather can encourage an openness and alignment to the conditions of and for action, and thus the potential for further action [...]. Relations here ultimately come down to our relationship with this atmosphere, whether we are open to its influence, whether we are aligned to its intentions'* (Lee, 2013. p. 259).

There is an extensive and ambiguous literature around the term *'atmosphere'* (Anderson, 2009). To explore this literature in relation to Abundance could provide a fruitful avenue for future research. In the scope of this work I understand the term to refer to a sense of *'shared ground from which subjective states and their attendant feelings and emotions emerge'* (ibid. p. 78). By this I do not mean that all participants were affected in the same way, but that there was a shared sense of intention within the atmosphere to be positive, exploratory and celebratory.

This sense of bringing together an impulse towards change with the experience of pleasure has much in common with Kate Soper's notion of *'alternative hedonism'* (Soper, 2008). According to Soper the *'Euro-American mode of consumption that has become the model of the 'good life' for so many other societies today, is unlikely to be checked in the absence of a seductive alternative'* (ibid. p. 571). She argues that developing a more ecologically sustainable use of resources is dependent on *'the emergence and embrace of new modes of thinking about human pleasure and self-realization'*, the ethics and politics of which should therefore appeal *'not only to altruistic compassion and environmental concern but also to the more self-regarding gratifications of consuming differently: to a new erotics of consumption or hedonist 'imaginary''* (ibid. p. 571). It could be said that the practices of Abundance join an emerging anti-consumerist trend that is driven in part by an altruistic concern for the global ecological and social consequences of consumerist lifestyles and is also motivated to some extent by the intrinsic pleasures of doing things differently. This could include such practices as walking or cycling instead of driving, or enjoying a slow home-cooked meal. What the Abundance case suggests to the notion of alternative hedonism is one set of practices that could help develop a *'contemporary cultural presence, both ethically and aesthetically'* (ibid p. 579) that Soper argues is needed to re-cast anti-consumerism. Linking her work with that of Joseph Beuys, Soper argues for the significance of cultural production in a reconfiguration of the world of materiality. This, again, resonates in terms of the artistic and creative practices of Abundance, and further adds to the case for the importance of the arts in social change.

7.7 Conclusions.

This chapter has taken further the discussion of the practices of Abundance to explore how they shift the capacity of practitioners to engage with and understand the environment and find new potentialities within it.

The empirical material from the Abundance project suggests links with the themes of embodiment, skill, affordances, and affect, which are substantiated here and could be further investigated beyond the scope of this thesis.

A key theme of this chapter is about how interrelations shift through practice. Interrelations amongst people and between people and elements of the built environment are shown to be reconfigured in Abundance practices to achieve the tasks of fruit scouting, harvesting and distributing. Beyond these specific tasks, the Abundance practices can be explored with a view to understanding some of the interrelations more broadly. Specific interrelations that are particular to the Abundance project that I feel merit further attention are the relations between people and trees. These will be the subject of the next chapter.

Chapter 8. People and fruit trees in Abundance

8.1 Introduction

Fruit trees are central to the Abundance project and people and fruit trees are brought together on a number of occasions through the practices of scouting and harvesting. In this chapter I consider the particular interrelations between people and fruit trees in terms of what perspectives and possibilities for learning and relating are opened up through them. The central theme of this chapter is how interrelations between people and fruit trees influence not only the Abundance project itself and its activities, but also the way that participants perceive and use the city more generally.

First, I introduce other work in which the interrelations between humans and trees are explored. I then set out perspectives on interrelations between people and trees that emerged during my fieldwork. I illustrate how each perspective was understood by participants, and indicate the wider debates in which I believe they are situated.

I work with the idea that interactions with fruit trees correspond with a realization or understanding that aspects of urban life do not have to be as they are, that there are other possibilities and ways of doing things. New perspectives are opened up that afford new possibilities. Vistas from fruit trees open up new and intimate aspects for visual perception. Following the cycles of fruit trees sets a rhythm for activity that is in tune with the seasons and takes account of non-human timeframes. Patterns of the past emerge through tracing the places where fruit trees are found. In sum, interactions with trees open up an urbanism with a different rhythm, different cues, different clues to the past and future, and different types of connection and association.

8.2 People and trees in other work

To support the idea that interrelations between humans and trees are generative of a particular type of understanding I draw on the cultural geography of Owain Jones and Paul Cloke (Jones & Cloke, 2008), and the anthropology of Eduardo Kohn (Kohn, 2013) and Sarah Pink (Pink, 2012).

In their study of non-human agencies and the role of trees in place and time, they present three cases of what they call *tree-places*. These are histories of places in which they argue that trees have been significantly influential, not only on how the sites have developed but also on human practices and performances within them. They argue that although trees do not possess the particular and extraordinary capabilities of humans, they do possess very significant forms of active agency, which have usually been assumed to exist only in the human realm (2008. p. 81). Trees, they state, act upon as well as being acted upon and they can be said to have agency in a number of ways. In terms of my research, *agency as transformative action* and *agency as non-reflexive action* are most relevant. Owain and Cloke describe these as follows (2008. p. 81):

'Agency as transformative action: trees can be seen to make new directions and formations. They are active in the creation and folding fields of relations, which in turn is bound up with the transformation of places. Trees can act autonomously in seeding themselves and growing in unexpected places and in unexpected forms and when remixed with the social aspect, these actions can have creative and transformative effects'

'Agency as non-reflexive action: the socio-ecological world exhibits significant creativity and creative potentials and non-agents such as trees participate fully in creative being and becoming. In particular, trees have a capacity to engender affective and emotional responses from the humans who dwell amongst them – to contribute to the haunting of place via exchanges between the visible present and the starkly absent in the multiple and incomplete becoming of agency'

Jones and Cloke assert that the *'powerful material presence of trees has relationally shaped the new place identities and configurations that have emerged around them'*. *'New waves of politics, emotions, economic and governance have gathered around the trees and formed alliances (or otherwise) with them in disputes about future place form'* (2008. p. 93). The evidence they draw on to support this demonstrates that it would be difficult to account for the history and present condition of the places without the active presence of trees: *'The stories reflect specifically situated tree agency and also a wider sense that the material presence of trees with their active capacities will afford palpable contributions to how very many places and their shifting material and social forms have unfolded over time'* (ibid. p. 93).

Eduardo Kohn, in his work relating experiences around the forests of Ecuador's Upper Amazon (Kohn, 2013), also asserts the importance of extending anthropology *beyond the human*. In his book *How Forests Think*, he explores the idea that traits commonly ascribed to humans, such as seeing, representing, even knowing and thinking, are not exclusively human. Drawing on the work of many posthumanists, and in particular Donna Haraway, he suggests that encounters with other kinds of beings can force us to recognize this non-exclusivity, and to recognise that engagements with other kinds of creatures can open new kinds of possibilities for relating and understanding (pp. 5-7). Of particular relevance to my research, he discusses eating as a way of bringing people into *'intimate relation to the many other kinds of nonhuman beings that make the forest their home'* (p. 5). Kohn explains:

'Getting food through hunting, fishing, gathering, gardening, and the management of a variety of ecological assemblages involves people intimately with one of the most complex ecosystems in the world—one that is chock-full of an astounding array of different kinds of interacting and mutually constituting beings. And it brings them into very close contact with the myriad creatures—and not just jaguars—that make their lives there. This involvement draws people into the lives of the forest. It also entangles the lives of that forest with worlds we might otherwise consider "all too human," by which I mean the moral worlds we humans create, which permeate our lives and so deeply affect those of others' (p. 5)

Despite the very different context, including the very real possibility that *'intimate connection with'* can, in the case of the Upper Amazonian forests, mean being eaten by a jaguar, the idea that practices of food-sourcing can bring people into mutually-constituting assemblages applies just as readily to the urban gardens of Sheffield.

Finally, Sarah Pink highlights the need to look beyond the primacy that is usually given to social networks, and to consider relations between people and plants, in relation to the literature on community gardens (Pink, 2012. p. 90). Drawing on Troy Gover's work on community gardens (Glover, 2010), Ash Amin's work on culture and urban space (Amin, 2008), and Tim Ingold's work on how the world is inhabited (Ingold, 2009), she argues for a focus on the '*entanglements*' between the human and then non-human, extending analysis to the relations between people and plants, and the complex intersections of global flows, local politics, and more. In the rest of this chapter I explore how involvement with the fruit trees of Sheffield draws people into the lives of others and how the practices of eating fruit, searching for trees, and harvesting and propagating trees, open up new possibilities for relating and understanding.

8.3 People and fruit trees in Abundance

In this section I set out a series of perspectives on interactions and interrelations between people and fruit trees in the Abundance project through empirical material from field notes and interviews. These seven are those that presented themselves most clearly during fieldwork; there could be many others. I set out evidence as it was presented to me by participants and through my own observations. In some cases a perspective was expressed by just one participant; in other cases I heard it shared by many. I have aimed to convey a sense of how extensively each was expressed, without detracting from the validity of each individual perspective or from the extent to which I could not know how widely each view was held without interviewing all participants with a standard set of questions. I believe that each perspective is useful in exploring the range of ways in which fruit trees draw participants into the lives of others and that each conveys something of the messages that emerge when people in cities pay attention to fruit trees.

8.4 Eating local fruit and initiating the "Abundance" project

It may seem obvious that fruit can be eaten from trees. However, the idea that this can be done in the city, and the extent to which it can be done, was often surprising to participants and members of the public. One participant, describing how she had gradually become aware of the possibilities of urban foraging, said '*I only found out that crab apples weren't poisonous when I was about 21!*'¹. For one of the co-founders of the project, foraging in the city was something he began to do by himself when he noticed fruit trees that looked like they had a surplus of fruit. By noticing what was already there, he created his own maps of fruit trees and began re-visiting them, and these became the basis of the collective Abundance fruit harvesting maps.

The story that is told about the beginnings of the Abundance project involves a poignant moment with a fruit tree. This story I heard from several volunteers about the moment they decided to initiate the Abundance fruit harvesting project:

'He said that they were in his allotment where there are a lot of fruit trees and they were going to harvest a tree of greengages and it was a very good crop. And they put down a

¹ Interview AS 17

sheet and shook it and they fell, and Anne-Marie stood up and said “Abundance”! And that set them off to think about all the trees that had an abundance and people were not using the fruit. This is one version anyway²

It seems that the idea to start the project resulted from being in a place over time and noticing, waiting, watching and taking cues from the trees in the local environment. Finally, the huge crop from a fruit tree gave them the signal that it made sense to proceed and to develop the idea into a community project.

Many participants I spoke to said that this intimate local knowledge of the location of fruit trees felt like a secret. Most fruit trees were in the back-gardens of homes and were often hidden from street view. They were found either through specific scouting missions or through word of mouth. Locating and visiting the fruit trees enabled participants to realise that fruit trees did exist in the city and that there were ways in which the fruit could be accessed and eaten. This interview extract describes how coming into close contact with fruit trees through harvesting can shift perceptions of where fruit comes from and what exists and can be done in the city:

‘It’s quite sort of intriguing, often you’re going into places where you don’t know what it’s like, what are going to find? Will there be fruit all over the floor? Or nothing there? It’s quite intriguing and it makes you realise, it’s food and it’s green space in a city. And it’s kind of like that’s not supposed to exist. But it does, it’s kind of secret. But we have to make sure everyone knows, ‘cause we need to use it rather than it being pushed away and forgotten about. And ‘food comes from a supermarket’. It’s kind of like a secret. It’s like people don’t know you can just eat fruit from the roadside, or that there’s all this fruit, there’s loads of cherries around that are going to be ready in a few weeks, hardly anybody knows that you can go and eat them! Absolutely amazing! And it’s a bit like a secret world. And hopefully we’re making it less secret, I suppose³

The experience of moving around the city to uncover the locations of fruit trees relates to James J. Gibson’s approach to ecological psychology and his concept of *affordances* (Gibson, 1979). Gibson stated that perception entails movement and that it consists in the intentional movement of the whole body in its environment (as opposed to a static perceiver). The knowledge obtained through this direct perception is practical knowledge about what an environment offers for the pursuance of the action in which the perceiver is currently engaged; so to perceive an object or event is to perceive what it affords (Ingold, 2000. p. 166). The involvement of Abundance participants with fruit trees suggests that the *affordance* of eating local fruit in the city is perceived through practical engagement with the urban environment. The affordance is not perceived by everyone in the city, but can be made available to those who know how to perceive it, as discussed in **Chapter 7**.

8.5 We’re part of a system that’s just “there”

Abundance participants often commented on the generative capacity of fruit trees. As this comment illustrates, this was often accompanied by a comparison with the ways that people make

² Interview AS 16

³ Interview AS 1

their livelihood, and a sense that people have become disconnected from the ecological processes that support life. Standing under a fruit tree facilitated an experiential awareness of this contrast, which generated responses such as wonder, curiosity and reassurance. The practices of scouting and harvesting provided a sense of reconnection with fruit trees and the wider ecological system of which humans are part:

*'Well that is the true magic, isn't it. When you're standing under a tree and it's completely laden with fruit and you just ask yourself, where did this come from? I mean it makes you feel what you don't feel when you have to scrape and bow and labour and do what you're told in order to get the basic stuff that you need to live on. It gives you a completely different message. It gives you the message that actually we're part of some system where it's just there, you know, and what we normally associate with making a living is very strange by comparison really'*⁴

The sense of connection was expressed as a cognitive realisation and as embodied, sensorial affect. Scouting, and particularly harvesting, brought participants into direct contact with fruit trees, and the assemblage of relations around that tree. It also enabled appreciation of the smell, taste and texture of fruit. Several participants commented that supermarket fruit was *sterile* by comparison. The sense of reconnection with fruit, then, was both sensed through the body and realised intellectually through seeing fruit growing on boughs of a tree rooted in the earth, and supporting other plant and animal life.

According to environmental activist, author, and scholar Joanna Macy, a key element in bringing about a '*life-sustaining society*' is a '*shift in consciousness*'. This is referred to as a paradigmatic shift: a cognitive, spiritual and perceptual revolution that helps us to become aware of the web of relationships in which we exist. She suggests that scientific discoveries can reveal that Earth is not inert matter to be used as a commodity, but a living system in which we are intricately interconnected, and that spiritual teachings can guide us in becoming conscious, responsible members of the living body of Earth. She argues for the need to reject anthropocentrism and to recast humans as '*in community with*' all life forms (Macy, 2007. p. 145). This idea, which I will explore further in the discussion in **Chapter 9**, seems relevant to the Abundance practices that bring about a sense of connection and community around, and including, urban fruit trees. In this case, the fruit tree is said to give a very direct *message* about the web of relationships in which we exist.

8.6 The city as a fragmented orchard

The comment below came from an interview I conducted towards the end of my fieldwork. I found it particularly interesting because it articulated something that I had felt as a visiting researcher and volunteer in Sheffield. I had never been to Sheffield before starting my fieldwork, so I got to know the city through the places associated with the Abundance project. This more developed interpretation of this feeling is also articulated in the Abundance Handbook as '*we are rediscovering Sheffield as one big orchard*'⁵. This turn of phrase was used to help explain to people that although Abundance was about urban fruit harvesting, it was not organised as a site-specific orchard project.

⁴ Interview AS 10

⁵ The Abundance Handbook

Instead, the orchard was made up of individual trees and groups of trees, mostly in the back gardens of houses across the city. They were only connected through the scouting, harvesting and fruit-tree mapping practices of the Abundance project. The experiences of finding and visiting trees through scouting and harvesting practices shifted the focus of perception, navigation and imagination from the buildings to the trees, such that the city could be imagined as somewhere where people lived integrated amongst the trees, as opposed to separated from them:

'I started to realise that through Abundance my navigation of the city was, and my perception of the city, was like a fragmented orchard. And the buildings were occupying the spaces in-between the orchard. So it's like a shift in perception. So when I moved around Sheffield, in part, 'cause I didn't know the names of the streets, but I knew where the fruit trees were, someone could say I'll meet you by the quince tree but I wouldn't know what street that was on. Which is quite an interesting concept when you're looking at urban space [...] So I wrote the manifesto. It's just about that experience of imagining people living amongst the trees. The city is just a place where people live amongst the trees. The trees are the structure'⁶

The theme of movement through the city, linking perception and navigation with a sense of immersion amongst trees, was echoed by another participant. His experiences of scouting and harvesting often involved climbing the trees themselves, from which he describes a different view on how urban life is lived and organised:

'Then you look over and you'll see someone like climbed up something, and as soon as you find one tree I want to climb up it and from up that tree you can see a completely different view, like i was saying before we live quite divided up lives, everyone lives in their garden and has hedges and fences whatever, not everyone but, and I'm not saying those people are wrong per se, but that's just what our culture is like isn't it. But when you climb up a tree in someone's garden you're in a really different place. [...] You're up in the sky, you can see all the other trees, they're on a level with you. There's no like garden walls between you and the massive tree in the nextdoor neighbour's garden. You're in a tree, there's a tree over there... that's one of my favourite things actually, being in the top, or on the top of trees in various back gardens, the views you get over the city. Not from a main road or from a park but from the backside of lots of houses where people actually live their lives, not the like door on the front, but the actual, the irregular higgledy piggledy backs of the houses. [...] Yeh, not in a spying way at all but just in, like i don't want to give you the impression that stand in people's trees looking in their gardens. Just looking widely across the city and seeing it as lots of people living their lives. And lots of trees doing their thing. Growing. And yeh, it's really good'⁷

The fruit tree affords a perspective on urban life that is different to *'what our culture is like'*. It is above the physical and perceptual boundaries that have been constructed through human habitation. It opens up narrow vistas into *'views widely across the city'*. To me, this speaks of an affirming sense of reconnection. It is a reminder that despite the physical divisions seen every day, trees and people are living side-by-side. Importantly, this is a view from a tree in someone's garden,

⁶ Interview AS 19

⁷ Interview AS 18

which further breaks down the sense of separation between public and private space, and brings a greater sense of intimacy and trust to urban life. The '*higgledy piggledy backs of the houses*' are rarely seen, but offer a reminder that behind the facades of front doors people are getting on and living their lives. This perhaps enhances our ability to relate and empathise in an environment that is often characterised by anonymity (Madanipour, 2003. P. 155).

Focussing attention on fruit trees and using those as landmarks for orientation changes how the city is known and shifts perceptions of the balance of living and built elements of the environment. It is relevant to the question of how humans negotiate and navigate amongst the assortment of other elements that exist in the built environment and also prompts further action to perceive and use the city as a *giant orchard*. The experience of reconfiguring the perceived balance of built and living elements in the city suggests a shift from a perspective of human dominance to one of greater ecological integration and links to broader debates about what is meant by ecology, particularly in the context of urbanism. The *people amongst the trees* is suggestive of what Eva Perez de Vega would call a *flat ecology* (Perez de Vega, n.d.). Rejecting Cartesian dualisms of nature and culture, and drawing on the philosophy of Deleuze and Guattari, Perez de Vega proposes flat ecology as:

'Unlike the essentialized notion of nature and culture, flat ecology is defined by the capacity of its entities (which include both the natural and the artificial) to enter into relation with one another. The capacity of an entity needs the interference of another entity in order to be activated; it implies the relational quality that all organisms have: capacity to affect and be affected. An ecology defined by the capacity of its entities implies the notion of coexistence, of environment'.

The capacity for bodily immersion and movement in the city to shape how meaning is made is explored in detail in Ian Borden's work on urban practices of skateboarding (Borden, 2001). His study charts the phenomenal procedures by which skateboarders engage with architecture and links those to the ideological and material process that condition them. His work, which draws on Henri Lefebvre (Lefebvre, 1991) and Michel Foucault (Foucault, 1972), supports the idea that social processes continually produce and reproduce the worlds we live in and that *architecture is not an object but a process, not a thing but a flow, not an abstract idea but a lived thought* (2001. p. 9). The theme around how ecological relations are revealed, experienced, produced and reproduced in the city is a theme which will be further explored in **Chapter 9**.

8.7 Patterns of the past... "there isn't abundance everywhere"

'The project is simply a rediscovering of this value of trees for food, and a claiming and celebration of a shared inheritance that many of us never knew we had. Abundance helps us to find ways to play our part in its propagation and extend this inheritance into the future'⁸

As this interview extract describes, scouting and harvesting practices enable current Abundance participants to trace patterns of where people in previous generations had decided to plant fruit trees. These patterns were built up partly from talking to home-owners about the fruit trees in their gardens, as some home-owners had planted the trees themselves. Most fruit trees, however, were

⁸ The Abundance Handbook p. 5

planted by previous residents, so the patterns had to be gleaned from the location of trees. Trees tended to be found in properties of similar types and an accurate sense of which parts of the city fruit trees could be found in could be developed:

'Yes, you start to learn the patterns. So I very quickly had a real acute sense of where to find trees, and very often did. If it's an old Victorian road, with old Victorian houses, there's going to be fruit trees in one of every three gardens. Guaranteed. Wherever you are across the country. So you start to understand patterns like that. And if it's a modern housing estate that's been built in the last ten years you won't find anything. No chance'⁹

Reading patterns of the past in the location of the city's current stock of fruit trees gave some participants a sense of inheritance from previous generations. Many expressed a sense of gratitude for this provision. In this case the agency of fruit trees lies in communicating a message about how people in previous generations met some of their needs locally by planting fruit trees. It also suggests agency in prompting current members of Abundance to want to plant more trees for future generations, in order to fill in the gaps where there currently is no abundance. This sense of connection to the past and future is brought about directly through interaction with fruit trees:

'So, once everyone is making use of the waste, let's identify the areas where there is no abundance. 'Cause there isn't abundance everywhere. Abundance was exploring a pattern of the past, where the people during the second world war and maybe the 60s and 70s, certain areas, and going back 100 years in some cases, finding old orchards, people thought it would be a really good idea to plant some fruit trees for future generations, and maybe us when we're older, the people during the war did this a lot, we find a lot of trees at about 70 years old, that were planted during the war, and now are cropping huge, and Abundance go and harvest them. So it was like, it was thanks to the pattern of the past, people thinking ahead, and thinking trees are good, self sufficiency, easy way to get lots of free food, and so now the next message, the first message hasn't fully got through yet, but it's filtering down, but the second message is really, my vision, every tree planted in a city should be a fruit tree, or a useful tree of some form, unless stated otherwise, it should be like the status quo, there shouldn't be like we have to apply to get fruit trees planted here, it should be like we're going to plant a fruit tree unless people really complain and say otherwise. That would be my way of doing it. Because it is just such a useful thing'¹⁰

A sense of intergenerational responsibility is well documented in the sustainability literature. The commonly referenced Bruntland Report, in which the term *sustainable development* was first coined, defines sustainable development as '*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*' (WCED, 1987). The key concepts of *needs* and *limitations* follow from this, in terms of the needs of the poor being given overriding priority, and the idea that social and technological limitations apply to the environment's ability to meet present and future needs. In the Abundance project fruit trees offer a tangible understanding of these themes by demonstrating how previous generations sought to meet their needs by planting trees locally. Fruit trees also offer the opportunity for current generations to explore distributive justice of this particular resource across the city by looking at where there is a

⁹ Interview AS 6

¹⁰ Interview AS 6

lack of fruit trees and how more can be planted. Although many definitions of sustainability focus on intergenerational responsibility in human terms, this idea can also be extended to other species.

8.8 A new urban commons

Many people assume that the majority of trees harvested by Abundance are in public spaces. However, having traced the city searching for them, most trees were found to be in the private space of domestic gardens. Each individual tree, when joined up with hundreds more through the Abundance scouting and mapping practices, can be seen as part of what one participant describes as ‘a new urban commons’. This idea in many ways echoes that set out in Section 3 above, that the city can be seen as a fragmented orchard. The idea of a *new urban commons*, however, takes a more political edge by connecting current action with historic issues around land rights. One participant explained it like this:

‘And in some ways you could even take this back to some origins with the Enclosures and the rights of rural people’s access to land being taken away from them. Those people are now living in cities, because many many decades, 100s of years ago they had to make that move in order to survive. And what they lost with it, this sense of common resources, is something that perhaps now again we’re trying to restore in an urban context rather, than rural [...] what we’re doing is attempting to restore the idea that resources, to some extent, some resources, we have common rights over, or there is a way in which having common access to these resources is actually good for everybody. So I like to think of these fruit trees spread about as being the new urban common, the common land, or the common resources, the rights that people had before in a rural Britain before the land was privatised in the 18th/19th century. And people were disenfranchised and in some very small way we’re actually addressing that same issue’¹¹

In the case of Abundance, what is common is not an unenclosed area of land, or unenclosed fruit trees. As one participant put it, ‘the thing that’s free and accessible to share is the idea’¹². A sense of common good is shared by participants and members of the public who contribute to the project. That sense of common good is what enables each tree to be connected into a greater entity, and that which enables each separate, isolated, resource of fruit in private space to become common. Each harvesting trip is undertaken with permission but represents a polite rebellion that challenges the norms of private space ownership and territoriality.

The idea of the commons has a long history, which I will not explore in detail here. However, to elaborate on the way that the Abundance practices question the notions of public, private, enclosure, and common resources, I will draw on a particular strand of critical geography that is relevant to urbanism and sustainability. In his recent work, *Rebel Cities* (Harvey, 2012), David Harvey discusses urban processes of privatization, enclosure, control, and surveillance, and their effects on the quality of urban life in general and the potentiality for new forms of social relations to emerge. He argues that ways of thinking about the commons have become narrowly focused and

¹¹ Interview AS 10

¹² Interview AS 18

polarized between private property solutions and authoritarian state intervention, and debates for or against enclosure. Considering the various ways in which enclosure, access, private and public good have been defined and practiced, he suggests thinking of the commons not as a particular kind of thing, asset or even social process, but as *an unstable and malleable social relation between a particular self-defined social group and those aspects of its actually existing or yet- to-be-created social and/or physical environment deemed crucial to its life and livelihood*. He continues:

‘There is, in effect, a social practice of commoning. This practice produces or establishes a social relation with a common whose uses are either exclusive to a social group or partially or fully open to all and sundry. At the heart of the practice of commoning lies the principle that the relation between the social group and that aspect of the environment being treated as a common shall be both collective and non-commodified-off-limits to the logic of market exchange and market valuations’ (Harvey, 2012. p. 73).

This type of *commoning*, produced in Abundance through the practices of fruit scouting and harvesting, exists at a scale that is manageable by a team of volunteers in Sheffield. Communication by email and word of mouth, and a division of tasks amongst several Area Coordinators, supported the practice. The idea of Abundance which can and had been shared and implemented in several other UK cities, suggests a means through which the social practice can be spread without dependence on extensive networks of communication or more complex instrumentalities. Again, the attention to fruit trees enables this perspective on *the commons* to emerge and new social relations to form around them.

8.9 What grows well here: the urban orchard now and in the future

Over years of practice, scouting and harvesting contribute to an accumulation of local knowledge of what grows where in the city, and what grows well. Through sustained attention, visiting and harvesting trees in different places, and passing knowledge between successive volunteers, a shared understanding emerges of the trees of the city, each within its own local ecology.

Observing trees in context enables participants to see more easily how natural systems work. The role of moisture, soil, bees, birds, humans and other plants is all the more evident when trees are observed in context. As the Abundance Handbook articulates, co-existence is more evident when considered within a local ecology:

‘Abundance binds us to the cycle of the seasons, it slows us down to the ripening moment of each fruit. Each tree was born from the water running through the soil, a tossed apple pip, a carefully tended sapling, the slant of the sun, a bird shitting, a foot falling in the right place – the elements, creatures and humans coexisting in the city. An eclectic mix of feral and cultivated varieties of soft fruit (damsons, plums, greengages), top fruit (apples, pears, quince, medlar, peaches, apricots, cherries) and nuts (hazel, walnut, chestnut) create a dispersed and surprising urban orchard across the city’¹³

¹³The Abundance Handbook p. 5

Participants learn about different varieties, cropping patterns, pests and diseases by attending to what they find on scouting and harvesting missions, and building up knowledge over time. The trees themselves provide the material through which learning is guided. A type of applied learning emerges that connects aspects of plant biology with a local context. For example, by observing different yields on different trees, participants can build up a picture of the different cropping patterns of different varieties, through which a sense of species diversity emerges.

As well as understanding the health and productivity of the current urban orchard, participants can select robust and popular varieties of fruit to propagate for future generations. Creating successful new trees is a long-term project that requires attention and skill. For example, tasks like collecting appropriate scion wood, and finding places to plant new trees, can be made more successful by observing and taking cues from existing trees. By paying attention to the cropping patterns of existing trees, participants can plan to propagate trees to cover a longer fruiting season, for example by including early cropping varieties such as Discovery, as well as later cropping varieties such as Orange Pippin.

Besides the plant biology and ecological conditions required to propagate and plant new fruit trees, there is an important sociological aspect to successfully situating new trees that can also be learned from the existing urban orchard. Observing which fruit trees have persisted, and where, offers useful context to considering a future urban orchard and how new trees can be fitted into broader patterns of urbanism and governance.

The case of Abundance in Sheffield suggests that numerous fruit trees have endured in private gardens. In some ways private gardens are risky places for fruit trees because they depend on the will of individual landlords or residents not to chop them down or neglect them. As is also demonstrated in the Abundance project, fruit produced on trees locked away in private space can become waste if it is not used by the occupants of the property. Overall, however, as one participant put it, fruit trees in private gardens, as opposed to public spaces, have '*custodians*'¹⁴. They are perhaps less vulnerable to vandalism or removal than fruit trees in public space. Owners or residents, as custodians, can be encouraged and prompted to open up private space to share fruit resources. In Abundance a mechanism for accessing fruit has been found and can be further developed. This suggests that following the patterns of trees of the past and planting some for the future in private gardens is useful.

In public spaces fruit trees did not have custodians and were vulnerable to vandalism. On a small patch of open space in the city that was tended by the Abundance project we planted several fruit trees, but were careful to minimise the visual impact so as not to draw attention to vulnerable new trees. Some participants observed that young trees get vandalised in the city, and were reluctant to risk planting out new trees that had been painstakingly propagated by volunteers. The reluctance of the Local Authority to plant fruit trees in public space is also indicative of a fear that fruit will become a nuisance, by littering the streets or being used as projectiles. Although the ideal of a common resource of fruit for the city may suggest planting fruit trees in public spaces, the current stories of trees in the city suggest alternative strategies may be more successful in the current context.

¹⁴ Interview AS 18

The emphasis with new tree-planting in Abundance was to situate young trees *among people*. This meant that after propagating new fruit trees, Abundance would look for community groups or individuals who shared a similar ethos to Abundance to take on some of the young trees. What was important was to find community groups or individuals who had a small space on their land and who would help to spread the word, and enable the fruit to be enjoyed somehow in a community-spirited way. This participant describes the way they tried to do this one year after a session propagating fruit trees:

'Lots of them are still to find homes 'cause we've kept hold of quite a lot in little nurseries in people's back gardens. Like the first year we did it we were offered a space that was big enough to put all of them in, on the edge of a park, like 300 or something, and plant them up so we could look after them. But again in a wanting to connect to lots of people we instead put a little few posters and flyers around saying will you foster some baby trees? And got quite a few, maybe 20 or something, saying they would give a bit of garden space, say a flowerbed or a strip along the edge of a lawn. Then we could have the trees around the city in people's gardens and then those people could keep one as like for being able to look after them. Then anyone visiting their house or anyone they meet coming to the house would see all these trees and be like what are all these?... and then...so it's about trying to get them out among people'¹⁵

The themes in this discussion are reminiscent of those in **Section 8.7** above about responsibility towards future generations. They also bring to the fore questions about ecology, coexistence, and the position of humans in relation to other species and natural ecosystems. Notions such as management, stewardship and custodianship suggest a unique position for humans in terms of influence on and actions towards other species (Worrell & Appleby, 2000). The idea that natural resources benefit from human management is contested, but well supported in the field of natural resources management. The extent of hierarchical thinking about species becomes relevant in terms of how central or superior humans are considered to be. The theme of coexistence is central to sustainability. From this follow both practical and ethical considerations about who or what benefits from human actions, and who serves or is served. One specific issue that Abundance relates to is how to in some way steward a local resource of fruit for collective benefit in the context of a built environment based primarily on exclusive private ownership of land. A more general question hovers over where and how humans are positioned in ecological thinking, and what that means for urbanism and sustainability.

8.10 "It's wonderfully unpredictable!" : Co-designing with fruit trees

Encounters and interaction with fruit trees in Abundance could not be planned solely around the schedules of participants. The timing and rhythm of activities followed the seasons and the varying patterns and stages of development of the different fruit trees in the city. As described in the quote above, Abundance harvested a range of soft fruit, top fruit, and nuts, all of which developed at different rates and in different months of the year. In this sense the trees held considerable influence in the timetabling of activities, and it could almost be said that the project was co-designed with them. Participants were attentive to when buds, blossoms, and fruits started to

¹⁵ Interview AS 18

appear, and to when fruit started to ripen and drop, as signs that the seasons were changing and that different activities needed to be done. The material changes in foliage and fruit were cues to the practices of scouting, harvesting, pruning, and propagating. Timetabling and co-ordinating project activities therefore hovered between the timings and schedules of trees and of humans, seeking to proceed responsively to both. Coordinators sought to enable a range of people to collaborate and participate in activities, whilst also optimising the condition of fruit and protecting the health of the trees. Sometimes we would visit trees that were not ready to harvest, and may return two or three times to trees that were heavily laden or bore fruit that ripened at different rates. It was also difficult to say how much fruit would be collected and to plan in advance what to do with it. This all depended on the condition of the fruit and the quantity produced by each tree. Most of the centres that Abundance distributed fruit to were understanding of this and were flexible in their approach. In other cases project managers, residents, and some potential funders had expectations of targets and delivery that needed to be carefully managed.

2012, the year I did my fieldwork with the Abundance project, was marked by unusual weather patterns that had a significant impact on fruit crops. Participants were acutely aware of the dramatic drop in fruit yields precisely because they had been visiting the same trees for several years and were familiar with their patterns. Through the sharing of information between participants across the city it was clear that the low yields were widespread and much more far-reaching than usual fluctuations in cropping. For volunteers, this meant fewer harvests could be organised, less chutney and cider could be made, and less fruit could be distributed to the causes that Abundance supported across the city. I lost count of the number of times we explained to people that there simply wasn't as much fruit that year, and that we could not guarantee whether events or deliveries could take place. The situation also prompted reflection amongst participants on the nature of more extreme weather events and what the possible links were with broader scale climate change. I noticed that participants were aware of which trees had and which had not fruited, and were looking for patterns that might suggest more resilient stock for the future¹⁶. Again, the attentive engagement with trees enabled a more informed knowing that could influence both perceptions of the current situation and action for the future.

The project was undertaken with a spirit of improvisation and unpredictability. Intentions were set, but held light so as to accommodate change. The project was organised around local hubs in several parts of the city. Hubs, as this volunteer describes, are a mix volunteers, space, community groups, and trees:

*'There's kind of these four possible aspects to each hub. I think there's four: volunteers; space; trees; community groups. If you've got every one ticked then you're sorted. But some have two, some have more... So Norton has space and trees but doesn't necessarily have volunteers or community groups. And Crookes and Walkley's got space, volunteers, trees, community groups... almost there. Kind of needs a bit of all of them I think to be successful'*¹⁷

¹⁶ Some information of this type was held on the shared, online Abundance fruit tree map and associated Google document. Although participants intended to record details such as which trees fruited each year, which were harvested, and where the fruit was distributed to it was likely that a lot of this type of information remains in participants' heads.

¹⁷ Interview AS 1

Trees and people need to proceed somehow in tandem to enable a successful project to emerge. As set out above, trees also have a significant influence on the timetabling and extent of the project activities. In terms of how people and trees interact, the way that Abundance operated seemed to me to relate to a theme in the design literature around co-design. Co-design is defined, broadly, as *'the creativity of designers and people not trained in design working together in the design development process'* (Sanders & Stappers, 2008. P. 7). It is part of a move away from user-centred design and broadens the scope to focus on the process by which the design objective is created. In Abundance the collaborations and interrelations between volunteers, community groups, and non-human elements including trees, suggests fluidity in terms of what is drawn upon as expert input, and greater inclusivity in terms of the design community. The idea of including trees in processes of research co-design has been explored by the More-Than-Human Participatory Research¹⁸ group and has links with the recent emergence of multispecies ethnography (Kirksey & Helmreich, 2010). These projects seek to extend the idea of community beyond its strictly human conception, and to explore ways in which *conversations* with other species can broaden an account of community and contribute to more nuanced understandings of ethics, power and voice in the research process. The role of fruit trees within the Abundance project seems pertinent to this debate and could be extended in future research.

8.11 Conclusions

Abundance practices regularly bring people into contact with fruit trees. This chapter has looked beyond what happens in those practices in terms of practical outcomes to consider the broader associations and perspectives that emerge through these connections. By being in and around fruit trees new vistas open up, new sensorial experiences unfold, and new rhythms are set. Patterns of the past offer clues to the history and potential futures of urban fruit growing, and suggest possibilities for other social and material relations that might improve the quality of urban life.

I have shown through empirical examples how relations between people and trees in the Abundance project can be connected with broader themes of urbanism and sustainability. In Abundance it seems particularly evident that the quality of life, the potentiality of new perspectives and the agency of action lies not exclusively in and with people but in the relations of people with other elements of the environment, both animate and non-animate. This research can therefore be situated in a field of interest not exclusively concerned with the social but with what are referred to as *'materialist'* concerns (Whatmore, 2006), *'new materialisms'* (Coole & Frost, 2010), or *'non-representational'* (Anderson & Harrison, 2010) and *'hybrid'* theories in geography (Whatmore, 2002). These seek to introduce new actors, forces and entities into consideration and provide new accounts of nature, agency, and social and political relationships. The discussion in the next chapter explores how the insights from this chapter, and those preceding it, can be brought together with this research's overarching theme of sustainability.

¹⁸ See for example, 'Conversations with Plants' at <http://www.morethanhumanresearch.com/about.html>

Chapter 9: Discussion and conclusions

9.1 Introduction

In this chapter I draw together the findings of the study into the five key areas identified in the research objectives (**Chapter 1**). **Section 9.2** addresses the first two research objectives about how I consider sustainability to be perceived and practiced in the Abundance project. A key finding in the Abundance project relates to a shift in how the city is perceived and lived, from conventional urbanism to a more eco-centric orientation. **Section 9.3** addresses the third research objective and considers how urban fruit harvesting practice is produced and develops two aspects I consider to be important. First, the role of socially engaged arts practice and collective action by inhabitants. Second, the interrelations between people and fruit trees. **Section 9.4** considers the fourth research objective and conceptualises Abundance as a critical urban learning assemblage that contributes to an alternative formulation of the city. **Section 9.5** Considers the broader implications of this research for the design and governance of sustainable projects in existing urban areas, and their 'critical' role with regard to development and urban change. Additional recent literature on urban foraging is considered in **Section 9.6**. Final observations and limitations are discussed in **Section 9.7**. **Section 9.8** concludes with suggestions for future work.

To re-cap, the overall aim of this research was to contribute to furthering the understanding of sustainability in existing urban areas by looking at how it is practiced and produced by existing urban inhabitants in a collective urban fruit harvesting project, called Abundance, in Sheffield.

To address this aim, the research had five main objectives:

- 1) to expand understandings of what counts as sustainability by exploring how members of the project frame the issues and principles that inform their practice;
- 2) to contribute to understandings of how sustainability is practiced by looking at what the Abundance group do in Sheffield through the lens of social practices;
- 3) to develop understandings of how fruit harvesting practice is produced in existing urban areas by taking an holistic view of the project and exploring relations amongst the elements involved in practice;
- 4) to contribute to understandings of how fruit harvesting, as a collective urban practice, can be understood in terms of its contribution to change in existing urban areas;
- 5) to consider the broader implications of this research for the design and governance of sustainable projects in existing urban areas, and to consider their 'critical' role with regard to development and urban change.

This chapter now considers how those objectives have been met.

9.2 Perceptions and practice of sustainability in Abundance: towards ecological urbanism

This section considers the first two research aims together because perceptions and practice were so closely related in the findings. The objectives were:

- 1) to expand understandings of what counts as sustainability by exploring how members of the project frame the issues and principles that inform their practice;
- 2) to contribute to understandings of how sustainability is practiced by looking at what the Abundance group do in Sheffield through the lens of social practices.

9.2.1 Sustainability towards eco-centrism or a more ecological urbanism

The initial review of the literature suggested that a key consideration in terms of sustainability is the extent to which it supports an anthropocentric or an eco-centric position. Related is the question of how perceptions might be shifted towards more ecological conceptions in which humans are seen as embedded in, as opposed to separate from, nature. What became most relevant to the study was not a concept of sustainability based on principles (as discussed in **Chapters 4 and 5**), but sustainability as ecological relations, or ways of inhabiting the city. This, instead of substantive qualities, sees sustainability as process, relationships, connections, learning and understanding. Stemming from the idea of '*making the best of what we've got*', Abundance can be seen to operate as a *meshwork*, as *entanglements*, that draws across boundaries and redefines how the city is perceived and lived. In this section I relate three interlinked aspects to this shift in perception and experience. First, in terms of how foraging and harvesting become urban practices. Second, in terms of how '*nature*' is experienced in the city. Third, in terms of how the notion of '*waste*' is shifted to '*resource*'. The empirical material I draw on to substantiate the claims I make is drawn mainly from looking at the sites in the city where fruit harvesting takes place (see **Chapter 6**); observations and conversations about interactions between humans and fruit trees (see **Chapter 8**); and a range of perspectives from participants about their subjective experiences in relation to the three themes above.

9.2.2 Foraging and harvesting as urban practices

Foraging and harvesting, and other practices that involve the procurement of material produce from the environment, and generally associated with rural rather than urban ways of life. Various types and forms of urban agriculture exist, which tend to be associated with specific sites where intentional food-growing activities are permitted through urban planning (Viljoen & Bohn, 2014; Viljoen & Howe, 2005). The distinction between the mostly site-bounded practices of urban agriculture and the dispersed practices of Abundance fruit-harvesting is interesting in that it extends these 'rural' practices into a new spatiality in the city, and adds additional layers of meaning and use-value to those sites typically assumed to be unproductive. So whilst urban agriculture introduces sites in the city that blur the boundaries between urban and rural, Abundance practices extend that sense of blurred boundary beyond site boundaries in a way that permeates 'rural' practices deeper into the urban fabric. In Abundance, private gardens, pavements, alleys, yards and many more spaces become part of a new landscape that has productive and cultural meaning for

those involved in fruit-harvesting. Research and practices such as these reveal diversity and co-existence in the lived experience of the city that belies the apparent order of cartographic city planning. They suggest that closer consideration of creative reinterpretations of land use bring greater understanding of how land is actually used and the potentialities it might hold for the future.

By operating as a collective, communicative project Abundance also translates a typically rural, as well as informal, and sometimes even subversive, practice into something that articulates and celebrates the value of growing and harvesting produce in the city. It actively promotes inclusion and participation and recasts it from a marginal or subversive position to an accepted and celebrated one. In this way not only are 'rural' practices not contained within a specific bounded site, neither are they contained with a set of people who identify with such a site (for example a community garden or allotments). By permeating further into the urban fabric, the ideas associated with urban foraging, the provision of material produce, and the local ecological knowledge are shared with home-owners, community centre visitors, people who pass a harvest in the street, and anyone receiving fruit through distribution centres.

Future work could make further connections with the literature on urban agriculture. In particular with the idea of continuous productive urban landscapes, which has looked extensively at the spatial implications of site-based food production but could be extended to look at interstitial spaces and practices (Viljoen & Bohn, 2014; Viljoen & Howe, 2005).

9.2.3 How nature is perceived in the city

The relationship between cities and nature has long been debated by social, environmental and urban theorists. Urbanisation, write Erik Swyngedouw and Nikolas Heynen, has long been discussed as a process whereby one kind of environment, '*the natural*', is traded in for, or taken over by, another much more crude and unsavoury '*built*' environment (Swyngedouw & Heynen, 2010). My intention here is not to engage with the extensive philosophical debate about what constitutes nature and what the place of humans and the urban environment is within it. Rather it is to discuss perceptions of nature and the city as expressed by urban harvesters, and to comment on how such perceptions seemed to relate with the practices and experiences of urban foraging.

There were two main narratives about nature in the built environment in Abundance. First, there was generally thought to be an imbalance of materiality and influence in the city. In terms of materiality, the urban environment was too '*concrete*' and did not contain enough green space. In terms of influence, there was seen to be too much control of the food chain by supermarkets, which disconnected people from the natural processes involved in producing fruit. Green space was seen to be valuable for its biodiversity and general ecology as well as for the production of food, but that the potential for food production was unmet. This is not to say that the '*built*' elements were necessarily disliked, but that there were not enough '*green*' or '*living*' elements amongst it. This idea of balance leads on to the second narrative, about coexistence. The coexistence of elements that resulted in a tree being available to harvest included materials, people, plants and other elements. This demonstrates an appreciation that human habitats and activities, such as food-growing, existed alongside wildlife and depended on a broader ecology:

Abundance binds us to the cycle of the seasons, it slows us down to the ripening moment of each fruit. Each tree was born from the water running through the soil, a tossed apple pip, a carefully tended sapling, the slant of the sun, a bird shitting, a foot falling in the right place – the elements, creatures and humans coexisting in the city¹.

Fruit trees are described as part of a living ecology in which other people and creatures have an active relationship with the tree and some fruit is always left for the birds or other foragers.

Abundance practices sought more responsible relationships amongst other elements. They sought to establish a balance that encompasses, rather than dominates, other species. They also sought to increase local ecological knowledge and general understandings of natural processes. This is done through the learning practices described in **Chapters 6 and 7** and through the interrelations described in **Chapter 8**. Most participants said they felt more connected to nature through doing Abundance. To redress the perceived imbalance of materiality and influence in the built environment, greater access to green spaces and growing spaces is sought. Abundance practices achieve not only greater access to green space but opportunities to engage with living processes in a way that is qualitatively different to using green space for recreation or passing-through (as is the most common use for parks and many other urban green spaces). Abundance use spatial practices that loosen up access to that which already exists for the specific purpose of attending to the natural cycles of fruit-growing. This strategy could be contrasted with conventional urban planning approaches to green space in which green space is predominantly for recreational purposes and access is assessed on the basis of quantity and proximity to residents.

This section has sought to address an important aspect of the question of sustainability in existing urban areas through the case of the Abundance project. Abundance practices suggest a more eco-centric orientation to sustainability in which humans are sensitive towards, not superior to, other elements of a living ecology. This suggests a perception that nature is not something ‘out there’, from which humans are separate and can go to ‘connect’. Rather, it suggests an appreciation that humans and the city are part of nature, entwined in a myriad of processes, elements and relations that make up a living urban ecology.

9.2.4 The notions of waste and resource: from linear to circular metabolism.

A key part of Abundance practice is converting waste fruit into a resource, as explored in **Section 7.5**. By finding fruit that is going to waste and referring to it as ‘firsts’, ‘seconds’, or ‘thirds’ based on the quality and suitability of the fruit as a resource, the role of fruit trees in the city becomes one of provision (as well as other ecological services).

The conversion of waste to a resource comes to matter to how the city is perceived in light of the concept of urban metabolism. Urban metabolism is used to assess how a city functions in terms of flows of materials and energy. The city is seen as an organism, or an ecosystem, in which resources are consumed and wastes are excreted. The model for a sustainable city is one that circulates resources, is energy self-sufficient and approximately conserves mass. Most contemporary cities have large linear metabolisms with high through flows of energy and materials (Kennedy, Pincetl, &

¹ The Abundance Handbook, p. 5

Bunje, 2011). By intervening in the system to change the flows of fruit produced within Sheffield, Abundance participants help to shape a circular metabolism and shift perceptions of the city towards it being a self-sustaining organism as opposed to a net producer of waste.

9.2.5 Inhabiting the city, towards ecological urbanism

I suggest that the shifts in perception described above amount to a particular way of inhabiting the city. This way of inhabiting seeks to break the binaries between what has been constructed as the 'urban' and what has been constructed as 'nature' or 'rural' respectively. By breaking these binaries and allowing new configurations of people, place, and practice to emerge, Abundance practices a form of assembling that could be called ecological. By ecological I refer to the idea of relationality amongst heterogeneous entities, which Tim Ingold refers to as a meshwork. The meshwork is the world as it is inhabited as '*entangled lines of life, growth and movement*' (Ingold, 2011. p. 63). It is similar to the idea of the '*web of life*' except that it is not a network of connected points, but a meshwork of interwoven lines. This important difference between the mesh of entangled lines and the web of connected dots has to do with the type of relationship they represent. Connected dots suggest bounded entities surrounded by an environment whereas the meshwork suggests an entanglement of lines in fluid space. These lines in fluid space allow the organism to perceive and act, to be alive in the environment. They also do not represent self-contained objects and the relationships between them, but things *as* their relations. Thus the notion of unbounded entities allows the continual re-forming of assemblages and renders mutable what constitutes 'urban' or 'nature'. This type of relationality points towards less anthropocentric formulations because it places all elements, including humans, into a meshwork together rather than considering humans as separate. In this way, people in the city can co-evolve interrelated with trees, as described in **Chapter 8**, and new assemblages can be made that change linear resource flows into circular ones. This conceptualisation of ecological urbanism also draws from materialist positions, such as Jane Bennett's political ecology of things, or '*vital materialism*' (Bennett, 2010), and Sarah Whatmore's '*livingness*' of the world in cultural geography (Whatmore, 2006) and would be interesting to develop in future work.

9.2.6 Ecological design

In his assessment of cities and natural processes, landscape architect Michael Hough (1995) argues for new design strategies that integrate human and natural processes at a fundamental level. Part of his critique of contemporary urban design is that much of it is designed to conceal the processes that sustain life. This, he argues, contributes to sensory impoverishment and to an alienation of urban inhabitants from natural processes. Making visible the processes that sustain life and a connectedness that recognizes the interdependence of human and non-human life are two key elements of the alternative approach to design that Hough proposes (Hough, 1995. p. 31). In a similar vein, Tim Ingold and Mike Anusas argue against the mainstream logic of form in design that reduces our ability to 'perceive the depth and scope of our material involvement with the world around us' (ibid. p. 1). Design that strives to make visible the processes and connections that sustain life is qualitatively different to approaches to ecological design that, for example, insert living

elements as objects into a landscape or building in such a way as they appear hermetically sealed and unrelated to their surroundings.

In Abundance, participants scouted for and harvested trees and through those practices learned about the cycles of the seasons, and gained general and specific local ecological knowledge. This, I argue, is an example of how ecological relations can be revealed rather than concealed, and through which the meshwork in which the trees exist becomes meaningful. Abundance, then, can be seen as a type of ecological urbanism: not by creating new sites of ecological value, but by working with what is already there and bringing to life the interconnections in creative ways.

In summary, the Abundance case shows that practices are shifting the ways people perceive themselves as part of the urban environment and how they think of nature in the city. By redefining these perspectives Abundance practices a form of ecological urbanism that is relational and points towards eco-centrism. Abundance opens up the possibility that the city doesn't have to be accepted as given; it can be creatively re-imagined and re-lived. However, these new ways of knowing and living the city need to be learned. The crucial overall role of learning will be further developed in **Section 9.4.**

9.3 The entanglements of urban fruit harvesting and the role of socially engaged arts and collective action

This section addresses the third research objective:

- 3) to develop understandings of how urban fruit harvesting is produced in existing urban areas by taking an holistic view of the project and exploring relations amongst the elements involved in practice

9.3.1 Entanglements

In **Chapters 6, 7 and 8** I consider the practices of Abundance fruit harvesting and show how those practices are always situated as part of the environment. In **Chapter 6** I suggest that practices can be thought of as *entanglements* of people, plants and other living and non-living things. In **Chapter 8** I highlight how fruit trees, within these entanglements, contribute agency in a particular way. By being in and around fruit trees new vistas open up, new sensorial experiences unfold, and new rhythms are set. Patterns of the past offer clues to the history and potential futures of urban fruit growing, and suggest possibilities for other social and material relations that might improve the quality of urban life. In Abundance it seems particularly evident that the quality of life, the potentiality of new perspectives and the agency of action lies not exclusively in and with people but in the relations of people with other elements of the environment, both animate and non-animate.

9.3.2 The role of socially engaged arts and collective practice

An unexpended finding of the research concerns the role of arts practice. The project was founded by two artists in Sheffield, and the first event was a small-scale public intervention with a small grant from the Arts Council. This happened in 2007, well before my research fieldwork began in 2012. I

cannot comment on the details of the initial event, except to say that I was told about it by several core participants who remembered it as setting a tone of creativity, engagement, sharing and celebration for the project that subsequently developed. In an interview one of the co-founders explained that the intention behind the project came from her arts practice. When I joined the project in 2012 the artists who set it up were no longer directly involved, so what is interesting and what I can comment on is what evolved from those beginnings and what can be learned from this about arts practice in sustainability. This perspective, looking in depth at the nature and character of a project five years after it began is unusual in terms of how the impact of interventions is usually assessed.

This section will give a brief introduction to socially engaged arts practice before commenting on some key debates in the field in light of the Abundance project. Socially Engaged Arts (SEA) practice engages people and confronts specific issues; it is '*poetic, functional and political*' (Thompson, 2012. p. 18). It is not an art movement, but intends to merge life and art. It suggests cultural practices that indicate a new social order, or ways of life that emphasize participation, challenge power, and may span disciplines ranging from urban planning and community work to theatre and visual arts.

The specific issue of fruit waste in cities is confronted in a way that seeks to re-conceptualise the city as '*a giant orchard*'. It is a concept that many people commented was easy to '*get*' and communicate to others. It was also specifically about living the city as a giant orchard and being actively involved in the production of that meaning. Participation is central to SEA. In his Handbook on the subject, Pablo Helguera identifies four types of participation that shape the level and scope of involvement: nominal; directed; creative; and collaborative (Helguera, 2011). In Abundance there were a range of opportunities to participate, from nominal involvement (for example a member of the public receiving an apple at a public fruit giveaway) to fully collaborative participation (in which core volunteers shared responsibility for developing the structure and direction of the project and leading events). It was notable that many core participants originally joined the project through nominal or directed participation and later took on more creative and collaborative roles. Through participation at various levels a broad community was established around the project that continues to maintain activity even though few original members remain heavily involved.

The link with authorship is important here in terms of the ongoing role of an artist, which may range from a '*hit and run*' style of artist to one that behaves more like an organisation (Helguera, 2011. p. 31). In Abundance there was a clear intention from the outset that at some point the project would no longer be needed because people would just get on with doing it themselves. This was not just an artistic decision but one based on what the founding members believed to be the most socially useful and sustainable thing. What was evident when I was involved was that although membership had changed over the years, many volunteers were heavily involved in the coordination of the project. Further, in terms of emotional affect, which Helguera (2011) notes is particularly important for the production of meaning, the spirit of celebration and positivity, described in **Section 7.6**, inspired and motivated people to continue participating.

Also important to the production of meaning and the particular style of participation in Abundance was a sense of emergence. That it was unpredictable; that fixed outcomes and quantification of fruit picked was avoided; and that in theory anyone could get involved and make suggestions. Although

some volunteers commented that the artistic quality of the project had faded over time, it seemed to hold coherence in terms of how things were done. Part of showing and teaching new volunteers, and of communicating in public, was about sharing the sense of creativity and inclusiveness as well as principles such as sharing and gifting. The case of Abundance, which emerged from one weekend event into an ongoing fruit harvesting project involving hundreds of volunteers, is testament to the potential for success in emergent ways of working, and suggests that constraining projects with defined outcomes or expectations at the start does not necessarily correlate with success.

A key aim of socially engaged arts practice is to go beyond the institution of the art gallery. Abundance seems to fully embrace what Helguera (2011. p. 44) refers to as the double ontological status in terms of communicating with both participants and spectators. Abundance embeds itself in the homes and gardens of participants; it engages visually and verbally with people who pass it in the streets; it communicates with those who open their gardens to harvesters to share their fruit, those who lend space in stores, and those who receive donations. The question as to whether or not it remains a work of art remains open, but I am inclined to believe that the project continues to be poetic, functional, and political, and to invoke issues of nature, society and the environment in new ways.

The apparently limited relationship between sustainability and art, and the lack of creative responses to serious global issues such as climate change, is one that has perplexed many writers on environmentalism, including Bill McKibben and Robert MacFarlane, but a field of practice is beginning to emerge that intentionally addresses sustainability (Allen, Hinshelwood, Smith, Thomas, & Woods, 2014; Neal & Jennings, 2010; Julie's Bicycle, 2014). Reflecting on the difficult relationship, one report commented that:

'At worst the combining of arts and sustainability has been interpreted as an instrumental tick-box exercise or a social engineering project; at best it is seen as part of a growing need for the arts to help us find our way in the current cultural shift we are moving through' (Allen, Hinshelwood, Smith, Thomas, & Woods, 2014. p. 5).

I suggest that the Abundance project, although not explicitly *about* sustainability, adds a further example to the collection of emerging creative responses that combine principles of both creativity and sustainability. This adds weight to the suggestions made in the recent Culture Shift report that additional funding and support is needed for artists working, often across sectors, with little funding, and on projects that are process rather than product-based (Allen et al., 2014). I also suggest that the findings of my research accord with American art critic Suzi Gablik's statement that *'it is precisely to the periphery and the margins that we must look if we are to find the cores that will be central to society in the future, for it is here that they will be found to be emerging'* (Gablik, 1991). Methodologically, this supports exploratory studies such as this one that seek to understand and engage with novel practices.

9.4 Abundance as critical urban learning assemblage

This section addresses the fourth research objective:

- 4) to contribute to understandings of how fruit harvesting, as a collective urban practice, can be understood in terms of its contribution to change in existing urban areas.

This research has looked at a range of aspects of the Abundance project, including the issues and principles that informed the practice (**Chapters 4 and 5**), the practices themselves (**Chapter 6**), some of the ways that learning takes place (**Chapter 7**), and the particular role of fruit trees in finding and developing new potentialities in urban life (**Chapter 8**). In this section I bring all those aspects together to conceptualise Abundance within an overall framework of urban learning. To do this, I draw on Colin McFarlane's notion of '*assemblage*', and situate it within his notion of a '*critical geography of urban learning*' (McFarlane, 2011).

This notion of learning is not about learning particular skills, although sharing practical skills (such as pruning, grafting and making produce) is an important part of what Abundance does. Neither is this notion of learning about knowing more about the city. As I will explain below, learning can be a way of inhabiting the city. If urbanism is about a '*ceaseless reassembling of forms*' (McFarlane, 2011. p. 174) then the way that forms are assembled tells us something about how the city is lived.

9.4.1 *Assemblage*

The term '*assemblage*' has several general usages as well as being deployed in a range of discourses in social theory (see for example the work of Bruno Latour, Doreen Massey, Manuel de Landa and Nigel Thrift). McFarlane uses it in three ways (McFarlane, 2011. p. 23). First, as orientation to the world (e.g. a way of thinking about urban policy production). Second, as an object in the world (e.g. an urban policy). Third, in the political sense, as a way of thinking about how learning is produced and how cities might learn differently; for '*continually thinking the play between the actual and the possible*'. This, McFarlane states, draws closely on the philosophy of Gilles Deleuze, in which an assemblage is '*a multiplicity constituted by heterogeneous terms and which establishes liaisons, relations between them*' (Deleuze and Parnet, 2007, quoted in McFarlane, 2011. p. 24). Urban actors, forms, or processes then, for McFarlane, are defined less by a pre-given definition and more by the assemblages they enter into and reconstitute. Interactions are central to the concept of assemblage. Interactions between components are what form the assemblage, rather than the properties of the component parts. The agency of the assemblage lies in the interacting whole. McFarlane makes a specific link to urbanism by emphasising that learning is central to how urbanism is produced. Urban assemblages are not spatial categories of learning or outputs or resultant formations. They are about how learning operates through doing, performance and events; through experiential immersion in urban space-time (McFarlane, 2011. pp. 31-32). Learning, McFarlane argues, is an important practical and political domain through which the city is assembled, lived and contested.

9.4.2 *A critical geography of urban learning*

In McFarlane's conceptualisation, there is nothing necessarily critical about an assemblage. However, critical urban learning assemblages can take on a role in progressive urban politics by questioning existing urban knowledges and formulations and learning alternatives. McFarlane

suggests three aspects to this (McFarlane, 2011p. p. 154). First, critical urban learning assemblages can '*evaluate*' urban knowledges that are given as inevitable by dominant interests and can reveal how these close down other choices. Second, they can present '*alternative*' sets of urban knowledges that entail learning a new kind of city. Third, critical urban learning assemblages can identify who is involved and can propose more '*democratic*', inclusive, socially just or ecologically sound forms of urbanism. Therefore, through inclusion of multiple temporalities, critical learning assemblages can highlight relations between the actual and the possible. They explicitly attempt to avoid reductionism and essentialism and focus on the contingent processes that produce assemblages and how alternative urban learning could be assembled differently. Additionally, critical learning assemblages reposition agency as an emergent capacity of the material and social aspects of the assemblage. This means that the potential of non-human forces shaping the world is accepted, and agency is not thought of solely in human terms.

In this understanding of urbanism, ways of knowing and performing the city are actively learned. McFarlane (2011. p. 175), drawing on work by Thomas Blom Hansen and Oskar Verkaaik (2009), states that those who are able to manoeuvre and control the urban environment are those who claim to know it and are able to create narratives about the city and its people. This makes learning the city, assembling it according to particular dispositions, essential to creating and practicing different forms of urbanism.

9.4.3 Abundance as urban learning assemblage

To draw together the findings of this study I want to suggest that the Abundance project can be thought of as an assemblage for critical urban learning.

In **Chapters 4 and 5** I examined the issues and principles that inform the practices, noting how they give the project a critical angle on dominant formulations of urbanism. In **Chapter 6** I discuss the practices themselves and consider some of the process-related, spatial and temporal aspects of the assemblage. **Chapter 7** discusses some aspects of the learning itself and how it takes place. **Chapter 8** demonstrates a particular way in which non-human aspects of the assemblage contribute agency by looking in detail at interrelations between people and fruit trees. Finally, in this discussion I comment on the way the project might be understood in terms of sustainability, by proposing that it constitutes a more ecological orientation to many conventional forms of urbanism. The assemblage would also include aspects not explored in detail in this study, for example the tools and technologies of the project. All the elements of the Abundance assemblage also belong to other assemblages, but brought together through the project they are reconfigured and exert a particular kind of agency. As a critical assemblage it highlights the shortcomings of urban formulations that lead to fruit waste, poor diets, and isolation. It proposes a new story about transformation, local food, and collective endeavour based on the idea of '*making the best of what we've got*'. It joins the conversation about how to live in cities and gives voice to some not usually heard in the politics of urban development, including a range of volunteers, marginal spaces, and non-humans, such as fruit trees. It proposes an urbanism sensitive to the interconnectedness particularly of people and fruit trees and creates an intentional space of attunement in which the two can co-evolve. It resists the idea of the city as object, in which patterns of habitation are pre-designed and determined. In

short, through Abundance, the city comes to be known differently and, I would argue, more ecologically.

9.4.4 The assemblage and locality

The notion of assemblage indicates an interesting relationship with locality. Abundance does not reside in a particular place but is carried with the ideas, people, equipment into various locations in the city. One participant commented that '*Abundance can happen anywhere*'². It depends on being continually reproduced through practice. The assemblage creates meaning and a sense of connection in a locality but is not bound by it.

9.5 Summary of contributions to knowledge made in this thesis

This section considers the fifth and final research objective:

- 5) to consider the broader implications of this research for the design and governance of sustainable projects in existing urban areas, and to consider their 'critical' role with regard to development and urban change.

This thesis has told a story of a grassroots urban fruit harvesting project. In the section that follows I look beyond the Abundance project to consider some key contributions to knowledge that can be made under the following headings. **Section 9.5.1 and Section 9.5.2:** Grassroots collectives and urban design, development and change; **Section 9.5.3:** Contributions to eco-urbanism; **Section 9.5.4:** Social practice theory; and **Section 9.5.5:** Ethnographic methods in design research. These findings are summarised in **Section 9.5.6**.

Section 9.5.1 Grassroots collectives can practice a form of urban design that is vernacular and experiential.

The practices of grassroots collectives can be understood as a form of urban design in the sense that they utilise ideas and principles and apply them to create change within the city. Through social practices, assemblages are created that draw heterogeneous elements into interaction in ways that recast the experience of the existing built environment. The practices create new ways of inhabiting the city. Unlike the activity of most professional urban designers, who instigate change to the physical fabric of the city, grassroots collectives can create new experiential forms. Creating social practices and new assemblages represent more accessible ways for grassroots collectives to participate in urban design, a domain from which they may otherwise be excluded due to the financial constraints and regulatory processes involved in re-designing the physical fabric of the city. This approach to design may be seen as a type of vernacular which, in a similar way to vernacular architecture, works with local people and local materials, and draws on locally-based knowledge and expertise.

² Interview AS 1

Section 9.5.2 Grassroots urban design can play a role that is tactical and critical in processes of urban development and change.

The type of urban design practiced by grassroots collectives can function as a 'tactic' alongside the strategic master-planning work of professional practitioners. In this conceptualisation, strategic master-planning is planned and implemented from 'above' in a 'top-down' fashion and is concerned with the physical form and arrangement of the city. Grassroots collectives inhabit a pre-planned 'given' urban fabric and from the 'bottom-up' can critically re-consider how it is lived. From within a given urban environment, grassroots collectives can understand and experience problems and anomalies that designers may not have anticipated and may not see or experience. They can look at ways to subvert the intended uses and patterns of behaviour built into the physical form of the city and they can find additional ways to supplement the primary functions of space. An example of this is to see the boundaries of private space, such as gardens, not as immutable, but as negotiable through appropriate use of dialogue and trust. By taking a proactive and critical approach to how the city is lived, grassroots collectives can express demands that may not be codified in urban design principles, or that may not be captured in formal, often text-based, consultation exercises. Through practice, these demands are also demonstrated without the more confrontational approach of protest. Grassroots collectives can act relatively autonomously, and their actions reveal what can be achieved outside of formal policies and directives. By working collectively the sense of permission to act differently and to re-cast the city according to alternative principles is shared. It can be spread through social learning and social practices, and can generate a culture of alternative thinking and acting. As a form of 'critical' urbanism, grassroots groups can complement as well as generate creative tension with other approaches to urbanism.

A key question in this respect is whether the relationship between the tactics of grassroots collectives and the strategy of formal urban design practice could be better connected through feedback and learning. I suggest that ethnographic studies of how urban space is used and recast by different groups could enhance the understanding of professional practitioners in urban planning and design. Observing what people do to change their local environment is a way of understanding what is problematic and what could be done differently. A pattern of practices different to the norm, and which overcomes a specific local problem, can be seen as a statement of a 'critical' nature.

Section 9.5.3 Contributions to eco-urbanism.

In the design disciplines of architecture and urban design, eco-urbanism is often understood as relating to technology or building performance, the use of ecological materials, or the provision or enhancement of green and blue infrastructure. Questions of how those technologies, buildings, spaces and infrastructures are used and understood by people receive less attention.

Looking in detail at the principles and practices of the Abundance project enabled a conceptualisation of eco-urbanism (as well as what could be called an experiential ecological urban design practice) to be revealed. Participants adopted an eco-centric understanding of sustainability,

which translated, experientially, into an assemblage, or meshwork, of ecological relations made up of entanglements with living and non-living others. As urban practice, formulations like these engage participants in the ecology of the city in a particular way. People are bound into relationship with plants and others in ways that raise awareness of interdependency and allow understandings of mutual benefit to develop. Participants learn how to draw provisions from plants within the urban landscape whilst understanding and respecting a broader ecology. Whilst other approaches to ecological urban design can secure the provision of green infrastructure, this type of practice creates connection with it. It is a type of ecological urban design that cannot be applied through a single implementation, it is an experiential form of ecological urban design that must be continually lived and practiced to maintain the relevance and knowledge of the interrelations in local knowledge and expertise.

This research provides an account of an eco-centric approach to ecological urban design and suggests that provision-based approaches to ecological urban design could be usefully supplemented with experiential practice-based approaches that create connection with, and understanding of, the local ecology.

Section 9.5.4 Social practices and social learning: contributions to practice theory.

The collective nature of the fruit harvesting practices discussed in this study matters in the context of social learning and contributes to social practice theory.

Collective social practices share not only the alternative practices as ways of inhabiting the city differently but also the sense of permission and possibility to create change by doing so. This study shows how social practices distil ideas and principles into recognisable and repeatable acts that generate social learning and lead to alternative ways of inhabiting the city. The social learning in this case is not learning *about* the city, but learning a different way to inhabit it, and the agency lies with the whole assemblage of human and non-human elements. This learning contributes to material changes in how the city functions and how people relate within urban space.

Section 9.5.5 - Contributions to urban design research: the use of ethnographic methods.

This research adds to what is known about the use of ethnography as a method of investigation. It has shown that in-depth research can reveal insights into what people say they do, as well as what they actually do, and can bring understanding to the motivations behind action and the principles that inform it. It has shed light on the culture around urban harvesting practices and what people need to know to engage in it. These insights help to understand the role of the practice alongside other processes in urban development and change.

Research in architecture and urban design tends to begin with the building or the space, and inquire as to how it is used or how it performs. By taking an ethnographic approach through social practices this study reveals how a network of spaces (including private gardens, garages, sheds, homes and walkways) act together as part of a community effort in a way that was not envisaged by their

original designers. Access to this knowledge is possible through in-depth ethnographic enquiry that is open to the various ways that people, place and practice may be assembled in the city.

9.5.6 - Summary

This research has shed light on a grassroots project in a way that could inform other such projects, and from which broader assumptions could be made about the role of grassroots projects in existing urban areas.

In terms of governance, the Abundance case is indicative of what can be achieved when people who live in an area make change without there being a specific policy or 'top down' directive in place specifying that this should happen. This demonstrates that the thinking and ownership around sustainability and urbanism projects need not sit only with planners and urbanism professionals, but can emerge from and be held within the realm of what may be called the 'everyday', or done by 'ordinary' citizens. Although there is an understanding in academic literature of what the terms 'everyday' and 'ordinary' people refer to, these terms are not entirely unproblematic. As this research has shown, it is not just anybody who sets up a grassroots project, and it doesn't just happen. In the Abundance case there was significant involvement from artists and committed volunteers, as well as funding that helped to achieve the aims of the project. The locally-based and grassroots nature of the project may suggest that this type of project can be seen as a type of vernacular urban design, in that, like vernacular architecture, it is not practiced by formally-schooled urban designers, and is based on local needs, local materials, and reflects local knowledge and traditions. It may be fruitful, in future research, to explore this terminology further.

Further, in terms of design, the Abundance case demonstrates an approach to urban change that focuses entirely on social practices (and social learning) as opposed to changes to the built fabric. It demonstrates that sustainability projects do not have to be high-performing buildings or infrastructure, and that the given city can be repurposed without changing a single brick. It is a form of experiential urban design that repurposes the city by living it and learning it differently. This focus on lived experience as a form of urban change is replicable. It could be relatively easily adopted by other sustainability projects in existing urban areas. The role of a grassroots project in an existing urban area can be to envisage and share new practices that generate social learning and lead to changes in how people and environment relate.

This, I believe, makes a strong case for broader support for grassroots projects that work from the 'bottom up' in existing urban areas by working with existing patterns of people, places and practices. That this grassroots project has achieved what it has achieved with limited support and resources suggests a latent potentiality that could be unlocked by similar groups, and with additional support.

As leaders and coordinators of this type of action, artists and community organisers could be supported through funding and could be trained in socially engaged arts. One way of integrating this type of artistic activity with urbanism could be through public art, by extending the understanding of public art beyond sculpture and physical landscaping to work more extensively with and in communities of locality and interest. Masterplanning and formal urban design processes must accommodate a mix of accessible and flexible space for small-scale local activity, including a range of

open, private, and semi-private green space in which food could be grown with differing degrees of protection and accessibility.

9.6 Urban foraging: situating Abundance alongside recent literature

When this study began I found no published research on urban fruit harvesting as an organised practice in existing urban areas. Since then journal articles based on an ethnographic study of urban foraging in Seattle have been published (McLain, Hurley, Emery, & Poe, 2013; Poe, LeCompte, McLain, & Hurley, 2014; Poe, McLain, Emery, & Hurley, 2013). These came to my attention late in the analysis phase of my study. The work, based mostly in Seattle, brought to the subject of urban foraging the following perspectives: cultural belonging and identity; belonging and place; belonging and more-than-human agency; urban political ecology; urban forest justice; human-plant geographies. It looked at the implications for environmental management; public space planning; and sustainability.

Although the Seattle research was based mostly on individual activity, as opposed to the collective activity I studied in Sheffield, it was interesting to note that similar themes emerged in the two cases. There is scope for future work to explore these linkages in much more detail.

9.7 Observations and Limitations

In terms of methodology, I felt that an inductive approach and ethnographic fieldwork provided a good understanding of the intricacies of the Abundance project. They allowed a broad scope of study that made possible the understanding of Abundance as assemblage, whereas a study with a narrower focus may not have been able to see the broader picture. The depth and detail of fieldwork enabled subtleties to be explored, for example looking beyond the declared principles and philosophy to understand sustainability in a more situated sense of how the city is perceived and inhabited. However, the inductive ethnographic approach generated a large amount of material. In a bid to include a holistic understanding of the project I have perhaps sacrificed depth for breadth in reporting the findings. Future work could further focus the findings and elucidate more of the debates in particular areas. On the other hand, decisions about what to include demanded that a lot of material has had to be left out. There are countless stories that could be told about the Abundance project, the one I tell here is a necessarily selective account and directed towards the broader research interests of sustainability and the built environment.

The literature review is the subject of some controversy in inductive research, particularly in the grounded theory tradition that this study draws on. Making decisions about what literature to review when proved difficult, especially as I found no published studies on my particular chosen area of study whilst there is extensive literature on sustainability. Towards the end of my research I discovered studies on urban foraging based in Seattle. The studies are not based on an organised project but on foraging as a relatively informal activity. Nevertheless it was interesting to note that there were similarities in how the authors conceptualised urban foraging in Seattle, which I feel adds a level of verification to my findings.

This study was inductive and exploratory. Following the ethnographic tradition it draws extensively on empirical material to tell the story of the studied world. I draw widely on scholarship in a range of fields to illuminate particular aspects of what was found. Much of this scholarship was new to me and the scope of the study did not allow for as much theoretical development as I would have liked.

There were two main unexpected outcomes from the research. First, the specific role of fruit trees, or what was illuminated by taking fruit trees as a starting point into the data. I found it interesting to consider this non-human or '*more-than-human*' (Whatmore, 2006) element so centrally having taken an approach based on social practices. The social practice approach effectively illuminated a whole entanglement that constituted practice, which included *more-than-human* elements such as fruit trees, and pointed towards a more materialist reading of practice. A second unexpected finding was the role of socially engaged arts practice and how it related to collective community action. The discovery of both these themes, and the scope to develop them was made possible by a broad, exploratory, inductive research design.

However, related to the point above, and as a general observation about the literature review, I question, with hindsight, the extent to which I was able to meaningfully engage with literature at later stages of the project. The empirical material suggested many possible options for study and left many loose threads. The topics mentioned above, socially engaged arts and human-plant relations, were two areas I would like to have explored in the context of a more extensive literature review, as well as situating this research more firmly in the context of other collective sustainability practice and urban agriculture.

In terms of the fieldwork, 2012 was an exceptional year in terms of fruit yields. Weather patterns had been unfavourable for fruit, and crops were significantly lower than expected. This influenced the research in two main ways. First, it meant that the activity organised by Abundance was less intense than in previous and subsequent years. Lower yields meant fewer harvests, fewer deliveries and fewer produce-making sessions. However, participants confirmed that they had managed to do the full range of usual activities, albeit at a lower intensity, suggesting that the data should not reflect omissions in terms of typical activity. What 2012 did reveal was the acute awareness of participants to the disruptive weather patterns. Participants were acutely aware of the dramatic drop in fruit yields precisely because they had been visiting the same trees for several years and were familiar with their patterns. Through the sharing of information between participants across the city it was clear that the low yields were widespread and much more far-reaching than usual fluctuations in cropping. The attentive engagement with trees enabled a more informed knowing that could influence both perceptions of the current situation and action for the future. Although the attentive engagement with trees would likely be evident in any year, it was particularly stark in 2012 due to the atypical weather.

9.8 Concluding remarks

This study has provided a detailed and grounded account of how Abundance participants find, harvest, distribute, map, and celebrate surplus produce in the city. The activity blurs boundaries of what is considered urban, rural, nature, and private. It brings humans into closer connection with the biological life of the city, generating a greater sense of ecological sensitivity and connectedness.

As a learning assemblage, *Abundance* critiques aspects of conventional urbanism and draws together more ecological alternatives. Concepts from ecological psychology, sociology, anthropology and human geography have illuminated multiple ways in which alternatives are formulated, perceived, practiced and shared. Materialist concerns are shown to have relevant questions for sustainability and urban ecology.

This study, one of the first of its kind on urban foraging, highlights how socially engaged arts practice and collective action by urban inhabitants offer one model for activating change, improving well-being, re-imagining the use and stewardship of green space and extending urban agriculture. Such action could complement, or in some cases obviate, the need for architectural or physical urban design interventions in existing urban areas.

The opportunities and inspirations for future work are numerous and I have indicated particular themes throughout the thesis in the relevant sections.

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Appendix 1

Log of Interviews

<i>Interview number</i>	<i>Date</i>
AS 1	14.6.2012
AS 2	4.9.2012
AS 3	4.9.2012
AS 4	19.11.2012
AS 5	6.10.2012
AS 6	19.11.2012
AS 7	22.11.2012
AS 8	23.11.2012
AS 9	23.11.2012
AS 10	24.11.2012
AS 11	26.11.2012
AS 12	26.11.2012
AS 13	28.11.2012
AS 14	5.12.2012
AS 15	6.12.2012
AS 16	6.12.2012
AS 17	18.12.2012
AS 18	17.12.2012
AS 19	17.7.2014