Urban Agriculture: Established and Emerging Projects in Hull and Copenhagen.

Lucy Rose Wright

Submitted in accordance with the requirements for the degree Doctor of Philosophy in Human Geography.

School of Environmental Sciences
University of Hull

January 2019

Established and Emerging Projects in Hull and Copenhagen.

ABSTRACT

Communities and organisations are increasingly appropriating urban land for food production. Claims are made that urban agriculture (UA) projects "are reclaiming food production and consumption from the market" (McClintock 2014: 19), can address food insecurity issues (Badami & Ramankutty 2015, Irvine et al 2007) and contribute towards urban sustainability transitions (Colassanti et al 2016, Aerts et al 2016). However, little is known about how or why these projects emerge. Nor how different initiators experience the process of emergence and behave once the project *becomes* established.

To explore emergence from an outsider perspective, and to address calls for more European studies (Guitart et al 2012), UA projects and practices were identified and 'mapped' in Hull, UK and Copenhagen, Denmark. Interviews were conducted with forty-six project organisers representing different UA types. These included community gardens, guerrilla gardens, allotments, urban orchards and urban farms. To reflect who initiates UA a typology of project initiators was developed and used during the rest of the research; categories included *governmental organisations*, *non-governmental organisations*, *networks* and *independent groups*.

The research identified how project practices and initiator behaviours shaped how the process of project emergence was experienced. During emergence, organisers become experts within their communities and as a result their commitment to project 'action' and feelings of duty deepen. How organisers pursue project participation and economic security changes the purpose of the project. Multiple direction changes mean a project's aims no longer reflect the initial motivation of an organiser. The time period of emergence and complex expressions of ownership contribute to how the pursuit for funding and participation is experienced. The consequence is that UA projects remain in constant flux. Those projects that can persist and preserve a place in the foodscape (Johnston and Baumann 2010, Sonnino 2010) create opportunities in navigating flux.

ACKNOWLEDGEMENTS

It is my pleasure to thank those who made this thesis possible.

Firstly, my gratitude must go to the University of Hull's Graduate School for awarding me the academic scholarship to pursue this research.

A very special thank you goes to my PhD supervisor, the marvellous Dr Lewis Holloway. I could not have had better supervision. I would like to thank him for his exceptional guidance, 'persisting' patience and for always being willing to meet with me. I would like to thank Professor David Gibbs for his enthusiasm and invaluable comments on my work.

During this process, my supervisor the wonderful Professor Sally Eden sadly passed away. I am very grateful for the time I was able to spend with her. She was an inspirational woman. The topics of our meetings often deviated away from the research and instead she gave me life advice. I have and will continue to take her wise words onwards into my academic career.

I would like to acknowledge the staff of the School of Environmental Sciences for the opportunities to teach and assist with fieldwork. They have been some of the many highlights of my PhD journey.

I would also like to thank the people in Hull and Copenhagen who agreed to be part of this research. I express gratitude to them, not only for their participation, but also for their inspiring resilience and commitment to making a difference in their communities.

Further appreciation goes to my family, my parents Julie and David and my brother Robert. Without their enduring support through this process, this work would not have been possible. I am particularly thankful to my mum for listening to 'tricky' paragraphs read aloud over the phone, my dad for his frequent phone calls from the allotment to find out how 'it' was going and my brother for his moral support.

I would also like to thank my fellow PhD friends (Charlotte, Shona, Alex, Hull-Ross and Aberdeen-Ross), my new Northern friends and my old 'home' friends.

Thank	you,

Lucy

CONTENTS

1	INT	FRODUCTION	13
	1.1	Research Context	13
	1.2	Research Foci	16
	1.3	Aims and Objectives	18
	1.4	Structure	
2		TERATURE REVIEW	
_		Urban Sustainability	
		•	
		1.1 Sustainability	
	2.	1.3 Urban Sustainability Transitions and The Case of Best Practice	27
	2.2	Food Security	
		2.1 The Rise of Food Security Research	
		2.2 Measuring Food Security and Understanding the Impact	33 35
		3.1 Alternative Food Network Emergence and Claims	37
	2.3	3.3 The Consumer and Community in Alternative Food Network Research	38
	2.4	Urban Agriculture	41
		Defining Urban Agriculture and Understanding Activities	41
		Perspectives and Methods in Urban Agriculture Research	
		4.4 Multi-Scalar and Multi-Faceted Claims For Urban Agriculture	53
		4.5 Urban Agriculture Re-emergence and Organisation	56
		H.6 Barriers For Urban Agriculture Projects	58 60
3		THODOLOGY	
	3.1	Explanation of Approach	63
	3.2	Method 1: Comparative Urbanism; Hull and Copenhagen	
	3.0	2.1 Research Location Context	
		Method 2: Finding and Identifying Urban Agriculture Projects in Hull	
	Cope	enhagen	74
	3.3	Further Considerations For Finding and Identifying Projects	74
		3.2 First Phase; Desk-based Research For Hull and Copenhagen	75
		3.3 Second Phase; On The Ground in Hull and Copenhagen	76
	3.4	3.4 On The Ground in Copenhagen	/ C
		vities)	
		4.1 Mapping Considerations and Rationale	
		4.2 Data Collection Process For Mapping	
	3.5	Method 4: Case Study Projects in Hull and Copenhagen	
	3.5	J 1	
		5.2 Consideration and Criteria for Case Study Selection	
		5.3 Project Case Study Selection For Hull and Copenhagen	
		5.1 Method Consideration	
		5.2 The Interview Approach	

			Interviews Conducted	
			·	
		7.1 7.2	Experience Background	
		7.3	Identity	
		7.4	Ethics	
	3.8		alytical Framework	
	3 :	8.1	Transcript Codification	116
		8.2	Codifying Organiser Transcripts To A Project Narrative	
		8.3	Finding and Labelling Contextual 'Demographic' Data.	
		8.4	Demarcation of Project Names and Categorising UA Project 'Type'	
		8.5	Multi-level Theme Development and Code Definition	
		8.6	Introduction to Chapters; Presenting Data Themes	122
4	PE	OPL	E AND PRACTICE IN URBAN ĂGRICULTURE PROJECTS	125
	4.1	The	e UA Foodscape in Hull and Copenhagen	126
		1.1		
		1.1	Projects	
		1.3	People	
		1.4	Practice	
			nographies of Actors in Urban Agriculture Projects	
		2.1 2.2	Project Organisers and Nature of Involvement Organiser Motivations	
		2.3	Organiser Insight into Participants	
			Practice: Knowledge, Activities, Production and Distribution	
		3.1 3.2	Project Organiser Background and Knowledge Project Activities	149 155
		3.3	Produce Distribution	
5			MERGENCE OF URBAN AGRICULTURE PROJECTS	
	5.1	vv n	en UA Projects Emerged in Hull and Copenhagen	
		1.1	Approach 1: Project cases in start date order presented in the normative	
			ategorisation by UA project 'type'.	
		1.2	Approach 2: The addition of contextual data to each project case	
		1.3	Approach 3: Identification and layering based on typology	
	5.4	по	w UA Projects Emerged in Hull and Copenhagen	
		2.1	Emergence Forms	180
	5.3	Geo	ographies of Project Emergence: Decision Influences	186
6	MA	NIF	TESTATIONS OF PERSISTENCE IN URBAN AGRICULTURE	
ΡĮ	ROH	ЕСТ	S	197
	0.1	Pro	ject Identity; Aims and Discourses	
		1.1	The Scope and Negotiation of Urban Agriculture Project Aims	199
		1.2	'Urban Agriculture' As Described By Organisers	207
			'Sustainability' As Described By Organisers	
	0.2	Urg	ganiser Commitment to Action and Recognition	
		2.1	Action	
	6	2.2	Recognition	
			naging Involvement and Faclings of Duty	222
	6.3	Ma	naging Involvement and Feelings of Duty	222
			king Economic Security	
	6.3 6.4	See	king Economic Security	226
	6.3 6.4 6.4	See 4.1	king Economic Security Funding Status and Experience	226 227
	6.3 6.4 6.4	See 4.1 4.2	king Economic Security	

_	6.4.4	Strategies in Seeking FundingFESTATIONS OF EPHEMERALITY IN URBAN AGRICULT	235
7	MANII	FESTATIONS OF EPHEMERALITY IN URBAN AGRICULT	URE
P	ROJECT	'S	241
	7.1 Or	ganiser Sense of Ownership	242
	7.1.1 7.1.2	Ownership as inherent and complex Ownership requires protection	245
	7.1.3 7.1.4 7.2 E	Ownership is subject to internal testing Ownership; a producer of 'uncertainty' and 'opportunity'veryday' Barriers For Urban Agriculture Projects	248
	7.2.1 7.2.2 7.2.3	Time Period of Emergence. Risk Perception and Risk Management	255
		Anti-social Behaviour	
	7.3.1	Rationale For Seeking Participants	261
	7.3.2 7.3.3 7.3.4	Variation in Satisfaction Levels with Participant Numbers	266
8	7.3.5	Challenges with Participants. LUSION	271
	8.1 Me	thodological Development	284
	8.1.1 8.1.2	Transferability Issues	
		UA Projects and Comparative Urbanismnclusions from Chapter 4: People and Practice in Urban Agricu	
	Projects		291
	8.2.1 8.2.2 8.2.3	Who is involved UA project emergence?	291 293 295
	298		J
	8.3.2	When projects emerged?	298
	Epheme	rality in Urban Agriculture Projects	301
	8.4.1	What behaviours and practices are shaping the emergence process?	?301

LIST OF FIGURES

Figure 1 Diagram showing the relationship between the literature themes reviewed21
Figure 2 Summary of the research phases, timeframe of implementation and location within the methodology chapter
Figure 3 Top, Kingston Upon Hull location in relation the Humber Estuary and the North Sea. Bottom, Copenhagen location in relation to the Baltic Sea69
Figure 4 'Avenue Community Noticeboard' at the entrance of park in Hull77
Figure 5 Part 1 of 2: Schematic of mapping process. Part 1 shows the hierarchical relationship between the broader foodscape and an individual project
Figure 6 Example of schematic mapping process in use. The project used is the Urban Community Orchard
Figure 7 Visual representation of the relationship between organisers being interviewed and the preceding method phases
Figure 8 Example of Interview Guide
Figure 9 Mindmap of data supplied by organisers during the interview process105
Figure 10 Examples of the headings used in first level analysis codes for contextual data
Figure 11 The four different data types accounted for in the process of demarcation for the forty project case names
Figure 12 Images of multi-level theme development
Figure 13 Outline of data chapters and which chapter fulfils specific research objectives.
Figure 14 The 'people' of UA, distinguishing between project organisers and project participants
Figure 15 Organiser involvement in activities alongside UA work
Figure 16 Planters outside the Adult Centre Community Garden152
Figure 17 Allotment Association Community Garden developed at the entrance to an allotment site
Figure 18 Information sheet produced by Urban Orchard showing the varieties of apple grown, harvest time, when the apple should be eaten by and type of apple (culinary, desert or cider).

Chapter 1: Introduction

categorisation using only UA project 'type'
Figure 20 Approach 2: The addition of contextual data to each project case173
Figure 21 Approach 3: Identification and layering based on organisation structure of each project within the pre-determined typology
Figure 22 An emerging community garden initiated by an NGO Housing Trust176
Figure 23 Matrix of processes and factors in UA project emergence
Figure 24 Plans for a Permaculture Community Allotment Garden used for resident consultation (provided with permission from an organiser)
Figure 25 A sample of maps drawn by Hull project organisers during semi-structured interviews. They show the spaces the organisers engage in geographically in Hull and project 'reach'
Figure 26 Images of the Youth Centre Community Garden taken by project participants.
Figure 27 Images of the Therapeutic Community Garden including planters growing vegetables
Figure 28 Rooftop Community Garden on top of the Shopping Centre220
Figure 29 Planters outside a Sports Club in Hull
Figure 30 Images taken at an Urban Community Orchard. <i>Left</i> Handwritten details documenting the different apple species on the wall of the shipping container. <i>Right</i> A project participant collects apples using a tennis ball gadget
Figure 31 Demonstration kitchen garden at Wildlife Community Garden245
Figure 32 Growing beds at an Organic Rooftop Farm in Copenhagen251
Figure 33 Evaluation by organiser on the impact that project participation has had on an individual
Figure 34 <i>Left:</i> Leaflet produced by a Therapeutic Community Garden <i>Right:</i> A leaflet created by an Organic Rooftop Farm and distributed to attendees at the Conference on Urban Farming. The envelope contains kale seeds
Figure 35 The entrance to the 'World' Playground Community Garden277
Figure 36 Aim features from the structural groups initiating UA projects295
Figure 37 Identification of Persisting and Ephemeral Project Qualities301

LIST OF TABLES

Table 1 Outline of research gaps identified in the review of Urban Sustainability literature
Table 2 Outline of research gaps identified in the review of Food Security literature22
Table 3 Outline of research gaps identified in the review of Alternative Food Network literature.
Table 4 Outline of research gaps identified in the review of Urban Agriculture literature
Table 5 Comparison of key indicators – OECD average, UK and Denmark. * From the wellbeing index by the OECD 2016 (excluding homicide rate)72
Table 6 Description of four data characteristics identified to map UA practice85
Table 7 Selected case studies in Hull based on considerations identified in UA in 3.3 Finding and Identifying UA Projects
Table 8 Selected case studies in Copenhagen based on considerations identified in UA in 3.3 Finding and Identifying UA Projects
Table 9 a . Overview of the number of projects in each location. b . Number of interviews conducted in each location and in relation to total number of interviews conducted.
Table 10 Outline of all forty projects used in this study including data on UA type, structural group who initiated project, whether the project was emerging or established and how many organisers were interviewed as part of that project117
Table 11 Considerations for developing a typology of the forty UA projects studied. 128
Table 12 Comparison of food production and consumption related activities and non-food production activities
Table 13 UA activities completed on and off-site. Activities categorised by target group children, adults and more general events
Table 14 Food grown on UA project sites in Hull and Copenhagen as categorised by organisers into 'vegetables', 'fruit' and 'herbs'
Table 15 Summary of research findings from the chapter and implications of findings. Implications identify the relevant stakeholder of the finding and makes recommendations
Table 16 Place-based rationales that led individuals and groups to initiate UA projects.

Chapter 1: Introduction

Table 17 Interest-based rationales that led individuals and groups to initiate UA
projects
Table 18 Summary of research findings from the chapter and implications of findings.
Implications identify the relevant stakeholder of the finding and makes
recommendations. 195
Table 19 Summary of research findings from the chapter and implications of findings.
Implications identify the relevant stakeholder of the finding and makes
recommendations. 240
Table 20 Summary of research findings from the chapter and implications of findings.
Implications identify the relevant stakeholder of the finding and makes
recommendations

LIST OF CAMEOS

Chapter 4 - People and Practice in Urban Agriculture Projects.

- 1 Health Centre Therapeutic Community Garden HO1 p134
- 2 Academy School Community Garden HO15 p135
- 3 Permaculture Community Garden CO22 p136
- 4 Adult Centre Community Garden HO5 p147
- 5 East Hull Traditional Allotment HO10 p150

Chapter 5 - The Emergence of Urban Agriculture Projects.

- 6 Housing Trust Community Garden HO17, HO18 p169
- 7 Residential allotment HO12 p170
- 8 Guerrilla Gardeners Network HO46 p171
- 9 Children's Planters Community Garden HO21 p171
- 10 Permaculture Community Allotment Garden HO27 p175
- 11 Permaculture Community Garden HO23 p180

Chapter 6 - Manifestations of Persistence in Urban Agriculture Projects.

- 12 Youth Centre Community Garden HO3, HO4 p193
- 13 Local Food Network HO9, HO42, HO44 p196
- Mobile Container City Farm HO31, HO32 p201
- 15 City Farm HO33 p204
- 16 Therapeutic Community Garden HO19, HO20 p207
- 17 Commercial-Run Rooftop Community Garden HO40 p210
- 18 Sports Club Community Garden HO26 p220
- 19 Urban Community Orchard HO35, HO36, HO37, HO38 p224

Chapter 7 - Manifestations of Ephemerality in Urban Agriculture Projects.

- 20 Wildlife Charitable Trust Wildlife Community Garden HO13 p234
- 21 Organic Rooftop City Farm CO28, CO29, CO30 p240
- 22 Children's Centre Community Garden HO9 p243
- 23 Community Change Network HO43 p248
- 24 Black and Minority Ethnic Community Garden HO24 p252
- 25 'World' Children's Centre Playground Community Garden CO6, CO7 p264

1 Introduction

1.1 Research Context

The term 'urban agriculture' is commonly accepted to refer to the growing of edible produce in and around cities (CFSC 2003: 3). There is evidence of urban agriculture in the cities of both the Global North and South. This study focuses on the re-emergence of UA (Dimitri et al 2016, Ackerman et al 2014, Marsden & Martin 1999) in two European cities, Kingston upon Hull (known as Hull) in the UK and Copenhagen in Denmark. From this point onwards, urban agriculture will be abbreviated to UA to improve readability. UA can refer to multiple practices in which food is grown in and around the city. This study looks specifically at food grown on publicly accessible urban green space rather than in the home or garden. These sites include community gardens, allotments, urban farms and orchards. The phrase 'UA projects' is used to reflect the planned nature of these sites by an individual, group of individuals or an organisation. To be included in this study a UA project must feature the provision of space to produce food within their aims and have voluntary participation on the site.

Existing research (Milbourne 2012, Firth et al 2011, Mount & Andrée 2013) has begun to acknowledge that different groups such as governmental, non-governmental, network and grassroot organisations are involved in the emergence of UA projects. However, research is yet to explore how these different project initiators experience the process of emergence and how they behave once the project is established.

Therefore, this research explores the emergence of UA. The research will be grounded in the experiences of the different groups who have initiated projects. The research will explore how project practices and initiator behaviours relate to the process of emergence.

When I started this longitudinal study in 2014 UA was a specialised term, known and used only by those practicing or researching food production in cities. Between then and completion of the research, the practice has been popularised and the term has become generally understood by the urban public of European cities (Koopmans et al 2017a, Lohrberg et al 2015, Tornaghi 2014). The observed rise in popularity of UA whilst I have been researching it has added to the importance of this study. The increase in UA popularity has occurred on the ground and as a field of study. This makes this study particularly timely because of pressing food security questions (Carolan 2013, Lang 2009, Tomlinson 2007). Questions are being raised concerning how urban populations

will be fed and whether this can be achieved sustainably. Food increasingly holds relevance to the urban realm alongside its established rural significance. City populations are no longer only consumers of food produced in rural spaces, but at least some have become food producers in their own right. Urban communities and organisations have developed UA projects to respond to food insecurity (Badami & Ramankutty 2014). The global economic crisis of 2008 resulted in food price surges and land use conflicts. This proliferated feelings of food insecurity by individuals in the city. This led many individuals, groups and organisations to engage in the emergence of UA (Poulsen et al 2015, Firth et al 2011, Armstrong 2000). The timeliness of this study is evident in its ability to capture the increasing numbers of UA projects emerging and how the form that projects take has diversified. As a result, UA is changing the food system on the ground. Existing literature has also hypothesised the transformative potential that UA can have. This is discussed further in Chapter 2, Literature Review. In brief, academics claim that UA has problem-solving qualities for transitions towards urban sustainability (2.1) and addressing food system insecurities (2.2). Additionally, academics have claimed that UA projects have broader promise beyond sustenance provision. This potential lies at the core of why UA matters. Existing research has begun to evidence how UA projects have social, cultural, environmental, political and economic functions for urban communities (Beilin & Hunter 2011). Here, I will briefly outline some of these claims.

UA projects in part provide sustenance for urban communities by growing fresh produce. Projects create new food networks in which urban communities can access food production in unconventional ways (discussed in Literature Review, Section 2.4, Alternative Food Networks). More importantly UA has been identified as providing a focal point for communities to come together around a set of shared practices and experiences in the pursuit of a common goal (Glover et al 2008, Pudup 2008). It has been claimed that UA projects build social capital through unique relationships and are becoming a mechanism for community development (Firth et al 2011, Twiss et al 2003, Schukoske 1999). UA projects are becoming spaces of social cohesion for people from a variety of backgrounds, age, race and class to connect (Armstrong 2000, Balmer et al 2005, Saldivar-Tanaka & Krasny 2004). The sites are used by organisers to educate themselves and their wider communities about where food comes from and provide the resources for them to do so (Kingsley & Townsend 2007). These resources are both physical, such as seeds and access to tools and intangible, such as the development of community skillsets and the confidence to apply these newly acquired skills (Saldivar-Tanaka & Krasny 2004).

Claims are made that involvement in UA can improve physical and mental health and wellbeing (Horst 2017, Alaimo et al 2008, Turner 2011, Guitart et al 2013). UA projects

within and across cities are sharing knowledge and people are developing practical skills. UA project groups are organising themselves (Stroink and Nelson 2013). UA groups are forming connections with wider city-based activities including cooking, conservation, heritage, arts, crafts and music as examples (Lohrberg et al 2015).

Economically as a result of UA projects, some urban communities consume more nutritious food (McCormack et al 2010), which has reduced food miles and greenhouse gas emissions. UA projects can increase popularity of an area and in some cases housing value (McClintock 2017). There are financial savings for local authorities that no longer have to maintain land and in some instances, there is evidence of effective crime reduction where a site's use has been changed to UA (Saldivar-Tanaka & Krasny 2004, Nordhal 2009).

In terms of the environment, some argue that UA projects promote biodiversity and conservation in cities (Middle et al 2014). UA prevents land being built upon which in turn reduces urban population density. Additionally, providing urban communities with green space that they may not have access to due to current high levels of population density and high-rise living arrangements (Mok et al 2014).

Until now it has been typical of researchers to attempt to substantiate claims by exploring one type of UA project such as community gardens or urban farms (Martin et al 2014, Corrigan 2011, Crane et al 2013, Armstrong 2000). Additionally, studies have focused on examples of projects that are already 'established'. To clarify, an established UA project has a site, is open to the community and produces food as one of the project's activities. Academics have favoured exploration of UA projects that are innovative, provide an example of best practice (Nelson et al 2012, Irvine et al 2007) or have experienced a context specific crisis (Smith & Kurtz 2004). This study will consider together projects which are long-established alongside projects in an 'emerging' phase. In addition, the study will explore projects that have innovative features alongside the more 'everyday' experiences of how UA is practiced. To some academics these 'everyday' projects that make up the majority of active projects would seem too mundane and as a result would not be considered research-worthy because they exist beneath academic notice.

The following section (1.2) begins to unpick how this study explores the research question: what are the factors enabling or hindering UA project emergence by different groups? The section summarises the key features of this research with the following section (1.3), formally outlining the research aims and objectives. The final section of the introduction (1.4) outlines the structure of the thesis.

1.2 Research Foci

The following list summarises the key research foci for this study. The list also demonstrates how this study is original and addresses gaps in current UA literature.

UA types and stages of development.

The study brings together different types of UA project found to be active in European cities and includes new forms of documented UA 'types'. UA project types included in this study are community gardens, urban farms, urban orchards, traditional and residential allotments. The study also explores national and local networks that are involved in UA projects, including networks of guerrilla gardeners. Furthermore, I recognise that different kinds of groups run UA projects and demonstrate that this affects how UA is experienced by those involved. The groups identified and used in this study to categorise projects are: non-governmental organisations (NGOs), governmental organisations (GOs), independent groups and national and local networks.

The thesis will show the value and richness of a study which draws on the experience of UA projects at all stages of development. The thesis captures and develops insight into newly 'emerging' projects alongside those which have 'established' and embedded within a city's foodscape. This draws on the idea of Ballamingie and Walker who describe food projects as "continually in the process of becoming" (2013: 540).

Foodscape is an accepted term within the field (Sonnino 2010, Goodman 2010) to describe the "dynamic social construction that relates food to specific places, people and meanings" (Johnston and Baumann 2014: 3). The adoption of a foodscape approach has been commended for providing a "valuable lens" in food studies (Yasmeen in Mikkelson 2011: 215). Yasmeen suggests benefits can be drawn in studies of food systems, which seek to understand spatial relationships (Yasmeen 2006).

Factors enabling and hindering project emergence and persistence.

This study will look at how a project comes to exist by discussing the factors and processes at play. The thesis explains the characteristics of projects that are enabling and hindering their ability to persist in the foodscape of a city. The research explores how the characteristics of projects, which manifest as a hindrance are contributing to a transient experience of UA by the people involved. I will show how in this experience of 'flux', some projects close, but in other cases the people involved in UA projects are able to create unexpected opportunities and develop resilience as a project.

• The experience of project organisers.

I have categorised the people involved in UA projects into two groups; organisers and participants. The two are differentiated by their role in UA projects. Organisers make decisions about their project and have more responsibility in its everyday running.

Participants attend the activities of an UA project as decided and facilitated by the organiser. This study is grounded in the experience of the people who have started an UA project or have become the 'organiser' of an established project on a voluntary basis or through employment. The reason for this is that the 'organisers' of projects are neglected within UA research, with participants favoured as being more researchworthy. The reason for this has been the race to evidence the potential impact of participation in UA as described above.

By grounding the study in the experience of organisers this study supports existing literature findings that a project's financial insecurity is a major challenge to the ability of an organiser (or organisers) to keep a project established. However, I will argue that project participation is an equally significant challenge for organisers. The challenge has been downplayed because of the complex relationship that exists between funding and participants. I will explore how organisers described a fragmentary experience of participation as both a symptom and producer of financial insecurity.

Researcher Perspective

I address, in this thesis, a research need for contrasting perspectives in the study of UA. Current research has primarily been conducted from an insider perspective with the researcher having pre-existing knowledge of, and/or experience in, an UA project (Blay-Palmer et al 2013, Angotti 2015 and Tornaghi & Van Dyck 2015). I will show that by adopting the atypical perspective of an 'outsider' there is value in the rich and critical data that this produces. To clarify, an outsider perspective means I have no previous experience of running or participating in an UA project.

I will present evidence of the UA organiser experience in two European cities, Hull and Copenhagen. The primary reasons for this are twofold. The first is that the research addresses calls within the literature to broaden where UA is studied as well as to conduct whole city studies to understand UA re-emergence (Nelson et al 2013, Taylor & Lovell 2012 & Smith et al 2013).

Much of the current literature is focused on the UA experience in North America and Canada, with the exception of UK studies by Milbourne (2011) and Tompkins (2014). The choice of the UK and Denmark reflects calls for comparative European studies of UA (Guitart et al 2012). Statistically they both share many similarities and have a long-standing emergence of UA projects in the form of allotments from which other types of UA have emerged. Scoping trips were conducted in many locations which confirmed their suitability as comparative locations.

In terms of my 'position' on UA, as the research question developed my perspective of UA in Hull moved from outsider to having insight. I was then able to bring this unique changing perspective to inform my understanding of the UA experience in Copenhagen.

This enabled me to identify whether context was influencing the factors enabling or hindering the project experience in each location. I could tease out the nuances of how this happened in practice on the ground. Through the process of comparison, I could inform my understanding of UA in each location by observing how factors were experienced similarly or differently.

To summarise, I have introduced the topic of study, opened the research question and explored the key features of this research. To explore UA and answer the research question a number of formalised aims and objectives have been developed.

1.3 Aims and Objectives

This study explores UA. The research aims to:

- examine the range of different types of activities included under the UA label, including community gardens, city farms, guerrilla gardens and allotments. It will focus on the "everyday spaces" in which projects operate (Milbourne 2012: 943) and includes conventional examples of UA alongside more idiosyncratic and innovative projects (Nelson et al 2013).
- 2. investigate both established and emerging UA projects. 'Established' refers broadly to a project that has a site, is producing food and has participants attending activities offered by the project. 'Emerging' refers to projects that are in a planning phase or are starting to become established.
- 3. explore UA projects from the perspectives of their organisers. The literature has begun to unpick the different roles present in UA projects and this study intends to add to this growing work (Glover et al 2005, McClintock 2014, Armstrong 2000).
- 4. compare UA in two cities. The adoption of comparative case studies will facilitate greater understanding of the phenomenon in each location. This addresses calls for European perspectives in the field (Guitart et al 2012).

To address and fulfil the research aims, specific objectives have been developed. The research will:

i. examine who initiates and participates in UA and why. This examination will include the development of a 'structural grouping' typology, based on the range of groups creating UA projects. These groups "often blur the lines between governmental, public, non-profit, cooperative, multi-stakeholder and private" organisations (Mount & Andrée 2013: 578). This objective will assist in fulfilling research Aim 1 (range of activities), 2 (established and emerging projects) and 3

(project organiser perspective).

- ii. focus on exploring the identities of project organisers. This objective will assist in fulfilling research Aim 3 (project organiser perspective).
- iii. investigate how UA projects emerge in two cities, Hull in the U.K. and Copenhagen in Denmark. This objective will assist in fulfilling all of the research aims with a particular focus on research Aim 2 (established and emerging projects) and Aim 4 (comparative case studies).
- iv. investigate the factors that are enabling or hindering the development of both established and emerging projects in both cities. This objective will assist in fulfilling Aim 2 (established and emerging projects), Aim 3 (organiser perspective) and Aim 4 (comparative case studies).
- v. investigate the longer-term emergence of UA projects by adopting a longitudinal approach. This objective will assist in fulfilling research Aims 1 (range of activities), 2 (established and emerging projects) and 3 (project organiser perspective).

1.4 Structure

The structure of the thesis is as follows. The next chapter is the *Literature Review*. The chapter reviews literature relevant to the field of UA. The chapter takes the reader from the broader, more general global challenges *Urban Sustainability* (2.1) and *Food Security* (2.2) to challenge responses, *Alternative Food Networks* (2.3) and the specific subject of this research, *Urban Agriculture* (2.4).

Chapter 3, the *Methodology* explains the research design implemented to fulfil the research objectives. The structure of the chapter chronologically mirrors the order in which the method was implemented, with specific methods running concurrently throughout the duration of the research. The first section describes rationales for the qualitative approach.

There are five main phases to the method, Method 1: Comparative Urbanism; Hull and Copenhagen (3.2), Method 2: Finding and Identifying UA projects in Hull and Copenhagen (3.3), Method 3: Mapping UA Practice (Projects, People and Activities) (3.4), Method 4: Case Study Projects in Hull and Copenhagen (3.5) and Method 5: Interviews with Organisers in Hull and Copenhagen (3.6). Following the method phase section 3.7 explores positionality and ethics. The final section explains the Analytical Framework (3.8) used to make sense of the data collected. The methodology chapter is

comprehensive to address UA study transferability issues identified in the literature review.

There are four data chapters which present the findings of this study. The first data Chapter, 4 is contextual providing background data collected on UA projects, *People and Practice in Urban Agriculture Projects*. The chapter provides new insights into who participates in UA and why and adds to debates on the practices of UA projects.

Following this Chapter 5 explores *The Emergence of Urban Agriculture Projects*. This chapter discusses how UA projects emerge in the foodscape by identifying the processes different initiators go through in seeking to make a UA project visible and active.

Together Chapters 6, Manifestations of Persistence in Urban Agriculture Projects and 7, Manifestations of Ephemerality in Urban Agriculture Projects identifies organiser behaviours and project practices that relate to an UA project's process of 'becoming' established.

Chapter 8, the *Conclusion* explains which chapters addressed which research aims and how. Further to this the conclusion describes my contributions to the study of UA.

2 LITERATURE REVIEW

Introduction

The literature fields, which relate specifically to the proposed research, are rapidly evolving. The literature areas reviewed include *Urban Sustainability* (2.1), *Food Security* (2.2), *Alternative Food Networks* (2.3) and *Urban Agriculture* (2.4). The literature review structure seeks to take the reader from the broader, more general global challenges towards the specific subject of this research, urban agriculture. Nevertheless, none of these literature themes are mutually exclusive and this approach aims to provide context for exploration in the subsequent chapters. The review identifies conceptual research gaps by identifying where each field requires further study.

The decision was taken to consider both very broad and specific fields of study because of the interesting relationship between the broader fields and the specifics of UA literature Figure 1 visually represents this relationship. Urban sustainability is considered a global challenge and food security is a substantial barrier to alleviating this challenge. At the same time scholars are observing responses to these challenges, these being alternative food networks and urban agriculture.

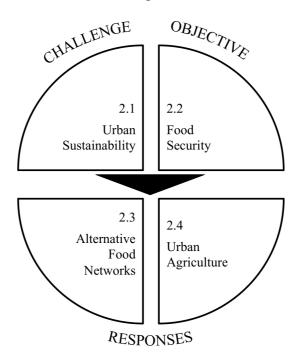


Figure 1 Diagram showing the relationship between the literature themes reviewed. The first section considers *Urban Sustainability*, reviewing a contextual macro-level theme (Figure 1). It primarily focuses on understanding the topic and both the

opportunities raised and challenges posed for urban sustainability as central to the literature debates. This situates the subsequent section on food security into the urban sustainability landscape.

Litera	ture Review Section	Conceptual Gaps Identified
2.1	Urban Sustainability	 Identification of the complexities and independencies between social, environmental and economic sustainability. To be aware of and contribute to changing definitions.
2.1.1	Sustainability	 Explore how growing urbanised populations can be fed sustainably. To analyse both national and local government caution in pursuing a sustainability agenda. To improve research dissemination on sustainability research. Further exploration of urban social inequalities, urban form and spatial development is needed with regard to sustainability.
2.1.2	The 'Urban' in Sustainability	 More research into why transitions occur in one place and not another Greater understanding of the place-specific contextual factors that underpin successful urban sustainability transitions is needed.
2.1.3	Urban Sustainability Transitions and The Case of Best Practice	 Conduct research that conceptualises cities through comparison. Further dissemination of best practice examples necessary. Research that explores community resilience specifically because it has been established as indicator of social sustainability. Recognition of change triggers where 'successful' transitions have occurred.

Table 1 Outline of research gaps identified in the review of Urban Sustainability literature.

The *Food Security* section itself attempts to briefly examine a large and constantly shifting body of work. The review focuses on key terms, the topic's rising popularity and debates that are most relevant to this study. Food security is a relevant review for this study because it is claimed within UA research that growing food in cities through urban agriculture projects has the potential alleviate food insecurity challenges (Table 2).

Litera	ture Review Section	Conceptual Gaps Identified
2.2	Food Security	 Exploration of food security objective as well as a challenge. Research which focuses on how food systems inherently interact with and shape space and place at the same time. Research on the specific themes of food availability and affordability.
2.2.1	The Rise of Food Security Research	 Understanding of the context specific issues of food insecurity. Analysis of how public food provisioning occurs. Conduct comparative food security studies. Explore land conflicts and rapid urbanisation in food security. Explore the relationship between people, land and health with regard to current and future food provision.
2.2.2	Measuring Food Security and Understanding the Impact	 Conduct studies that explore how food security is observed on the ground and can be measured. Present examples of food insecurity intervention stories. Greater understanding of food intervention outputs and of the processes at play when intervention occurs.

Table 2 Outline of research gaps identified in the review of Food Security literature.

This is followed by *Alternative Food Networks* (Table 3). This section and the following on *Urban Agriculture* are best understood as emerging literature fields reflecting the study of responses to urban sustainability challenges and food insecurity.

Reviewing AFN research is important to this study because such networks are how the produce grown by UA projects is distributed to improve food security.

Literat	ture Review Section	Conceptual Gaps Identified
2.3	Alternative Food Networks	 Further exploration of the connections that exist in and between networks. Research that seeks to understand the alternativeness of different AFNs. More idea crossovers from different perspectives for future studies.
2.3.1	Alternative Food Network Emergence and Claims	 Investigations into how embedded AFNs are within their locality. Exploration of AFNs in locations considered 'food deserts'. Consideration of the 'new' shortening connections in producer-consumer relationships. Conduct studies on the intersection of the AFN being embedded or 'disembedded'.
2.3.2	Issues In Alternative Food Network Research	 Explore the nuances of the inclusive and/or exclusive nature of AFNs. Present positive outcomes alongside the challenges of localised systems.
2.3.3	The Consumer and Community in Alternative Food Network Research	 The consumer-community relationship is currently underrepresented in research. Studies required on the people who are part of AFNs. Future research into the context surrounding AFN practices and producers. More clarity of the methods used to identify AFNs.

Table 3 Outline of research gaps identified in the review of Alternative Food Network literature.

The final and most substantial review is conducted on *Urban Agriculture*. An in depth review of current UA literature is necessary because it is the primary focus of this study. The field in its current infant form is a reflection of renewed interest in the topic as it has been identified that UA is experiencing a re-emergence. Table 4 outlines the research gaps which currently exist in current studies. The final column of the table signposts to where work has been completed within this study which develops our understanding in relation to each research gap.

Litera	Literature Review Section	Conceptual Gaps Identified	Signposting to which gaps are addressed and where (C=Chapter).
2.4	Urban Agriculture	 Exploration of the complexities of UA practices. Investigate the shifts of nature and scale in UA practices. 	C4 People and Practice in Urban Agriculture Projects 4.3 In Practice: Knowledge, Activities, Production and Distribution.
2.4.1	Defining Urban Agriculture and	 Acknowledge that UA terminology is changing as practice is changing. 	C6 Manifestations of Persistence in Urban Agriculture Projects 6.1.2 'Urban Agriculture' As Described By Organisers.
	Understanding Activities	 A need for critical evidence-focused studies on the emergence of UA and this impacts established UA claim works. 	C1 Introduction 1.3 Aims and Objectives - v. investigate the longer-term emergence of UA projects by adopting a longitudinal approach.
		■ Work needed to visualise the networks of UA practice.	C3 Methodology 3.4 Method 3: Mapping Urban Agriculture Practice (Projects, People and Activities).
		 Clarification of the criteria used to identify and label a practice as UA. 	C4 People and Practice in Urban Agriculture Projects This study develops a 'structural grouping' typology, based on the range of groups creating UA projects.
		 Investigation of these specific themes identified in UA projects: ownership, management and connections. 	Ownership: C7 Manifestations of Ephemerality in Urban Agriculture Projects 7.1 Organiser Sense of Ownership Management: C4 People and Practice in Urban Agriculture Projects This study develops a 'structural grouping' typology, based on the range of groups creating UA projects.
			Connections: 6 Manifestations of Persistence in Urban Agriculture Projects 6.1 Project Identity; Aims and Discourses
		 Explore the barriers to the development of urban farms. 	C1 Introduction 1.3 Aims and Objectives - iv. investigate the factors that are enabling or hindering the development of both established and emerging projects in both cities
		 Investigation of the nuances of different UA practices particularly with regard to guerrilla gardens and guerrilla gardening. 	C4 People and Practice in Urban Agriculture Projects 4.3.2 Project Activities
2.4.2	Perspectives and Methods in Urban	 Diversification of the locations where UA is studied. 	C1 Introduction 1.3 Aims and Objectives - iii. investigate how UA projects emerge in two cities.
	Agriculture Research	 The field is open to studies that focus on one type of UA as well as studies seeking to understand multiple UA practices operating in the same location. 	C1 Introduction 1.3 Aims and Objectives - iii. investigate how UA projects emerge in two cities.
		 A balance of insider and outsider perspectives is needed. The field also welcomes deeper understandings of the ethical implications of insider perspectives on the study of UA. 	C3 Methodology 3.7 Positionality
		 Work towards the development of typologies remains needed. 	C4 People and Practice in Urban Agriculture Projects This study develops a 'structural grouping' typology, based on the range of groups creating UA projects.
		 UA researchers should provide more clarity in terms of methods and sampling of practices. 	C3 Methodology 3.3 Method 2: Finding and Identifying Urban Agriculture Projects in Hull and Copenhagen
2.4.3	Motivations, Roles and Stakeholders in	 Leaders of UA projects and their roles are currently inadequately addressed. 	C1 Introduction 1.3 Aims and Objectives - i. examine who initiates and participates in UA and why.
	Urban Agriculture Projects	 Further research is necessary that explores project initiators and new non-professional food roles. 	C1 Introduction 1.3 Aims and Objectives - ii. focus on exploring the identities of project organisers.
		 Understand local conditions of the city where UA is studied. Set within wider urban sustainability transitions. 	C1 Introduction 1.3 Aims and Objectives - iii. investigate how UA projects emerge in two cities.
		 Explore social claims for projects at different development phases. 	C1 Introduction 1.3 Aims and Objectives - Aim 2 - investigate both established and emerging UA projects.

	C1 Introduction 1.3 Aims and Objectives - v. investigate the longer-term emergence of UA projects by adopting a longitudinal approach.	C6 Manifestations of Persistence in Urban Agriculture Projects 6.2 Organiser Commitment to Action and Recognition	C5 The Emergence of Urban Agriculture Projects. 5.2 How UA Projects Emerged in Hull and Copenhagen	C5 The Emergence of Urban Agriculture Projects. 5.2 How UA Projects Emerged in Hull and Copenhagen	C3 Methodology 3.7 Positionality	C5 The Emergence of Urban Agriculture Projects.		C1 Introduction 1.3 Aims and Objectives - iv. investigate the factors that are enabling or hindering the development of both established and emerging projects in both cities.	C1 Introduction 1.3 Aims and Objectives - iv. investigate the factors that are enabling or hindering the development of both established and emerging projects in both cities.	C7 Manifestations of Ephemerality in Urban Agriculture Projects	C6 Manifestations of Persistence in Urban Agriculture Projects and C7 Manifestations of Ephemerality in Urban Agriculture Projects	C1 Introduction 1.3 Aims and Objectives - ii. focus on exploring the identities of project organisers.	C6 Manifestations of Persistence in Urban Agriculture Projects and C7 Manifestations of Ephemerality in Urban Agriculture Projects	C4 People and Practice in Urban Agriculture Projects 4.3 In Practice: Knowledge, Activities, Production and Distribution	C3 Methodology 3.1 Explanation of Approach
Jrban Agriculture Re-emergence and Drganisation Barriers For Urban Agriculture Projects	■ Further investigation into how UA projects emerge, are organised and how processes of re-organisation happen.	 Explore how social capital is gained by UA projects. 	 More research into the conducive conditions which have led to UA re- emergence. 	 Analyse how project initiators use UA practices as a form of intervention. 	 Reflect on the process of conducting UA research whilst the phenomenon is still re-emerging. 	In terms of geographies of emergence UA has been identified	as occurring unevenity in certain cines, i utilier research should explore unevenitess in different locations and identify factors immacring emergence	■ Exploration of the barriers faced by UA projects.		■ Exploration of project funding mechanisms.	 Investigation of project permanence, which has already been questioned. 	 Initiator feelings of security and insecurity and the role of these feelings in project place-making capabilities. 	 Greater need to understand complexities and contradictions in UA projects. 	• Exploration of the role of UA.	• Counter accusations of poor data quality and weak study designs. Move future research from anecdotal to qualitative.
2.4.5 E	Urban Agriculture Re-emergence and Organisation							Barriers For Urban Agriculture Projects							

Table 4 Outline of research gaps identified in the review of Urban Agriculture literature.

2.1 Urban Sustainability

This contextual section of the review considers what is known about urban sustainability. The debate on sustainability is notoriously extensive and complex. Considering this and study constraints, this section will focus on 'urban sustainability' and 'transitions' whilst briefly acknowledging the overarching sustainability debate itself.

2.1.1 Sustainability

Research on sustainability has been rapidly expanding since the publication of the Brundtland Report in 1987, also known as 'Our Common Future' and produced by the United Nations World Commission on Environment and Development. The classic definition of 'sustainable development' is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987 41). It is mainly approached as a visionary development paradigm. It is described as a process no final state known (Childers et al 2014). The field of inquiry seeks to address the relationship between "human activity and the environment" (Rapport 2007: 77). The roots of sustainability were to couple economic and environmental development. The evolution of sustainable development is based on three main ideas. The first is anthropocentricism and human need. The second is attaining equilibrium between human life and nature and the third is time, achieving long-term dynamic change (Moldan et al 2012). The term 'sustainability' is so ubiquitous in literature that it can be taken as common sense (Lee et al 2000, Moldan et al 2012). Sustainability as a discipline focuses on solving current problems and meeting future challenges (Spangenberg, 2011) and its form has been categorised into three pillars, which are social, environmental and economic sustainability (Moldan et al 2012). It is evident in the literature that the 'pillars' and definitions are a progressive agenda (Vallance et al 2011) with many researchers suggesting complexity in the interdependencies between them (Turcu 2012).

2.1.2 The 'Urban' in Sustainability

A substantial amount of sustainability research is focused on the challenges present in reaching a sustainability visionary paradigm. These include rising population, inadequate infrastructure, economic and environmental disruptions. One specific challenge facing sustainability is the exponential growth of urban areas globally. The urbanisation trend is the increasing urban population in relation to the total population, with 'urban' growth continuously outpacing the 'rural' (Keivani 2010). Particularly pertinent to this research is the food challenge presented as a result of increasing population and growing urbanisation. This significant problem is discussed in the next section, 2.2 Food Security.

The concept of the 'urban' is generally accepted as unproblematic in literature. However, from a social theory perspective criticisms are raised about interpretation of the term in relation to space and ideology (Sayer 1984). Urbanisation creates many challenges for the pursuit of sustainable urban development. An expansive literature seeks to align urban development with sustainable development, known as 'urban sustainability' (Turcu 2012). Though there is not an exact definition of 'urban sustainability' Vojnovic provides a succinct summary describing it as "the economic, physical, social organisation of cities and their population in ways that accommodate the needs of current and future generations while preserving the quality of the natural environment and its ecological functions over time" (2014: 35). It is commonly accepted among commentators that urban sustainability is difficult to conceptualise (Barton & Kleiner 2000). It has also been argued that definitions remain in flux because of the questions generated by the intersection and relationship between global sustainability and urbanisation (Bugliarello 2005).

This is a fast-moving topic with growing global interest and the literature presents urban expansion as both a challenge and opportunity for sustainability (Weinstein et al 2010). Limiting factors for sustainability include current knowledge of the science underpinning sustainability concerns and current government caution in advancing a sustainability agenda (Vojnovic 2014). However, Keivani explores sustainability as potentially producing "more virtuous circles of development with more equitable growth, empowered communities, liveable spaces and reduced (or at least controlled) levels of pollution". To which he adds, "or the reverse" dependent on how the built environment negotiates the pursuit towards sustainable development (2010: 5).

Urban sustainability researchers are calling for help to address many gaps. These gaps include [1] urban social inequalities, [2] the challenge for sustainable economic growth, after the loss of major industries and previous economic identities, [3] greenhouse gas emissions, pollution and negative impact of climate change on living conditions, [4] access to utilities and basic infrastructure particularly in developing cities, [5] urban form, [6] spatial development and [7] multi-level governance and institutional development (Keivani 2010). There are calls for dissemination of all extant completed research into these challenges across disciplines (Keivani 2010).

2.1.3 Urban Sustainability Transitions and The Case of Best Practice

Sustainability is considered a constantly shifting target with cities at different points on the pursuit towards sustainable development. This view has led to emerging interest in 'sustainability transitions'. This is an accepted term to describe "long-term, multi-dimensional, and fundamental transformation processes through which established socio-technical systems shift to more sustainable modes" (Markard et al 2012: 956).

Hansen and Coenen highlight that the spatial dimensions in sustainability transitions have not been researched explicitly enough, querying why "transitions occur in one place and not in another" (2013: 2).

In the production of a comprehensive review of the existing literature on transitions, the authors, Hans and Coenen (2013: 7) found many examples of the acceptance of place-specific contextual factors as significant. They categorised the extant literature in six main ways; through "[1] urban and regional visions and policies, [2] informal territorial institutions, [3] local natural resource endowments, [4] local technical and industrial specialisation, [5] localised knowledge spill overs and [6] consumers and local market formation". There is increasing recognition of the importance of place-specific contextual factors as a lens through which researchers can assess the global urban environment. McCann et al describe aspiration to conceptualise cities through assembly and comparison (2013).

Transition analyses have been criticised for celebrating the 'particular' by concentrating on the stories of certain locations. It is therefore a challenge for spatial analyses of sustainability transitions "to identify and formulate insights with theoretical purchase beyond the narrow domain of geography of transitions" (Hansen & Coenen 2013: 3, Geels 2013). There has also been a tendency to identify 'cases' of best practice. However, with more critical perspectives based on 'on the ground findings' situated political struggles can be identified (Bulkeley 2006). Bulkeley concludes that the literature must move away from re-examining the importance of urban sustainability itself and instead assess where urban development is still 'learning sustainability'. There is criticism of best practice seeking by researchers when we are yet to understand best practice or how to disseminate best practice ideas. Bulkeley (2006) calls current reward and recognition of urban sustainability initiatives as 'a sanitised story' because local conditions may make such transitions difficult to transfer to other locations.

Much debate questioning best practice highlights the need for local context. A small number of researchers are seeking to use ideas of what makes local communities achieve best practice and whether a community's potential for 'determination' is a good indicator of social sustainability. This has been referred to as 'community resilience', defined as "the existence, development and engagement of community resources by community members to thrive in an environment characterised by change, uncertainty unpredictability and surprise" (Magis 2010: 402). Magis (2010) also asserts that communities do not always control everything they are affected by which furthers the case for a need to study the 'political' alongside environment, social and economic factors.

Multi-level context is now considered a requirement for exploring sustainability transitions. Childers et al (2014) call for a focus on inter-city comparisons because

Chapter 2: Literature Review

transition study has focussed on "local, regional and urban levels" but not at a national level (Hansen & Coenen 2013: 95). Childers et al (2014: 320) summarise the key areas researchers should consider when investigating urban sustainability transitions, (1) "the triggers that have induced change, (2) situations where crisis triggers change, (3) why cities transition toward more sustainable states on their own even in the absence of crisis, (4) what we can learn from new city and non-sanitary city transitions and (5) how resource interactions affect urban transitions" (2014: 320).

2.2 Food Security

This section reviews the literature on food security. Food security literature is currently experiencing a renaissance (Lang & Barling 2012, Lerner & Eakin 2011) as the issue of food security becomes a greater concern for the Global North. In its briefest summation and accepted form, it is "when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life", a definition confirmed at the World Food Summit in 1996 (WFS 1996). Food security has been conceptualised as an objective (Misselhorn et al 2012), "measured by the absence (or low prevalence) of hunger specifically and of food insecurity more broadly" (Keenan et al 2001: S49 49). The research field is complex, with academics looking at both current and future food security geographically and spatially, including at global, national, community and household levels (Dowler & O'Connor 2012). It is tentatively considered to at least involve research on global food availability, sustainability, availability (at both a national and household level) as well as food access, safety and confidence issues.

It is generally accepted that current patterns and methods of food production and consumption are having an adverse effect on sustainable development goals, in part at least due to current patterns having an increasing carbon, water and ecological footprint (Barilla 2010). The academic view of the relationship between consumption and sustainability has changed. The relationship was considered contradictory; however, consumption has been identified and accepted as an important part of sustainable development (Verain et al 2012). Urban sustainability and consumption have been linked in various studies, including those which have identified differences across cities by income level (McGranhan & Satterthwaite 2012) resulting in disproportionate amounts of environmental impact. The impact on low income cities being a localised environmental burden of poor air quality and inadequate water provision (Vojnovic 2014). Middle-income cities produce greater pollutant emissions from fossil fuels and a have wider spatial impact than low income areas. In contrast, high income cities incur the most widespread environmental burdens through wealth concentration and high resource consumption levels creating pollutant emissions and waste generation. Food consumption has been identified as unique because it cannot be entirely controlled by and for capital (Marsden & Sonnino 2012). The conclusion being that despite on-going globalisation, food systems inherently interact with (and shape) space and place (Marsden & Sonnino 2012).

The common definition of food security itself has changed over time. Earlier characterisation of it focused primarily on national food security whether a country had access to enough food to meet energy requirements (Pinstrup-Andersen 2009, Zezza et al 2010). However, the discourse now also gives considerable attention to global and household food security (Carletto et al 2013). At a global and household level food

security (Akter & Basher 2014) definitions focus more on food supply, the availability of food.

The discourse is shifting from a productivist approach to a bimodal approach (Marsden 2013). The productivist approach of the 1970s focused predominantly on quantitative food self-sufficiency in developing countries (Lindenberg 2002, Gladwin et al 2001) and to be food secure primarily just meant "a country can meet its own food needs" (Lang et al 2010: 88). Early research in the productionist paradigm was when the Earth's resources were assumed to be functionally limitless. The current bimodal approach looks at the limitations of the 'macro' national and the 'micro' household dichotomy in terms of the quantity and quality of all countries, both developing and developed. The bimodal approach is also known as an 'access based' approach, studying issues of food distribution. The productivist approach remains relevant today but it mainly emphasises "the role of scientific and technological innovation in mitigating food shortages" (Sonnino 2016: 190). The approach accentuates the moral responsibility of developed countries to produce more for developing countries (Dibden et al 2013, Rosin 2013).

Food security debates are closely linked to consumption patterns. 'Availability' and 'affordability' are the two dominant food security consumption discourses. Availability relates to the increasing demand for food and the sustainability of its supply. Affordability debates centre on increasing impoverishment and the phenomenon of food poverty (Davis et al 2001, Lang et al 2009). Food poverty is defined as "the inability to acquire or consume an adequate quality or sufficient quantity of food in socially acceptable ways, or the uncertainty that one will be able to do so" (Dowler et al 2001: 12). It has been argued that the ongoing academic reclassification of the food security umbrella provides a good framework for researching food poverty at many levels (Dowler et al 2001: 4, Lambie-Mumford 2012). Kneafsey et al describe the lack of global academic debate on hunger in wealthy countries as "a silence about hunger amidst the plenty" (2013: 101). Further studies needed include the interaction between household food consumption and access including acquisition and allocation behaviours. This will help understand the prioritisation of other goods and services over food i.e. whether to pay for food or for heating (Pinstrup-Anderson 2009). Food access and availability have been claimed to be the two most critical factors of household retail choice (Webber et al 2010).

The issue has been raised that food availability does not necessarily assure access (Pinstrup-Andersen 2009). The difficulty experienced in defining food security has largely not affected the agri-science research field where there is a general acceptance that it has a broadly progressive agenda. This has culminated in the view that the relationship between food security and insecurity can be experienced as both transitory and permanent states. An example of a transitory experience of food insecurity can

occur when a parent cannot afford to feed their children school holidays (Graham et al 2016).

2.2.1 The Rise of Food Security Research

The global population is rising and urban sprawl increasing exponentially (Buhaug and Urdal 2013). Researchers agree that incredible pressures have been placed on the global food system to meet demand from this sustained population growth (Carolan 2013, Kneafsey 2013, Cassman 2012). Many researchers have given emphasis to the reduction in workable land for agriculture because of the pace of urbanisation (Guitart et al 2012).

New questions are raised about "physical and financial access to food" (Sonnino 2014: 190). Context-specific issues of food (in)security has been termed the "new geography of food security" or the "the new food equation" (Morgan & Sonnino 2010: 1). Researchers cite the abrupt reversal of trends in food production and food prices for the increase in food security research. These are key factors governing endeavours to reduce poverty and hunger worldwide because the poor spend a disproportionate amount of their income on subsistence (Cassman 2012).

Wider contextual concerns include the slowing of economic growth rates (Carmody 2013), the stubbornly high numbers of indigent and hungry people (Mok 2014, Nwaobi 2014), accelerating greenhouse gas emissions, the increasing pressure on fresh water supplies for agriculture (Barthel & Idendahl 2013), the conversion of agricultural land for other uses, the danger to wild fish stocks, biodiversity loss and the continued clearing of vast areas of rainforest (Cassman 2012).

The political response to these issues has led to an emerging body of research which examines the discourse of food security within policy such as Macmillan and Dowler's (2012) study of the UK (Kirwan & Maye 2013). Kiggins and Erikson (2013) have also looked at policy, finding that ambiguities in administrative responsibility for food security is detrimental to the effectiveness of schemes intended to alleviate the worst effects of food insecurity. These ambiguities may be due in part to the emergence of original food policy development in industrialised countries, at a municipal government level with many competing to be 'innovators' in solving food security issues (Blay-Palmer 2013, Viljoen & Wiskerke 2012). Political strategy has been studied in three core areas, [1] "the motivations behind cities' perceived need to rescale food governance, [2] key concepts and ideas deployed to construct the underlying narratives of the strategies and [3] the role attributed to 'relocalisation' in reaction to food security and sustainability concerns" (Sonnino 2014: 191). Currently the research field is seeking to analyse 'responses' to a challenge that is not yet fully understood or systematised.

Policy remains a neglected area of food security research. Researchers have stated previously that planning for food in the urban setting needs to expunge the outdated assumption that food is of the rural domain (Morgan 2009). There have also been calls for greater consideration of policy at an urban level for public food provisioning. More research is required to look at innovative food strategies that have been implemented in cities. Specifications have been made that such studies should be comparative and comprehensive (Sonnino 2009). Increased understandings of process have been deemed a critical research agenda for the food security policy field. Sonnino (2009) identified that this could facilitate knowledge building and sharing within and across cities. Morgan argues that planners are concerned with "public health, social justice, energy, water, land, transport and economic development" (2009: 341), all of which interact heavily with the food system. Morgan identified five themes which have increased the criticality of this research agenda, [1] a food price surge between 2007-2008, [2] food security has become a national security issue, [3] climate change effects, [4] escalating conflict over land and [5] rapid urbanisation (Morgan 2009; 342). Lang (2010) supports this analysis, emphasising that food policy does not properly account for pressures on people, land, health and the environment.

2.2.2 Measuring Food Security and Understanding the Impact

Researchers have traditionally found it difficult to estimate levels of food security. The field of food security measurement has been expanding in recent decades (Headey & Ecker 2013) due to widespread dissatisfaction with traditional measurement methods, leading to a pervasive tendency to infer global trends too readily from regionalised data (Deaton 2010, Barrett 2010). The measurement of food security has been thought a critically important research agenda because it will aid in finding intervention needs. Key academics in the field, Headey and Ecker (2013) concluded that dietary diversification indictors are a powerful predictor of economic status and malnutrition. The difficulty in measuring food security beyond analysis of different measurement tools has caused the research field to diversify. Emerging qualitative studies are beginning to generate improved evidence on the individual experience of food insecurity and vulnerability (Quisumbing 2013). This is finding the emotive and subjective nature of food security issues including feelings of hunger and anxiety particularly in urban environments (Headey & Ecker 2013). Qualitative studies are also finding that feelings of food insecurity are not confined to the poorest members of a population or those who rely on the social security system. Individuals on middle incomes are also experiencing these feelings as a result of an illness and unemployment which can lead to difficulties in repaying mortgages and other forms of loan (Tarasuk & Vogt 2009 in Bidwell 2009). The relationship between food insecurity and poverty of

specific social groups such as children and gender inequalities is an emerging field (Gundersen & Ziliak 2014, Wight et al 2014).

An emerging field explores methods of intervention alongside feelings of food insecurity, such as the role of nutritional education (Keenan et al 2013) and mapping food outlet provision to identify 'food deserts' (Pothukuchi 2004). 'Food desert' is the term used to describe the scarcity or inaccessibility of quality, healthy, affordable food in low income areas, which has led to prolonged increases in obesity and diet-related disease rates (Shannon 2014, White et al 2004).

To conclude, Serageldin (2001) summarised many of the main food security debates which academics are currently working towards interpreting. It involves: [1] not just production but also access, [2] not just output but also process, [3] not just technology but also policy, [4] not just global balance but also natural conditions, [5] not just natural figures but also household realities, [6] not just rural but also urban consumption and [7] not just quantity of food but also quality.

2.3 Alternative Food Networks.

Alternative food network (AFN) research has developed across Europe and North America. It covers a wide range of activities including community-supported agriculture (CSA), farmers' markets, organic agriculture and foodbanks. The main ways in which AFNs have been defined is the reconfiguration of the producer-consumer relationship to one of closeness and authenticity (Kneafsey et al 2008), representative of an 'ethic of care' (Dowler et al 2010) and a 'quality-turn' (Ilbery and Kneafsey 2000). As with many emerging research fields, defining the concepts is still problematic with the term AFN itself lacking full clarity. This lack of clarity in the research field is problematic but also reflects the reality of the interconnected nature of food networks. It encompasses systems of food, which short-circuit the conventional global agri-food complex (Goodman 2004) by developing "new relationships between producers and consumers" (Sonnino & Marsden 2006: 183). The shifting ideas about the current meaning of 'alternative' and whether the 'alternative' is becoming 'conventional', along with the place of 'radical' food movements and networks emerging within them, are all ripe for research (Dupuis et al 2006).

AFNs have been examined from several key perspectives including [1] political economy (Goodman 2004, Allen et al 2003), [2] sociological (Brunori 2007) and [3] modes of governance and network theory (DuPuis & Block 2008). Despite this there are still calls for further crossover of ideas across different theoretical perspectives (Tregear 2011). The political economy [1] perspective explored by Goodman (2004) and Allen et al (2003) studies the AFN movement as competing against the forces of capitalism. It does this through explaining outcomes by analysing the political and economic realities which form them. Sociological perspective [2] has explored the narrative of the lived experiences of AFN participants (Tregear 2011). Governance and network theory [3] primarily focuses on the development of AFNs at a regional level, conceptualising actor groups as part of a network to understand the way in which they negotiate control issues whilst operating in a regulated and institutional setting (DuPuis & Block 2008).

2.3.1 Alternative Food Network Emergence and Claims

The rationale for the emergence of AFNs has been explored from both the producer and consumer perspective. The rationale for the producer movement towards engaging with the alternative includes a need to be part of a network that redistributes produce value through the chain more fairly (Whatmore et al 2003). Competitiveness in the 'conventional' industrialised producer-retailer-consumer network, as supermarkets fight for market position and consumer spend, has driven down the farm-gate prices for the farmer at the bottom of the supply chain. From the consumer's perspective, there are concerns over the conventional food networks available to them and a detachment from

the origin of food. This unease manifests itself in part due to issues around poor food traceability because of complex supply networks (as shown by the recent 'horsemeat scandal' in the UK), as well as the risk of contaminants from environmental pollution and food additives (Abbots & Cole 2013, Wandel 1994).

The shortening of the connection in the food supply chain is thematically central to research on AFNs. (Hinrichs 2003, 2014, Goodman 2004). This shortening can refer to a reduction in the number of links in the supply chain (Renting et al 2003), or alternatively the physical distance between the producer and consumer. Despite calls for more focus on consumption, production-related AFN research has traditionally dominated the field - though this is beginning to change. Much of the research centres on producer case studies reporting their side of the story and the potential financial benefits of AFN participation (Morris & Kirwan 2011, Venn et al 2006).

There have been numerous studies into the alternative values associated with food networks primarily aiming to understand the relationships and differences that separate 'alternative' food networks from the 'conventional' industrial food system (Sonnino & Marsden 2006). These values include [1] economic viability for farmers and consumers, [2] ecologically sound production-distribution and [3] improved social equity for all in the community (Feenstra 1997). Ecologically sound production-distribution methods include a movement towards production equipment powered by renewable energy and the reduction of embodied energy in transportation such as the carbon footprint of airfreight. 'A key theme reported in AFN literature is 'embeddedness' which refers to the 're-placement' of food within its social, cultural, economic, geographical, and environmental contexts in response to the 'disembedding' forces of conventional food networks (Goodman 2012 in Cabrera 2013: 18).

The value of AFN has been alluded to by wider food security disciplines, which are exploring wider opportunities to areas such as food poverty, food deserts, 'food democracy' and 'food sovereignty' (Venn et al 2006). 'Food sovereignty' has been much discussed in AFN literature (Jarosz 2008) since the 1996 World Food Summit when it was introduced by La Via Campesina as the "right of each nation to maintain and develop their own capacity to produce foods that are crucial to national and community food security, respecting cultural diversity and diversity of production methods'' (Via Campesina 1996: 5, Hospes 2014). La Via Campesina is an international movement which defends small-scale sustainable agriculture as a way to promote social justice and dignity (Borras 2008). 'Food democracy' as summarised by Hassanein relates to the idea that people should have the "power to determine agro-food policies and practices locally, regionally, nationally and globally" (Hassanein 2003: 79 in Murtagh 2015: 17, Johnston et al 2009, Guthman 2008). These relate further to AFN ideas for framing population need as a problem (obesity and nutritionally deficient food

consumption) and exploration within AFN as one way to look at it, such as not necessarily needing more food but a better quality and spread of it. Therefore it would be particularly research-worthy to understand the potential of AFN in areas where the population is experiencing rising rates of obesity and diet-related disease in so-called food deserts.

2.3.2 Issues In Alternative Food Network Research

There is growing research which opposes some of the claims made about the transformative effects of AFNs. Jarosz (2008) innovatively focuses her work on the processes of emergence giving appropriate deference to the political, cultural and historical context rather than just traditional AFN attributes such as quality, transparency and locality (Sonnino & Marsden 2006). Jarosz found that urbanisation and rural reconstruction both promote and constrain the emergence and development of AFNs. Their interaction produces AFNs marked by uneven development which do not support all producers and consumers. To summarise the theory: increasing urbanisation and subsequent gentrification in peri-urban areas, leads to an influx of wealthier consumers, rendering access to affordable food from AFNs more difficult for low income consumers. Jarosz's conclusions highlight the need for further research that explores the inclusive/exclusive nature of AFNs. McDonald (2007) agrees with Jarosz and outlines the benefits of AFN for urban fringe farmers in gentrifying areas.

Further claims have been made about the potential of AFNs including a constructive contribution to food security by recommending ensuring a consistent food chain, regional development through a more integrated and territorial agri-food approach (Sonnino and Marsden 2006, Wiskerke 2009) and improved sustainability through shared goals of economic viability and social justice (Sonnino and Marsden 2006: 187).

Jarosz found that fragility and dynamism are inherent in AFNs which are existentially tied to metropolitan development. For example, high urban demand for local seasonal produce paradoxically does not necessarily enable all farmers to subsist of it alone (Jarosz 2008). A degree of risk has been found in producer product diversification for AFNs (Jarosz 2008). Other researchers looking at alternative systems of food provision place greater emphasis on the notion of 'alternativeness' based on the economics of geography and dispute some of the claims of writers like Jarosz. They tend to find that food relocalisation and the 'turn to quality food production', when focused predominantly on food, produces 'weaker' alternative systems (Watts et al 2005). Academic ambiguity has been deemed a problematic feature of current AFN literature. Researchers have often rested on assertions that AFNs inherently "deliver more just, equitable and ecologically sound outcomes" (Tregear 2011:425). These assumptions have been tied to research on food systems with less conventional networks, operating

on a restricted geographic scale, and has led to a presumption that almost any localised system produces positive outcomes.

Inconsistent use of terminology and definitions, often derived from small-scale empirical studies, is problematic in advancing AFN research. One example is the normalised use of 'defensive localism' since being coined by Winter (2003a). This term is used to conceptualise when communities engage in AFN to defend themselves from perceived threats from 'conventional' networks. They do so by purchasing local produce rather than engaging in more typical ecological-minded behaviour such as buying organic. It is not suggested that terms such as 'defensive localism' should be avoided, however they should be employed cautiously and clarified further to avoid misunderstanding. Tregear (2011) suggests the existence of a theoretical impasse within AFN literature stemming from researchers becoming entrenched within already-established theoretical positions. Venn et al (2006) agree, concerned that researchers' use of 'alternative' to describe the degree of 'alternativeness' in food networks may be deemed 'pejorative' by those within such networks. Tregear (2011) highlights the impact of inconsistency as detrimental to the knowledge process, and accuses researchers of overusing the AFN umbrella for academic convenience.

2.3.3 The Consumer and Community in Alternative Food Network Research

One important but underrepresented theme in AFN research is the consumercommunity relationship. Restricted place-based research into AFNs tends to assume their participants inherently prioritise justice, equality and sustainability with minimal proof, based on a tendency to idealise the 'alternative' instead of acknowledging its associated problems. Tregear (2011) suggests that more academic scepticism is vital for the field. The debate surrounding AFN research has widened beyond the geographic stream. The consumer's role in food systems has traditionally been understated, an issue heavily criticised in prior reviews of AFN research (Sonnino and Marsden 2006). There are calls to further assess the socio-economic values connected to 'alternative' and 'conventional' food networks by consumers. For example, 'socio-economic' values relate to how economic activity is shaped by studying society. So, in this case the different values consumers have may explain their activity and participation (or lack thereof) in certain networks. Increasing focus on the 'consumer' has become tangled with perceived need to study 'people' within AFN, and not merely their consumption habits and participation motives. A wider perspective of issues affecting people, including but not limited to welfare problems, tensions, trade-offs as well as the advantages and benefits resulting from AFN engagement, all need to be examined (Tregear 2011). We need to assess how people engage with different types of AFNs, such as farmers' markets, which highlight the importance of understanding

Chapter 2: Literature Review

'community' in the reconfiguration and reconnection of the producer-consumer relationship (Holloway 2000). Additionally, there is a need to appreciate the context of AFN to measure how much other food-related organisations are influencing these networks, both directly and indirectly. There have been calls for the methodological processes used in AFN research to be re-examined, for greater clarity in their identification (Venn et al 2006), which play more than a demonstrative role. Empirically, there are now serious appeals for greater rigour and variety in research design within the field. A gap exists for the study of food producers operating within and around AFNs.

Established and Emerging Projects in Hull and Copenhagen.

2.4 Urban Agriculture

Research interest in urban agriculture has experienced rapid growth across many disciplines and particularly in human geographical enquiry. Urban agriculture research is complex because the activities and practices of projects are diverse and constantly shifting in nature and scale. Activities most commonly associated with urban agriculture include community gardens, allotments, urban farms and guerrilla gardening. These different types of UA activity range in size, function, formality and intent. However, there is a general consensus that they are contributing to "unique participatory landscapes" in cities (Saldivar-Tanaka & Krasny 2004: 399). The sites reflect transient cultural landscapes permeated with multiple meanings and are associated with differing practices and beliefs (Baker 2004). UA has been presented in two ways. It has been labelled an agent for change in food security, urban development and sustainable development. It has also been portrayed as an antithesis to wider societal shifts experienced in many cities, for instance leisure commodification and increased policing of public spaces (Tornarghi 2014). This is discussed further in the following sections.

The structure of this review reflects the main themes present in urban agriculture literature, as follows:

- 2.4.1 Defining Urban Agriculture, Understanding Activities and Aims
- 2.4.2 Perspectives and Methods in Urban Agriculture Research
- 2.4.3 Motivations, Roles and Stakeholders in Urban Agriculture Projects
- 2.4.4 Multi-Scalar and Multi-Faceted Claims For Urban Agriculture
- 2.4.5 Urban Agriculture Re-emergence and Organisation
- 2.4.6 Barriers for Urban Agriculture Projects
- 2.4.7 Caution and Direction in Urban Agriculture Research

2.4.1 Defining Urban Agriculture and Understanding Activities

According to the Committee of the Community Food Security Coalition, UA is "the growing, processing, and distribution of food and other products through intensive plant cultivation and animal husbandry in and around cities" (CFSC 2003:3). In the most recent critical studies of urban agriculture, the phenomenon has been widened to include; "small-intensive urban farms (Viljoen et al 2005), food production on housing estates, land sharing (McMorran et al 2014), rooftop gardens and beehives, school-yard greenhouses, restaurant-supported gardens, public space food production, guerrilla gardening (Hou 2010), allotments (Miller 2013, Crouch & Ward 1988), balcony and windowsill vegetable growing and other initiatives" (Tornarghi 2014: 551). Each of these are conceptualised as activities of urban agriculture. However, this definition by

Tornaghi omits activities considered by others to be forms of UA, including urban school gardens and orchards (Smith et al 2013, Boyle 2013).

Extant research lacks consistency with definitions of urban agriculture complex and constantly evolving within the research field as well as 'on the ground'. With language and understandings of practice in flux, researchers are increasingly challenged to explicitly describe what is being researched to systematise their research outcomes. The speed of innovation and diversification of urban agriculture practice on the ground (McClintock 2014) has compounded the difficulty for researchers in forming a comprehensive definition. Flux in categorisation also underpins the challenge present in providing a concise urban agriculture literature review. This has been further worsened by the lack of literature surveys undertaken of the field (except for Guitart et al 2012 on community gardens).

Others have avoided the term urban agriculture in favour of civic agriculture (Saldivar-Tanaka & Krasny 2004) to reflect how they observed UA to be practiced, "growing food within the community, for that community, by that community" (Smith et al 2013: 1415). This change in label used by some stems from a deeper understanding of the role agriculture can have in urban settings and its increasing function in enacting citizenship (McClintock 2014). Undercurrents emerging within the field include criticism of the widespread use of 'urban' to describe practices because use of the term "poorly reflects the diversity of spatial references that underpin such projects" (Ernwein 2014: 77). Similarly, researchers have been accused of conflating the practices of urban and periurban agriculture (Opitz et al 2016). The field is reserved in defining urban agriculture because there is a fear that claims for its problem-solving qualities may be overstated.

The challenge of understanding what UA is becomes more difficult when considering the research conducted into the purpose of UA. The purposes are, unsurprisingly, varied and explained by researchers in different depths of detail. One study found five overarching themes present in UA practices; "financial, environmental, health, social/educational and community development" (Reynolds 2015: 248). Also, these findings share commonalities with research on community gardens in Holland's literature review which states that "education, community development and leisure" are central themes in project goals (Holland 2011: 295). The purpose of community gardens has been more thoroughly documented than that of urban agriculture more broadly. For example, Milbourne found five main goals that united his case study projects, [1] to improve the visual aesthetic of local public spaces, [2] to create new forms of green space in high density neighbourhoods, [3] to respond to social problems of the area, [4] to encourage cultural integration in areas undergoing changing demographics and [5] to provide therapeutic forms of gardening through the collective nurturing of land, plants and people (Milbourne 2012, Tompkins 2014).

Mount and Andrée offer a succinct analysis of these trials (2013). The authors name three key challenges that are inhibiting UA research. They call for balance in "nuance and uniformity" to address understanding of differences and similarities in UA practices. Additionally, they call for more understanding of the "complexity and simplicity" already established to be evident in UA practice. Finally, the authors call for studies which acknowledge and visually represent the networks of UA practice "that often blur the lines between governmental, public, non-profit, cooperative, multistakeholder and private" (2013: 578). To overcome the challenge in categorising what urban agriculture is, research is attempting to move towards a more critical and evidence focused approach in which researchers attempt to assess "where [urban agriculture] comes from and how to address its impacts" with research idealism tempered with realism (McClintock 2014: 148).

Having broadly identified the activities considered examples of urban agriculture and begun to unpick some of the roles UA practices have, I will now briefly explain the characteristics of the main activities in relation to the literature. The order of activities presented reflects the size of literature in extant research, from most present to least. This includes, community gardens, city farms, guerrilla gardens (and guerrilla gardening) and food hubs, initiatives and projects.

i. Community Gardens

The urban agriculture research field is currently dominated by literature on community gardens. While it is commonly accepted that community garden research falls under the remit of urban agriculture the work also forms an impressive stand-alone body of literature (Saldivar-Tanaka & Krasny 2004, Baker 2004, McClintock 2009). A definition that succinctly encapsulates a number of the fundamentals of a community garden is as follows, "open spaces which are managed and operated by members of the local community in which food or flowers are cultivated" (Guitart 2012: 264 drawing upon Holland 2004, Pudup 2008, Kingsley & Townsend 2006). Unfortunately, what a community garden is and what 'community' means in relation to a garden remains the subject of frequent debate. Despite this, it is generally accepted that the activities of community gardens, the connection between 'community' and 'garden' and the management/access of the sites are all key themes in the literature field.

In terms of what a community garden is and what they do, there is a general acceptance that they vary greatly in type and form and continue to diverge in many ways. This can include variation in physical site size, what they produce, the method of production and how they create place (Stocker & Barnett 1998). In relation to urban agriculture activities more broadly, community gardens are considered to encompass the greatest range of possible activities in comparison to, for example, city farms and allotments. In

the literature community gardens tend to be most commonly associated with social objectives, as opposed to financial and environmental ones, "established with the purpose to create and share positive, expressive, and friendly interactions with neighbours and community members" (Glover 2004, Glover et al 2005: 86). Evidence suggests that community gardens also frequently contain a number of "non-gardening elements, such as lawns, social areas and spaces for active ball games" (Middle et al 2014: 639). Going further, early research has claimed that community gardens are in fact "more about community than they are about gardening" (Glover 2004: 192). This combination of gardening and non-gardening elements has compounded challenges in defining the spaces. If this is the case then community gardens would not be considered UA based on the CFSC definition presented at the beginning because of their lack of food cultivation. A further problem in the field is the tendency to generalise findings beyond the specific community garden studied. In a global review of eighty-seven community garden studies, Guitart et al identified that two thirds of the papers had not explicitly defined community garden (2012). Researchers have been accused of considering 'community gardens' as a self-explanatory term and therefore not warranting exploration in relation to the spaces they studied (Guitart et al 2012).

An important and developing theme in community garden research are researcher attempts to systematically identify that which underpins the spaces of community gardening. This identification effort focuses on commonalities in activities yet continues to grapple with the problematic term 'community' itself. As a result, central to identifying said commonalities is work on 'community'. The term is used interchangeably to represent both location and identity. In addition, work reimagines the place/identity signifiers as place or interest based community gardens (Firth et al 2011). Firth et al sought to understand the process by, and degree to which projects seek to embed themselves into a locality or "span across diverse communities" (2011: 555). However, they further acknowledge the associated contestations of this categorisation, itself highlighting that whether a project is place-based or interest-based is not always apparent. The continued use of community as both a signifier of place and as an expression of identity in ownership has cemented its use in the field. Despite this the question of who these communities are and what form they take remains in its infancy. Researchers have begun to unpick the term by identifying the community active on the space. However, this has highlighted large differences in what researchers have studied. To demonstrate this, Ferris et al (2001) likened a community garden to a public garden, with similar ownership, access and degree of democratic control. This is supported by Bendt et al and their labelling of gardens as 'PAC gardens' to mean public-access community gardens which characterise "public green spaces that are collectively managed by civil society groups" (Bendt 2013: 18, Middle et al 2014).

PAC gardens included gardening projects alongside ones focused on food production. However, as anticipated, where questions of openness are present, other issues such as enclosure, inclusion and exclusion and the impact this may have on the role of community gardens are subsequently raised (Kurtz 2001: 660). Kurtz was particularly concerned with this given the priority placed on inequality reduction by the state in many research locales.

This contrasts drastically with Holland (2011) who described community gardens as "open spaces managed and operated by members of the local community for a variety of purposes" (Holland 2011: 285). Interestingly in Holland's research, though invoking a specific definition of community gardens, an urban farm was also included in the study (also see Ackerman et al 2014). Holland (2011) hypothesised that more intangible ideas were what linked projects together and therefore warranted investigation as similar entities, primarily suggesting that empowerment of and by actors was a continuous theme. Borelli also carried through the idea in describing community gardens as "community management of open space" (2008: 273). On the other hand, early work by Stocker and Barnett categorised community gardens according to who manages the site rather than the access or ownership of the land itself. They described that "community gardens differ from public gardens in that they are managed by community members rather than by local governments although they may be located on council land" (Stocker & Barnett 1998: 179). Work has also begun to identify the connections between these projects and other systems of exchange existing within cities, such as McCormack et al's work on community gardens and farmers' markets (2010) however this type of work remains in infancy.

To summarise, there is a vibrant debate on how best to conceptualise the space of community gardens, with various studies unpicking ideas of *activities*, *ownership*, *access*, *management* and project *connections*. To begin to understand projects more thoroughly, a wider look at stakeholder interaction and the networks surrounding community gardens is necessary.

ii. Urban Farms

Urban farms and farming are one area of urban agriculture that is accumulating increased attention from researchers. From an academic perspective, urban farms are often presented as a more economically driven form of urban agriculture. Those who establish an urban farm do so for several reasons one of which being for financial gain. However, in the literature there are two clear different types of farm. There is the urban farm, established for food production in the city and the urban 'care farm'. A care farm refers to "the use of commercial farms and agricultural landscapes for the promotion of human health, social inclusion, and educational benefits through farm activity" (Loue et

al 2014: 503 drawing upon Berget et al 2011). There are examples of both rural and urban care farms described in the literature (Elsey et al 2014). It is generally accepted in the literature that urban farms focused on food production can also be used to promote the benefits of care farms (Rich 2012).

There is a general feeling in the literature that urban farms are considered key for fulfilling the potential of urban agriculture in cities. On a basic level the fundamental difference between community gardens and urban farms is the inclusion of livestock on site for the primary purpose of food production. Debate over the scale of urban farms has emerged and is evident in the increased use of "small", "large" or "extensive" to describe the scale of a farm (Angotti 2015, Colasanti et al 2016). This size categorisation is still lacking in terms of formalisation with a need evident to distinguish urban farms by practice as a means to understand scale. This means that the field is open to new suggestions of methods by which farm types may be distinguished such as by comparison of income generation, food production yield, types of produce grown and population density of urban farm's location. Urban farms are conflated into often studies of community gardens (Reynolds 2015, Taylor & Lovell 2012, Holland 2011).

For urban farms appreciating thematically the role, and importance, of socio-economic features is considered vital in ascertaining how practices currently are and could be enacted in the modern city (Deelstra & Girardet 2000). Research by Dimitri et al employing a comparative approach using New York farms found that location greatly impacted which objectives were enacted with "lower median income [farms] more likely to have social goals related to building community or improving food security" than higher income levels (2016: 603).

Multiple barriers to the development and expansion of farms in the city have been identified. These include high urban land prices, land use prioritisation in urban development planning, quality of urban soil and balancing involvement expectations of those who farm (Angotti 2015). In addition, there are suggestions that urban farms can both address or exacerbate demographic differences (Angotti 2015). However, it is worth noting that the majority of studies on urban farms focus on American case studies, predominantly in New York City.

iii. Guerrilla Gardens and Guerrilla Gardening

The practice of guerrilla gardening and the sites upon which it is practiced (guerrilla gardens) are aspects of urban agriculture which have been the subject of increasing attention (Hardman & Larkman 2014). This rise in popularity is in part due to how the land is reclaimed for growing. An individual or group perceives neglect of a site by its owners and begin to grow without permission. Guerrilla gardens occur at the intersection of disapproval about an aspect of a site between stakeholders and legal

owners (Adams et al 2013, Crane et al 2012, Hardman & Larkman 2014, Hou 2010). Crane et al (2012) go as far as to describe guerrilla gardening as an example of sustainability in action because of the transformation of land from unproductive to productive (food producing). Unlike urban farm sites and urban farming practice, which have been viewed as virtually indistinguishable, guerrilla gardening is often treated separately from the site itself due to the frequently multi-site nature of the practice. The popularity of this type of research can be rationalised through understanding that guerrilla gardening has been widely viewed as a distinctly radical and politicised form of urban agriculture, and therefore of interest to a diverse spectrum of academics. All the same, this perception is shifting and there is an emerging theme in guerrilla gardening focused research which questions these projects as forms of 'political practice' and suggests there is a downward trend of 'resistance' as an underlying element (Adams & Hardman 2013). Furthermore, there are calls for a greater understanding of the wider setting in which guerrilla gardening occurs and the spaces near guerrilla garden sites. Currently work on guerrilla gardening and that of community gardens and city farms remains quite separate.

iv. Food Hubs, Initiatives and Projects.

Alongside urban agriculture project specific literature, there has been a steady increase in research that seeks to understand the phenomenon by discussing multiple activities within a specific location. Often within these studies, urban agriculture projects are included, however the central theme is typically urban food initiatives more broadly. This has led to a wave of terminology being created to collate multiple activities (usually happening in a specific geographic area) into the same study, for example an urban agriculture project and a community kitchen. Terms include 'food hubs' (Stroink & Nelson 2013, Blay-Palmer et al 2013) and 'food projects' (McGlone et al 1999, Carahar & Dowler 2007, 'local food projects' (Dowler & Carahar 2003). More recently there has been a tendency towards the use of 'community' in describing and labelling so-called 'food projects' (Mount & Andrée 2013) and 'food growing initiatives' (Anderson & Cook 1999, Tornarghi 2014). Also evident are phrases such as 'community food sector' (Sonnino & Griggs-Trevarthen 2013) and 'local food movements' (Marsden & Franklin 2013). A 'food hub' describes multiple communitybased initiatives acting to directly link producers and consumers (Blay-Palmer et al 2013). This shares perceptible similarities with alternative food networks as discussed previously in the literature review. Within Fridman & Lenters' work on food hubs (2013), a community kitchen was also included. Sonnino & Griggs-Trevarthen (2013) used the term 'community food sector' to reflect the variation of enterprises, which involved studying a community farm alongside an artisanal bakery. A key rationale behind this combined approach is in seeking to understand the connections between

food growing and cooking activities occurring in cities. This alternative direction enables researchers to make comment beyond mere individual projects, raising wider questions about scale (community, city and national scales most evident) and the impact activities can have on an area in their totality.

To summarise, urban agriculture has been described as a complex network of organisations with various types of cooperation and partnership models (Baker 2004). The literature is increasingly moving towards greater understanding of the variety of organisational models present and subsequent acknowledgement of this fact in research methods.

2.4.2 Perspectives and Methods in Urban Agriculture Research

i. Theoretical Perspectives

Urban agriculture has been explored from a variety of theoretical perspectives, including urban political ecology (Agyeman & McEntree 2014, Miller 2013), Gibson-Graham's alternative/community economy perspective (Ballamingie & Walker 2013) and Wilson's (2010) cities as complex systems, a lens also utilised by Bell & Cerulli (2012). Furthermore it has been assessed through a historical-geographical lens (Barthel & Isendahl 2013) and, as a result of the growing popularity of social science perspectives, with the aid of social network theories (Ghose & Pettygrove 2014), social theories of learning (Bendt et al 2013) and critical race theory (Reynolds 2015). Although not a theoretical perspective, there are collective works which seek to understand urban agriculture projects and their impact from an ecosystem services position (Middle et al 2014, Aerts et al 2016). Research from other disciplines includes; urban studies (including planning, environment, policy and law), nutrition and health, education and behaviour, agricultural studies, ecological economics and the leisure sciences. Each of these has proven to be valuable for diversifying the scope and scale of research.

ii. Research Locations

Research on urban agriculture and connected activities is most prevalent and arguably at its most rigorous in Canadian scholarship (Irvine et al 1999, Baker 2004, Wakefield et al 2007, Nelson & Stroink 2013, Nelson et al 2013, Ballamingie & Walker 2013, Blay-Palmer et al 2013 & Mount et al 2013). For instance, the culmination of one research project included over one hundred and seventy different community-based food initiatives (Marsden & Franklin 2013). The reason for this abundance of Canadian scholarship is the result of a "province-wide initiative aimed at better understanding local food systems in communities" (Stroink & Nelson 2013: 520).

This is closely followed by research from cities in the North of the United States (Alaimo et al 2008, White 2011, Taylor & Taylor 2012, Ackerman et al 2014, Agyeman

& McEntree 2014 & Carolan & Hale 2016), with an established and surprisingly extensive focus on New York (Schmelzkopf 1998, 2002, Reynolds 2014, Angotti 2015, Campbell 2016). In one systematic review on community gardens Guitart et al (2012) categorised according to the type of plants grown, who is involved and the nature of land ownership. They further explored the papers by nature of the authors, geographic and disciplinary approach and methods (Guitart et al 2012). They evidenced the high prevalence of studies coming from the U.S, Canada and Australia and highlighted the relative lack of European studies specifically focused on whole city studies (2012).

North American scholarship has been accused of being too focused on low income areas within cities. Additionally research on developing world cities is present (Novo & Murphy 2000, Zezza & Tasciotti 2010 & Poulsen et al 2015). There is further research attention emerging from across Europe (Koopmans et al 2017a, Ernwein 2014, Knapp et al 2016) and an established body of work from Australia (Stocker & Barnett 1998, Kingsley & Townsend 2006, Turner 2011 & Firth et al 2011). UK research is also present and is often used as a comparative case for US research (Marsden & Martin 1999, Dowler & Carahar 2003, Holland 2004, Coufopoulos et al 2010, Charles 2011, Bell & Cerulli 2012, Milbourne 2012, Miller 2013 & Martin et al 2014). Research on UK cities has traditionally focused on capital cities and some 'ordinary cities' but unfortunately only on community gardens and not urban agriculture more broadly (Milbourne 2012, Hopkins 2014).

iii. Access to Research Phenomenon

Growing attention is being paid to how academics access urban agriculture projects. Increased consideration to project access has deepened understandings of ethical issues for the field particularly in the popular use of participatory action research approaches (Charles 2011). Future studies require greater discussions of expectations between researchers and participants. Questions around the research access to the phenomenon has also given rise to an abundance of scholar-activism within the field, as emphasised by Blay-Palmer et al who described researchers as "integral members of their food communities" in their research on food hubs (2013: 521). Scholar-activism is overwhelmingly present within urban agriculture research and has certainly increased research knowledge on community-inclusive research projects (Wakefield et al 2007, Angotti 2015, Tornarghi & Van Dyck 2015).

However the study of urban agriculture from an insider perspective outweighs studies from other perspectives. Thus reflecting a perpetuation of similar methods and insights generated. The study of urban agriculture projects with more objectivity appear welcome to address this imbalance.

iv. Methods, Sampling and Typologies

Academic studies on urban agriculture typically employ qualitative research methods. This predominantly includes the use of interviews (Glover et al 2005, Holland 2011, Reynolds 2015) and case studies and in most cases, both, with interviews the archetypal research mechanism for case study data collection (Firth et al 2011). There are also examples of walking tours of gardens (Milbourne 2012: 984) and telephone surveys to reach higher numbers of research participants such as in the case of Glover et al's one hundred and ninety-one respondents (2005).

Case study adoption in this field ranges from the use of one in-depth case study to a considerable number of cases (Taylor & Lovell 2012: 60, Firth et al 2011). In some instances, there are difficulties in drawing conclusions across multiple studies using similar practice methods because of a lack of contextual data from both the research location and regarding the specific projects used. The challenge in concisely presenting this data has been acknowledged, particularly when there are significant numbers of projects included in a single study. For example Nelson et al and their inclusion of forty-three projects (2013) discussed this issue. Smith and Kurtz (2003) and Schmelzkopf (2002) similarly wrote on the experience of when one-hundred and fourteen gardens were put up for auction and redevelopment in New York City and the difficulties raised.

There are several examples of the implementation of typologies used to analyse the phenomenon across multiple projects. Unfortunately these are rather scarce and it is difficult to distinguish between sampling as part of a method and typologies developed for analysis purposes. For example, McClintock categorises UA in terms of [1] type of urban agriculture, [2] organisation, [3] scale of production, [4] primary functions or orientation, [5] management, [6] labour and [7] market engagement. However he acknowledges that this typology is vague because of overlaps.

Many researchers adopt specific sampling techniques to find commonalities and differences between case studies. For example, Corrigan explains her choice as representative of "different approaches to community gardening and different perceptions of healthy food" (2011: 1232) while others have sampled based on the projects which are 'food producing' and by site access, focusing on land considered to be a "publicly accessible space" (Reynolds 2015: 246). Similarly, Nelson et al included a food focus element to selection for their work on 'community food initiatives' but they were also more specific, citing "production, distribution, access, health, or other perspective" to encompass the different ways in which food may be focused in a project. Initiatives were further required to have "a community dimension to their work and case studies were selected which used "particularly innovative strategies to sustain their work" (Nelson et al 2013: 569). These are exemplary studies in describing sampling, the exception and not the norm in comparable urban agriculture project

studies. However when such sampling descriptions are present it remains difficult to work out what different approaches to community gardens are, whether accessibility in one context is the same in another and how innovative strategies might be identified.

In attempts to study urban agriculture more broadly, researchers typically include two or more examples of urban agriculture activities. Holland included 'city farms' in the study of community gardens for two reasons; they are [1] "active in certain aspects of community development, education, training and health awareness", and [2] "at their core [are] similar activities to community gardens; animal husbandry, food growing and [have] a focus on community activity" (Holland 2011: 291). Furthermore, it was noted that city farms are more likely to be visited by the public than community gardens, which poses questions about the nature of 'public' particularly in Reynolds' selection of publicly accessible urban agriculture projects (2015). Holland's study selected interviewees to represent a range of schemes; [1] "food growers, [2] an ecological scheme, [3] an educational/children's scheme, [4] a therapeutic employment scheme, [5] established 'traditional' community garden schemes, [6] renewed models of allotment style gardening and [7] city/urban farms" (Holland 2011: 294). Beyond typical scheme representation, other auxiliary project sampling types are evident including geographical sampling on a country level (Holland 2011). There has also been sampling from national organisations such as Milbourne's UK study which used projects from the Federation of City Farms and Community Gardens (FCFCG) and Royal Horticultural Society (2012).

2.4.3 Motivations, Roles and Stakeholders in Urban Agriculture Projects

Research into the motivations of participants in urban agriculture projects is particularly popular. At the turn of the millennium, Armstrong found that in order of importance, motivations included access to fresh food, enjoyment of nature and associated health benefits (Armstrong 2000: 319). Similarly, in later research Firth et al found reasons to include reconnection with food and nature. Additionally sustainability was the third motivator (2011). A more recent study found subsistence as a primary motivation for project involvement (Poulsen et al 2015). Interestingly the literature suggests that the motivations behind participation in community gardens are changing but generally does not provide rationale or describe direction for further research. As the first section highlighted (See 2.4.1) the range of activities considered urban agriculture projects is also itself shifting and this raises questions regarding the connection (if any) between these two changes.

A key limitation of extant research is that it does not adequately address the role of leaders in urban agriculture projects specifically. Some research distinguishes the

participants in projects as either leaders or non-leaders (Glover et al 2005), or alternatively 'programme facilitators' and 'participants' (McClintock 2014). In the Glover et al study telephone survey were completed with participants asked, "what would best describe your role at your community garden?" (2005: 84). However the researchers themselves acknowledge that although 'leaders' suggested that they took on 'additional responsibilities', this was not explicitly confirmed as part of the method. This issue was similarly described by Armstrong who differentiated between 'coordinators' and 'gardeners' (2000). Armstrong describes the coordinators as being "familiar with local neighbourhoods" and "aware of community-level and organising, which may impact or derive from each community garden" (Armstrong 2000: 321). However these claims for familiarity with local neighbourhoods are only evidenced for community gardens.

The idea of a leader/coordinator role does feature in some specific papers however in most instances the project participants are grouped together as 'gardeners' or referred to as 'interviewees' throughout the work. This means it is difficult to unpick who specifically the insights refer to in a project. There are two more recent papers, which are clear in role identification. The first is a UK study, *Developing "Community" In Community Gardens* which highlighted the difference between roles and whether the role was performed in employment or on a voluntary basis, identifying "managers of the community garden, project staff, volunteers, community garden users and a staff member of an external organisation connected to the garden" (Firth et al 2011: 560). The study further highlighted who initiates community gardens describing most as started "and managed by community groups, although an increasing number have input from external organisations" (Firth et al 2011: 556).

The second UK paper on the subject is Reynolds' (2015) work *Disparity Despite Diversity: Social Injustice in New York City's Urban Agriculture System* in which she goes further to identify practitioners and stakeholders beyond the site itself. They include [1] "urban gardening and farming practitioners with diverse operations throughout the city's five boroughs, [2] representatives of non-governmental organizations that provide support or advocacy for urban agriculture, [3] representatives of foundations that had recently funded urban agriculture programmes and [4] municipal and state-wide government officials directly involved in urban agriculture activities" (Reynolds 2015: 246).

Gender, race and class discussions are evident, however nominal in number and certainly need more attention. In Reynold's work on injustice, she uncovered race and class-based disparities across actors in her urban case study (2014). Flachs criticises the tendency of academics to over-emphasise poverty and race differences in studies of UA. This over emphasis relates to describing these groups as 'more' motivated by the

economic value potential of UA projects (2010). However in White's study (2011: 13) of Detroit, urban agriculture became a way for black female activists to reassess "their cultural roots and reclaim personal power" as well as "nurture activism and challenge the racial and class-based barriers to accessing healthy food". Saldivar-Tanaka & Krasny (2004: 399) explored the role of "community development, open space and civic agriculture" in their twenty cases of "Latino community gardens in New York City".

The importance of a "dedicated leader" has been found to be critical to a project's knowledge development and prospects for success (Corrigan 2011: 1232). Research exists which looks more broadly at the experiences of 'community food workers'. The role was proposed by a UK government policy document titled *Choosing Health: Making Healthier Choices Easier*. The research found challenges in the [1] nature of their role, [2] quantifying their success, [3] working with other health professionals, [4] gaining skills and knowledge and [5] finding strategies to work with communities (Coufopoulos et al 2010). There is a distinct lack of literature that seeks to understand the 'people' who initiate urban agriculture projects and these new non-professional food roles.

Innovative research conducted by Colasanti et al is particularly interesting as they seek to understand the 'people' of urban agriculture beyond both organisers and participants, to focus on the residents living in close proximity to projects and how expansion may be perceived. The results show general support for urban agriculture while suggesting opposition for expansion comes from three areas, "the extent to which it should occur, the purpose it would serve, and the people it would involve" (Colasanti et al 2016: 348).

2.4.4 Multi-Scalar and Multi-Faceted Claims For Urban Agriculture

The potential for urban agriculture projects to help solve wider societal problems has been widely investigated in the previous decade and a focus on this potential makes up the substantial bulk of currently extant literature in the field. The claims and outcomes of projects are wide-ranging and have been investigated across many scales, from global to individual benefits. In light of the substantial amount of research on the claims for urban agriculture and for narrative convenience and clarity, the literature has been labelled according to the dominant theme present in each 'claim' work. These labels are multi-scalar claims and multi-faceted claims. The first relates to work that investigates the impact of urban agriculture and related activities at different levels of society including, globally, on a city-level, community-level, household and individual. The second are multi-faceted claims in which research focuses on the phenomenon and its impact across different dimensions, including social, political, environmental and economic claims.

Multi-Scalar Claims

Global claims evident in the field, in order of prominence include the potential to address emerging issues resulting from globalisation (Irvine et al 2007) such as growing urbanisation (Aerts et al 2016), sustainability (Martin et al 2014, Stocker & Barnett 1999), urban sustainability (Colassanti et al 2016) and food security problems including food poverty alleviation (Badami & Ramankutty 2015a, Irvine et al 2007). Furthermore others conclude that urban agriculture has potential as an antidote to climate change and public health concerns (Aerts et al 2016). Urban agriculture has been found to offer a base for broader regional food system conversations (Mount et al 2013). In Turner's work centred on 'embodied connections', she interviewed twenty participants from seven community gardens and found that such gardens "have a significant role in facilitating the development of embodied and embedded relationships to place, food system and consequently in promoting sustainable living practices" (2011: 509).

To solve the difficulties present in claiming urban agriculture as a solution to such large-scale challenges, researchers have begun to investigate and disentangle the ways in which projects substantiate and contribute to these claims using different spatial units. However the literature remains in jeopardy of becoming repetitive and risks stagnation by accepting mostly unsubstantiated claims as fact. Interestingly, on a city level early projects were typically found to be "an effective grassroots response to urban disinvestment and decay" (Kurtz 2001: 656). Authors instrumental in analysing city claims include Twiss et al. They observed that as a result of urban agriculture projects, cities have enacted "policies for interim land use and complementary water use, improved access to produce, elevated public consciousness about public health, created culturally appropriate educational and training materials, and strengthened community building skills" (2003: 1435). There is a general consensus that a foodscape made up of both community gardens and city farms is a solution to inadequate access to food in cities (Ackerman et al 2014). City based claims are problematic as urban agriculture emerges unevenly (Smith et al 2013, Nelson et al 2013, Taylor & Lovell 2012) and cities experience stages of urban development differently. A solution to this would be placing more emphasis on understanding the conditions of the city studied.

At what is described as 'community level, positive outcomes mirror macro-scale ideas with benefits for food security and human health. Additionally at a community level, urban agriculture has been identified as producing opportunities for local ecology, social capital and opportunity for community development (Firth et al 2011: 555, Wakefield et al 2007). Recent work described the effect of food security at this scale as strong (Aerts et al 2016). Results obtained by Middle et al through utilisation of an ecosystem service perspective suggest that urban agriculture "can facilitate bridging interactions between different social groups, whilst providing opportunities for local residents to participate actively in green space planning processes" through a process of

increasing integration (2014: 638). It has been further hypothesised that the urban agriculture project "movement could act as a model for the implementation of more general sustainability policies on a local level" (Holland 2004: 285).

There is also value in understanding claims on a household scale, which can be done via two different approaches. The first method is through considering urban agriculture within the boundaries of the 'home' where it offers opportunities for improved wellbeing and friend making (Zhang et al 2013). The second draws upon ideas of scaling wider urban agriculture projects to include household activities, which when combined, could help confront many of the aforementioned urban problems as well increase community level benefits such as economic revitalisation (Gray et al 2014) This notion of scale is explored further in the next section. Individual claims suffer an academic tendency to be conflated with household and community claims.

Individual outcomes from urban agriculture involvement are more tangible and evidentially substantiated within the literature, including job creation and training (Kobayashi et al 2010), physical wellbeing through the creation of places for engagement (Twiss et al 2003), food and health education (Alaimo et al 2008) and increased fruit and vegetable consumption (McCormack et al 2010). Specific evidence for the latter demonstrates that "adults in households with household member who participated in a community garden consumed fruits and vegetables 1.4 more times than those who did not participate, and they were 3.5 times more likely to consume fruits and vegetables at least 5 times a day" (Alaimo et al 2008: 94).

Furthermore, other more intangible benefits are presented as stemming from project spaces with them contributing to identity building as acting as agents of cultural preservation and self-determination (Gray et al 2014) as well as creation of democratic citizens (Glover et al 2005). Additionally, participant engagement in projects has been recognised as demonstrative of an individual's wider commitment to sustainability (Twiss et al 2003, Bendt et al 2013). Projects "can also contribute to individual and community reconnection with the socio-cultural importance of food, thus helping facilitate broader engagement with the food system" (Turner 2011: 509).

Multi-Faceted Claims

More broadly multi-faceted claims are made without implications of scale with many researchers consistently acknowledging that urban agriculture provides social, economic (Schmelzkopf 1996) and environmental functions (Ballamingie & Walker 2013).

The social functions provided by urban agriculture projects include fostering a "common social and cultural identity for city residents" (Ackerman et al 2014: 189) as well as a spirit of community cooperation (Schukoske 1999). Further positive social outcomes include improved cross-generational (Armstrong 2000) and cultural

integration (Balmer et al 2005) with research suggesting urban agriculture has provided benefits for improving connections between immigrants and their cultural heritage (Saldivar-Tanaka & Krasny 2004). Community gardens specifically have been found to provide social benefits, including "increased social cohesion (the sharing of values enabling identification of common aims and the sharing of codes of behaviour governing relationships), social support (having people to turn to in times of crisis) and social connections (the development of social bonds and networks)" (Kingsley & Townsend 2006: 525). Nonetheless Kingsley & Townsend raise questions about the feasibility that such claims can be made for projects in infancy and suggest that benefits may be confined to a project setting (2006).

In terms of ecological and environmental functions, projects represent a logical juncture between ecological restoration and community gardening, by addressing the aims of each other (Irvine et al 1999). Community gardens and city farms specifically, are found to have a useful environmental role in the "reduction of heat island effects, mitigation of urban storm water impact and in lowering the energy embodied in food transportation" (Ackerman et al 2014: 190). Born and Purcell (2006) concluded differently, demonstrating scepticism about the positive environmental outcomes of projects. They are incredulous about claims that 'localised' food growing is inherently more environmentally sustainable, as in some places the ecological benefit from using less fuel for food transport is seemingly outweighed by the need for massive water inputs in spaces without access to water. However the ecological outcomes of urban agriculture has not yet been thoroughly researched within the field making all arguments relatively conjectural.

It appears evident that the research field is somewhat focused on the distant, avoiding carefully acknowledging the economic problems facing projects that may hinder the potential social and environmental outcomes (Beilin and Hunter 2011:536). The research has evolved into popular studies of project engagement as a means to develop a path to deep obligation and long-term commitment to sustainable living practice more widely (Turner 2011). This is particularly problematic when funding is considered by many researchers to be critical in being able to effectively promote healthy lifestyles (Corrigan 2011). This is compounded by the academic verdict that how a project is funded is one of the greatest barriers to urban agriculture development as described in the previous section (Holland 2011).

2.4.5 Urban Agriculture Re-emergence and Organisation

A dominant strand in urban agriculture literature seeks to cast light on the phenomenon's re-emergence and subsequent development as a movement. It has been suggested that urban agriculture is part of a wider phenomena where a local food social movement continues to be created (Starr 2010).

The rise in popularity of urban agricultural practices has been rationalised in two ways, interventionist and through the conditions which have facilitated it (Crane et al 2012). The rationale for UA's re-emergence (Marsden & Martin 1999) is that projects are used as an intervention vehicle for urban regeneration, social cohesion and solving related health problems (Kingsley and Townsend 2006). This intervention idea is supported by claims made by Schukoske in earlier research (2000), which identified the potential for community development through gardening. She highlighted that it can help overcome the problems created by disused land in urban settings such as criminal activity, waste accumulation, health risks and strained neighbourhood relations caused by the aforementioned problems occurring in proximity to households. Urban agriculture has been considered a distinctly social movement (Ackerman et al 2014) and in cases where food production is limited (often due to space and knowledge scarcities), the social goals of UA projects supports their increasing numbers (Dimitri et al 2016). Urban school gardens have been given specific citation as crucial in terms of remedial work for improving food education (Boyle 2013).

Many wider conditions have been identified by Bell and Cerulli (2012) who concluded that increasing food prices and concerns about the environmental impact of industrial agriculture are, among other things, producing conditions conducive to the emergence of community gardens specifically. They further identified the complicated interactions between niche, regime and landscape-level actors and structures evident during both the emergence and stabilisation of new projects. They found that a project's self-organisation and birth from local conditions are of critical importance and a necessity for them to be able to access more formal structures of support.

The theme of self-organisation stands out in other work. Research on this is limited but has been done primarily from a complex systems perspective (Wilson 2010, Batty 2008). A complex systems approach seeks to understand the interconnected and rapidly changing world through the employment of interdisciplinary knowledge about the structure, behaviour and dynamics of change. The importance of self-organisation was also found by Stroink and Nelson (2013: 620) as the second stage of a four-phase project development cycle. They stated that [1] projects emerge, [2] self-organise, [3] adapt to change and [4] harness innovation for new growth. This assessment is mirrored by Twiss et al (2003) who found that urban agriculture projects provide an opportunity for actors to organise around issues and build social capital.

A developing debate within UA literature seeks to identify to what extent this movement is occurring in particular cities. The consensus between academics that have studied where UA projects exist is that they are unevenly distributed across areas in a city (McClintock 2014). Taylor and Lovell (2012) identified *unevenness* when looking at different UA project types in Chicago (2012: 64). They found "complex and

interacting demographic, cultural, economic, infrastructural and historical factors" as reasons for this (Taylor & Lovell 2012: 64). Evidence of project *unevenness* was supported by the work of Smith et al who found community gardens did not emerge in line with 'community prioritisation' (Smith et al 2013). Community prioritisation being targeting by the State to intervene in social, health, environmental and economic problems experienced in a specific area. The authors identified a prevalence of community gardens in areas with a higher than average medium household income (Smith et al 2013). Conversely, finding that the resources for "community food production" were "evenly distributed across the study area" in Madison, Wisconsin (Smith et al 2013: 1415). They identified a reason for this existence of uneven emergence. Smith et al discussed how "spatial decision-making" had influenced the placement of projects within the city. Decisions were made "based on factors other than the aims of the food security policy and proximity to food insecure populations, despite what might be stated publicly" (Smith et al 2013: 1425). The undercurrent being that there are 'interests' at play in where projects are located.

A study of UA in South-western Ontario by Nelson et al (2013) similarly identified uneven geographies of project emergence. Within the study they drew upon the concept of 'social capital' to identify a factor contributing to uneven project distribution. Social capital meaning "networks together with shared norms, values and understandings that facilitate cooperation within or among groups" (OECD 2001: 41). More simply, social capital or value that can be created through relationships or project connections made by organisers. On the face of it, this seems beneficial for projects however the character of the relationships between networks can also present a challenge for UA emergence. These relationships identified by Nelson et al (2013) are twofold. There is a need for bonds, relationships between organisers from different UA projects. Strong relationship bonds of this nature are good for civic engagement however too strong a tie can be exclusionary to other new relationships and foster a resistance to change. The same was identified with bridging connections between diverse organisers, with weak ties creating vulnerabilities in which a network's decisions can be susceptible to influence by outside interests or elites. Work in this area is promising however there remains a gap in terms of identifying how flux in connections is experienced by an UA project.

2.4.6 Barriers For Urban Agriculture Projects

The obstacles encountered by urban agriculture projects at differing stages of development are a common and longstanding research topic. Significant challenges were found to be inhibiting the formation of new projects, with early research for this field by Schmelzkopf (1996: 364) finding urban community gardens in New York became "contested space", exhibiting power relation struggles for the "right to land" between gardens and residential housing. This was similarly evidenced by Angotti in

2015, who described the shortage of space and increasing cost of land, within a back drop of outmoded land use policies, as barriers to formation and inhibitors of progress. Alongside this shortage of access to suitable land, shortcomings in available gardening skills were also deemed obstacles to urban food production (Kortright & Wakefield 2011). Pursuant to the aforementioned problems, Wakefield et al (2007: 92) also found barriers to include "bureaucratic resistance, concerns about soil contamination and a lack of awareness and understanding by community members and decision-makers".

Once a project had attained land access, socio-institutional factors were found to be the most significant role 'threatening' the stability of projects. In research utilising case studies from the Netherlands and Switzerland, the severity of this vulnerability differed depending on project locality and associated conditions (Knapp et al 2016). Another considerable factor inhibiting established projects is economic sustainability with Caraher and Dowler (2007) finding all twenty-five project case studies reporting only a short-term funding commitment. The funding commitments were between six and twelve months and relied on external public funding rather than income-generation. This is reiterated by Sonnino and Griggs-Trevarthen (2013) who hypothesise that for a community food enterprise to sustain itself, external funding is crucial. The economic sustainability of the projects, where activities are part of the new wave of social entrepreneurship, become jeopardised by the inability of urban farmers and gardeners to create paid positions (Dimitri et al 2016). Continuously highlighted is the lack of adequate policy and legislative coverage for urban agriculture, which in turn restricts provision for these financial and human resources (Carahar & Dowler 2007).

Extant studies have identified barriers to the success of urban agriculture incuding "zoning regulations; lack of funding and technical assistance; a perception that farming is not a legitimate use of urban space" (Reynolds 2015: 242). In Reynolds' study *she* found varied experiences by practitioners in "obtaining financial support, accessing city-owned land and securing services from city agencies" (Reynolds 2015: 242). One rationale given for these different experiences include an "organisation's leadership demonstrating race-based disparities that appeared, in some cases to stem from structural racism" (Reynolds 2015: 242). Saldivar-Tanaka & Krasny (2004: 399) additionally identified perceptions held about whether urban agriculture was a legitimate use of urban space finding that there were pressures for the land to be used for housing.

Ballamingie and Walker (2013: 553) examined on the ground challenges experienced by a large-scale established project. Challenges to expansion included [1] the limitations of the site, [2] lack of funding for paid staff and budget to run project activities, [3] managing and negotiating multiple stakeholder interests at many levels and [4] attitudes of local residents. The barriers identified for one project, mirrors many of the challenges

identified by Guitart et al who carried out a systematic review of community gardens. The most frequently cited challenges from across the studies, included "insecurity of future land access, [2] lack of funding, [3] cultural difference issues, [4] neighbourhood complaints, [5] managing volunteers or volunteer drop-off and [6] lack of knowledge" (Guitart et al 2012: 368).

An emerging literature theme questions the permanence of urban agriculture projects. Borelli (2008) suggesting that questions around land ownership and resulting legal issues hampers potential project fulfilment. She outlines proposals for a need to redefine land value. Schukoske (1999) also used the prism of permanence in her evaluation of the difficulties experienced by projects. Her work specifically highlighted the problems for urban agriculture project in obtaining access to resources and fears by individuals that have become exposed to potential legal liabilities. Recent work by Koopmans et al (2017: 162) claim a lack of permanence in urban agriculture projects weakens the potential for place-making as a result of project development. The authors find that a degree of autonomy and feeling of security is required by the individuals or groups involved to contribute to place-making potentials.

2.4.7 Caution and Directions in Urban Agriculture Research

Despite considerable knowledge development in this relatively new research field, healthy scepticism is necessary and on the increase. Caution about inflated claims (Martin et al 2014) is the most apparent form of this in the literature with many questioning the feasibility of substantiating the claims (see previous section) made for the potential of urban agriculture in different contexts. For example, research indicates that feasibility for urban agriculture in high-income countries can make more impact on urban food security than in low income countries (Badami & Ramankutty 2015a). Kingsley and Townsend call for time and space studies, which seek to understand the time it takes to attain beneficial claims (2006).

There have also been findings of major disparity between academic claims for the potential of projects and claims made in specific projects as outlined by the 'cases' of projects used. Carahar and Dowler (2007) found this disparity where projects claim to tackle food poverty but actually concentrate on skill acquisition and individual access issues rather than food inequalities. Furthermore, according to McClintock the field itself is at risk of undermining the potential for urban agriculture with studies almost-obsessively highlighting the role projects have as a "protective counter-movement" to the reduction of "social safety net" which "underwrites neoliberalisation" by refusing to understand the contradictions properly (McClintock 2014: 11).

From a historical geographic perspective, Barthel & Isendahl (2013) conducted an original study which looked at the role of urban agriculture from a historic/pre-historic

site perspective. This concluded that rather than playing an antithesis role in the urban environment, the phenomenon's occurrence endures during times of scarcity and has always been a crucial contributor to the resilience of cities. Tornarghi (2014) points to specific shifts including increasing surveillance, leisure commodification and increased corporate control, governance and policing of public space, which have contributed to the modern re-emergence of urban agriculture.

Mok et al (2014) succinctly identified five areas of exploration which would improve understanding about the contribution and place of urban agriculture in the future for food security and social wellbeing. These include [1] "the impacts of continued urban sprawl and loss of peri-urban agricultural land, [2] the appropriateness of government and institutional support at local, regional, and country levels, [3] the role of urban agriculture in urban self-sufficiency, [4] the risks posed by pollutants from agriculture to urban ecosystems and from urban ecosystems to agriculture, and [5] the carbon footprint of urban agriculture and use of 'food miles'" (Mok et al 2014: 21). Mok et al also indicated a greater prevalence of the negative impacts of urban agriculture practices than thought previously.

Although urban agriculture research has made considerable progress, many feel that poor data quality and weak study designs are rife within in the research area (Poulsen et al 2015, Warren et al 2015b). The field must markedly shift from the anecdotal to the qualitative (Zessa & Tasciotti 2010) whilst improving understanding of the embedded complexities and contradictions that exist in urban agriculture movement (McClintock 2014).

CHAPTER CONCLUSION

The purpose of the literature review has been to develop a current and relevant understanding of the subject of study. This included key concepts and ideas as well as understanding how research has previously been conducted. The literature review was instrumental in shaping the research aims and objectives. The process of conducting the review identified present-day gaps and supported the need for this research. The areas reviewed included *Urban Sustainability* (2.1), *Food Security* (2.2), *Alternative Food Networks* (2.3) and *Urban Agriculture* (2.4). The literature review took the reader from the broader, more general global challenges towards the specific subject of this research, urban agriculture.

Established and Emerging Projects in Hull and Copenhagen.

3 METHODOLOGY

Introduction

The purpose of this chapter is to explain the research design and strategy implemented to fulfil the research objectives. The structure chronologically mirrors the order in which the method was implemented, with specific methods running concurrently throughout the duration of the research. The methodology had a degree of flexibility based on changes to the research aims and objectives as issues and themes arose. These changes were followed and subsequently addressed within the research. Methodological reflections are included within the story of the method. Researcher reflexivity was critical to the development of purposeful data collection and subsequent analysis strategy. The chapter describes how the method was gradually built up and sustained throughout the research period. The empirical research was conducted for three years from February 2014 to February 2017.

3.1 Explanation of Approach

The research employed qualitative research methodologies including identifying UA projects, mapping the practice of projects, identification and development of case studies. In addition, semi-structured interviews were completed and a comparative study adopted. This assisted in understanding the 'flux' and changing nature of the UA project landscape. The comparative case study locations were Kingston upon Hull in the North East of England and Copenhagen. A multi-method research strategy was adopted to support the exploratory and descriptive nature of the research aims. The research used qualitative research methods to understand the idiographic paradigm (Johnson & Onwuegbuzie 2004). The rationale being that the research is seeking to produce new knowledge about projects and organiser behaviour and the reasons that govern the behaviour of both (Bogdan & Bilken 2006) as outlined in the research objectives.

Qualitative research methods facilitate the understanding of how and why things happen through in-depth exploration. A qualitative method is typically considered advantageous in seeking respondent driven meaning, for theory development and the addition of 'quality' to studies. Berg describes this 'quality' as the essence or ambience of something (Berg 2007). The variables within UA projects and of organisers are best understood in their 'natural' settings (the site), studied over real time (Frost 2001). Understanding was the paramount objective. The approach sought new knowledge

through the continual building up of 'thick' data to understand and encapsulate the complexity and variety of UA projects.

To ensure a robust research design, numerous qualitative data collection methods were considered for feasibility and usefulness in fulfilling the research aims and objectives. The emergent method design enabled testing of both research aim appropriateness and literature claims. As shown in Figure 2 research method phase is discussed in the order in which it was implemented. The figure outlines the timeframe of the method phase and shows which methods are used to fulfil the research objectives and answer the research aims. To provide context to the figure I will briefly outline each research method phase. Each phase is then discussed in turn during the chapter itself.

The remainder of this introductory section describes the appropriateness of a qualitative approach in this study. Following this the comparative city locations of Hull, UK and Copenhagen, Denmark are introduced and given context (3.2 Method 1: Comparative Urbanism; Hull and Copenhagen). In brief, numerous factors contributed to the decision to conduct a comparative study. This included the dominance of North American literature studies and lack of a European perspective on UA. The rationale for these two specific locations include: the longstanding similarities between the U.K. and Denmark, particularly with regard to history of allotment provision in the cities, the limited evidence for UA existence within Copenhagen and calls for studies of UA in 'ordinary' places within the U.K. (Milbourne 2012).

Section 3.3 titled *Method 2: Finding and Identifying Urban Agriculture Projects in Hull and Copenhagen*, discusses considerations in the search for UA projects and the two phases used to find and identify projects; desk based research and on the ground research. Initial observations are made about UA, providing context for the need to develop a method to map practice. Section 3.4 explores *Method 4: Mapping Urban Agriculture Practice (Projects, People and Activities)*. The mapping section builds on the insights gained from finding and identifying UA projects on the ground.

Section 3.4 is titled *Method 4: Case Study Projects in Hull and Copenhagen*. The section is informed by the previous mapping task. It focuses on case study literature and both the rationale and appropriateness for its implementation in this study. Furthermore there is an in-depth discussion on the consideration and criteria used to select appropriate case studies.

Section 3.5 focuses on the *Method 5: Interviews With Project Organisers in Hull and Copenhagen*. It describes the consideration of focus groups and rationale for the decision to interview. The section includes interview theory, the approach taken including planning, sampling and consideration of other data types collected during the interview process. To summarise, semi-structured interviews were conducted with

organisers in both cities. In total forty UA projects were included in the study with forty-six organisers interviewed (of which many were interviewed multiple times).

Next my *positionality* in the research is explored (3.7). Positionality discussion centres on three areas, my experience, background and identity. A section follows on *ethics*.

The final section of the chapter 3.8, discusses the *Analytical Framework*. The section is chronological, explaining the stages of data analysis for the methods implemented. In brief this includes transcript codification, multi-level theme development, identification of all the projects included in the study and the introduction of the data chapters.

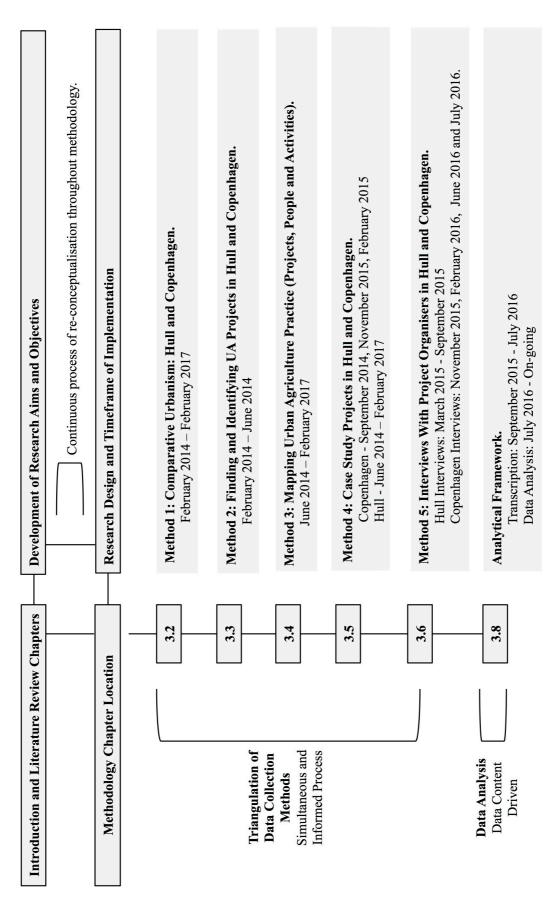


Figure 2 Summary of the research phases, timeframe of implementation and location within the methodology chapter.

3.2 Method 1: Comparative Urbanism; Hull and Copenhagen.

The locations selected for this study are Kingston Upon Hull, UK and Copenhagen, Denmark. They are chosen as contrasting cities with complementary UA practices. This section explains why a comparative approach is appropriate, contextualises the locations and demonstrates how and why the choices are appropriate for the study of UA. The following method sections explicitly explain how the process of comparative urbanism was conducted. By synthesising findings from both locations I will generate new insight into UA project emergence.

The reason for engaging in comparative urbanism is [1] to be able to identify nuanced similarities and differences in UA practices, [2] to explore whether shared narratives of organisers are present across Hull and Copenhagen, [3] to identify best practice examples to be shared within each location, [4] to identify any existing academic misinterpretations in current work and [5] to create a basis for attitude benchmarks about UA in each city from which future studies can be conducted.

The rationale for choosing the cities of Hull and Copenhagen to explore UA is multi-faceted. Firstly, choosing cities is pragmatic. Cities reflect the 'urban' nature of the 'urban agriculture' phenomenon. Cities are where UA happens and therefore a broader understanding of the cities in which they emerge is significant. Most significantly both have a long-standing presence of allotments.

Secondly, as specified in my aims and objectives I am conducting UA from an outsider perspective. During the initial data collection for Hull my knowledge on UA was growing and the opportunity for comparison enabled deeper understanding by gaining insight into how projects emerged in another location.

Thirdly, human geography literature specifically calls for more comparative studies in the study of cities (Robinson 2011, 2013). Taking a comparative approach addresses calls for researchers in the UA field to increase the transferability of their studies with researchers having been accused of weak study design (Poulsen et al 2015, Warren et al 2015). UA is emerging in many urban environments and Guitart et al (2012) call for European perspectives for the field.

Fourthly, in answering the research question to explore UA project emergence, whole city studies are required to understand the 'even' or 'uneven' geographies of emergence (Nelson et al 2013, Taylor & Lovell 2012, Smith et al 2013).

In considering my approach to the comparison, a number of questions were raised.

Do cities have projects in various phases of development, both established and emerging?

- How many projects do cities have?
- Do cities have examples of similar types of projects (community gardens, allotments, and urban farms etc.) or deviations from conventional types?
- Do organisers have the same narratives in projects?
- Do the same people initiate and run projects in different cities?
- Are projects initiated for the same reasons in different cities?

To begin to answer these questions I looked for evidence of UA activity in multiple European cities. There is evidence of UA in many cities and many European cities could have been chosen for this study. To explore the uniqueness of the cases, scoping trips were conducted to see UA in Athens, Greece and Warsaw, Poland as potential locations for the comparative study. These scoping trips were part of research community training schools. The training schools were run as part of COST (Cooperation in Science and Technology), an inter-governmental initiative, which aims to integrate and support scientists and their research communities.

3.2.1 Research Location Context

This research focuses on the cities of Kingston Upon Hull known as Hull and Copenhagen (Figure 3). Hull is located on the North bank of the Humber Estuary and is one of Yorkshire's major cities. The City has developed as a major sub-regional centre for a wide area in the East of the Yorkshire and the Humber Region. The City of Hull is geographically encased by the East Riding of Yorkshire. Copenhagen is the capital of Denmark, which is divided into two provinces, Copenhagen Town (Byen København) and the Surrounding of Copenhagen (København Omegn). To provide context to the research locations a short description of the main similarities and differences between Hull and Copenhagen and the U.K. and Denmark is provided.



Figure 3 Top, Kingston Upon Hull location in relation the Humber Estuary and the North Sea.

Bottom, Copenhagen location in relation to the Baltic Sea.

3.2.1.1 Hull and Copenhagen

The following statistics for Hull are from the Hull Data Observatory (2017) and the Danish statistics are from Statistics Denmark (2017), unless otherwise stated.

Population

The population of Hull is 260,000. There are more men than women (males: 50.4% and females: 49.6%). Hull has a high population density of 36.5 people per hectare in comparison with the UK national population density of 4.3. The population of Copenhagen is 601,448, more than double that of Hull. The population density is 6,900 people per square kilometer. This is close to 10% of the country's total population. Copenhagen is very densely populated at almost forty-five times denser than the Denmark on average. There are more women than men (females: 50.6% and males: 49.5%).

Young people dominate the population of Hull's population with the largest five year age group of 25-29 years. The UK average is 45-49 years. Hull is similar to Copenhagen with a quarter of the population aged (25-34 years). The average age of a Copenhagen resident is 35 years. Life expectancy in Hull for males and females is three years below the national average. Life expectancy in Copenhagen is higher than Hull.

In terms of ethnicity 90% of Hull residents describe themselves as White British higher than the national figure of 80%. The BME population in Hull is therefore 10%, lower

than the 22.2% national average. The largest BME group in Hull is 'White: Other' which is 4.4% of the population. Nearly a quarter of the population of Copenhagen are of Danish origin. 8% of the population is descended from Western countries and 15% from non-Western countries.

Health and Wellbeing

The health and wellbeing statistics for adults, young people and children in Hull are worrying Less than half of adults in Hull eat their recommended '5 a day fruit and vegetable portions'. 70% of the population is overweight or obese and nearly a third describe themselves as physically in active. This is far low in Copenhagen with half of the population considered seriously overweight. Rates of disability for adult females and males in Hull are higher than national statistics. Statistics for childhood obesity in Hull are concerning with nearly 30% of six year olds classed as overweight or obese with this statistic increasing to 36% for 11 year olds. However child obesity has seen decreases the last few years. Childhood obesity rates are a third lower in Copenhagen.

Employment

In terms of industries the largest sector in Hull is manufacturing representing over a quarter of total gross added value, far higher than the 10% national average for the UK. Other predominant sectors include public administration, education and health. 7% of economically active people in Hull are unemployed with the unemployment rate for 16-24 year olds particularly high at 15.8%. These statistics are improving. Predominant sectors in Copenhagen are tourism, food, public administration and creative industries. In 2018 the unemployment rate for Denmark was 3.9%. Rates of unemployment in young people was higher at 9.1%.

Poverty

There are 326 local authorities in England. In the Index of Mutliple Deprivation Hull ranks as the 3rd most deprived local authority and forth worst in terms of income. It is the most deprived local authority in terms of education, skills and training. Nearly 14% of all households are classed as in fuel poverty. Almost 30% of all children under 16 live in poverty, almost double national average. In terms of homelessness in Hull, between March 2017 and April 2018 there were a total of 644 homeless decisions made. Copenhagen has more poverty than the other regions of Denmark. Unlike Hull, Denmark has only introduced a poverty threshold in the last two decades. Persons considered to be 'severely materially deprived' nearly doubled from 2.0 to 3.7% between 2008 - 2015.

Resident Opinions

As part of the *People Panel*, *Making Your Voice Heard* residents of Hull were asked for their opinion on the city. Residents identified priorities for the city that needed to be address. In order of priority these were [1] improving infrastructure, roads and transport, [2] encouraging new business to invest and established businesses to be successful, [3] increasing the availability of secure, well-paid jobs, [4] reducing crime and improving community safety and [5] increasing affordable, quality housing and reducing homelessness. (Hull Data Observatory 2016) Feelings of a neighbourhood community are strong in Hull. Almost 50% of residents talk to neighbours (more than just saying hello). 64% feel they belong to Hull and 53% feel they belong to their immediate neighbourhood. Two thirds of the People Panel respondents rated the threat of climate change as high. (Hull Data Observatory 2016) Residents describe Hull as having an interesting history, being an affordable place to live with people who are warm and friendly. However they also identify that Hull is not a particularly modern city, had a bad reputation and it is difficult to gain employment. (Hull Data Observatory 2016).

Denmark has topped the European Commission's 'Eurobarometer' in terms of well-being and happiness every year since 1973. Most recently, Denmark was ranked the second happiest nation in the World Happiness Report 2017. Copenhagen is a cycling city with around four hundred kilometres of cycle paths (The Urban Life Account 2014). 62% of the inhabitants of Copenhagen take their bike to work or study all year round (The Urban Life Account 2014). 82% of Copenhagers feel satisfied with their opportunities to participate in urban life and 59% of Copenhagers considered where they live to be both vibrant and varied (The Urban Life Account 2014). Three quarters of Copenhageners say that they take part in or watch event in the urban space at least a couple of times a year (The Urban Life Account 2014). Residents are welcome to more tourism in the city.

3.2.1.2 UK and Denmark

Statistically, the two countries share many similarities. A summary of the relevant statistics can be found in Table 5. Although the U.K. and Denmark have different population size and density they share similar average ages of population and rates of both employment and job security (a signifier of employment quality). In terms of health, life expectancy is similar between the two countries and both have a National Health Service. Similarities that are particularly relevant to this study include the average amount of time spent volunteering at three minutes per day, urban population as a percentage of total population and positive rates of annual urbanisation. Furthermore low levels of agricultural employment whilst sharing a high prevalence of agricultural land.

Noteworthy differences between the two countries include the stronger positive attitudes of the Danish towards access to green space and frequency of experiences that are positive day to day. A distinct difference is voter turnout with a third less of the population in the U.K. voting than in Denmark. Danes pay one of the highest levels of income tax in Europe and are one of the most egalitarian countries, with almost one percent of gross national income per person spent on foreign aid.

Additional differences between the two include; the average number of hours worked; with the British working on average one hundred and eight hours more a year than the Danish. Disparity between the rich and the poor is different between the two countries, with the top twenty percent of Danish population earning four times as much as the bottom twenty percent. However in the UK, it is six times the amount. Although this still shows that both have inequality (OECD 2016).

Denmark ranks highly in terms of the quality of education and healthcare provision, protection of civil liberties, government transparency, democratic government, prosperity and human development (OECD 2016).

Indicator		OECD Average	United Kingdom	Denmark
Population	Total population (Million)	n/a	63.65	5.61
	Population growth rates (%)	n/a	0.7	0.4
	Youth population aged less than 15 (%)	n/a	17.8	17.3
	Elderly population aged 65 and over (%)	n/a	17.3	18
Housing*	Dwellings without basic facilities (%)	2.1	0.4	0.5
	Housing expenditure (%)	21	23	25
	Rooms per person (Ratio)	1.8	1.9	1.9
Income*	Household net adjusted disposable income (GBP)	23268	21400	21607
	Household net financial wealth (GBP)	67797	56074	43975
Jobs*	Labour market insecurity (%)	6.3	5.7	2.3
	Employment rate (%)	66	73	73
	Long-term unemployment rate (%)	2.58	2.22	1.66
	Personal earnings (GBP)	32856	33406	39764
Community*	Quality of support network (%)	88	93	96
Education*	Educational attainment (%)	76	79	80
	Student skills (Average score)	497	502	498
	Years in education (Years)	17.5	16.7	19.6
Environment*	Air pollution (Micrograms per cubic metre)	14	11	11
	Water quality (%)	81	87	95
Civic Engagement*	Stakeholder engagement for developing regulations (Average score)	2.4	2.9	2.1
	Voter turnout (%)	68	66	86
Health*	Life expectancy (years)	79.9	81.1	80.4
	Self-reported health (%)	69	74	72
Life Satisfaction*	Life satisfaction (Average score)	6.5	6.5	7.5
Safety*	Feeling safe walking alone at night (%)	68.3	77.8	85.2
	Homicide rate* (Ratio)	4.1	0.2	0.3
Work-Life Balance*	Employees working very long hours (%)	13.02	12.83	2.21
	Time devoted to leisure and personal care (Hours)	14.91	14.87	15.87

Table 5 Comparison of key indicators – OECD average, UK and Denmark. * From the wellbeing index by the OECD 2016 (excluding homicide rate).

The next section explains the method used to find and identify the UA phenomenon in each city.

3.3 Method 2: Finding and Identifying Urban Agriculture Projects in Hull and Copenhagen.

The story of the method began very quickly after deciding the broad research topic, the re-emergence of UA that is being experienced across many towns and cities in the Global North. Unusually for a PhD research project the data collection began almost immediately, running across the three-year time period. I was able to make the most of this immediacy, maximising my ability to take an objective and longitudinal approach. This addresses calls for such an approach in the literature (Glover et al 2005). To explain further, at the beginning I had moved to Hull to begin the research with only a brief prior knowledge of the area (as discussed in the previous section) and needed to establish what types of UA existed and where they were located. This need was compounded by the unpredictability of how obvious or hidden the practice would be. This is explored further below. Alongside this, the meaning of time in relation to the foodscape became a critical consideration to this early approach. For example, it was unknown how operational projects would be across the year and if the growing season began in early spring and I started in the February this needed to be taken into account. By delaying the data collection, an opportunity to identify UA may have been lost. A further deciding factor was that the research period was three years and literature claims are made that on average projects take three years to establish (McGlone et al 1999).

3.3.1 Further Considerations For Finding and Identifying Projects

In seeking to identify UA activities, I was aware that many of the people that the research would meet may not identify as, or even be aware of the term, 'urban agriculture'. As clear in the complex and shifting terminology highlighted in the literature this needed to be anticipated (2.4.1). Though I decided to work through the complex array of terms and practices within the research, I did not seek to come up with an absolute definition. The decision was taken to explore what terms are used, and how, by people involved as well as in academic discourse.

This attempt at clarity opened questions about the parameters of the activities this study should include. The decision was made to produce a continual accumulation of knowledge of projects from the ground up to decide which projects should be included in the study. The approach was to be inclusive with all food and environmental-related projects embraced until relevance and appropriateness to UA became clear. This appropriateness would be evidenced through visual inspection of the project and through discussion with people active in the foodscape. I needed to construct an overview before I could become selective. These considerations opened many questions about the best way to begin to find and identify UA on the ground in Hull and Copenhagen.

- If some extant literature presents UA as an antithesis to wider external pressures in society such as increasing surveillance (Tornaghi 2014), would at least some projects operate covertly?
- If people participate in projects to counter an increasingly technology dependent society, would they have an online presence or only exist on the site in which they operate?
- With findings that some UA activities include illegal practices, would a project and the people involved want to be found and identified, and what would the ethical implications of this be?
- With people identifying as participating in alternative and radical practices to escape their everyday lives, would they be willing to participate in the research?

This led to a two-phase approach, desk-based and on the ground research.

3.3.2 First Phase; Desk-based Research For Hull and Copenhagen

To find projects in Hull and Copenhagen a multi-phase approach was adopted. Starting with only a limited knowledge of the city and faced with an evolving foodscape, a list of potential data sources was created. This first phase comprised of desk-based research.

For Hull this included searching the Hull City Council website for allotment site information and having conversations with different council departments on the phone. This led to conversations with the 'local area teams' in Hull. The area teams are formed by seven committee groups, working across all parts of the city under a local ward councillor. The teams aim to facilitate faster decision-making and increased public participation. The rationale for using allotment sites as a starting point was the longstanding presence of local authority managed allotments in the foodscape of many UK cities. Further to this, searches were conducted in print media (local newspapers remain popular in Hull) and on social media. I also searched environmental-related national organisation databases and UA specific networks, such as the Federation of City Farms and Community Gardens. As I collected the data I produced a database of projects to follow up. However, the projects found in this way were all to a certain extent 'advertised' and would not necessarily suffice in revealing all the possible practices present in the city. By 'advertised', I mean a visual presence other than existing on the site itself.

For Copenhagen, I also completed desk-based research to find out whether any studies had been conducted specifically looking at UA projects. There had not. I sent out requests for information on social media and emailed organisations including the local Kommune (local authority equivalent in Denmark). The greatest insight achieved from desk-based research was an email of potential project names, received from a member of 'Copenhagen Open Gardens' because of an interaction on social media. Open

gardens are typically when a private garden or space is opened for a short period to the public. Hull also had evidence of open gardens. This list gave a starting point for geographically finding some of the projects prior to the trip. However, from the project names there were the same difficulties in identifying the people behind the projects as experienced in Hull.

To find projects which were 'unadvertised' in Hull and Copenhagen, a second phase was needed with 'on the ground' fieldwork.

3.3.3 Second Phase; On The Ground in Hull and Copenhagen

The database had possible project names, site locations and names of people involved in both Hull and Copenhagen. At this stage the database was best described as fragmentary usually having only one of the aforementioned pieces of information. This was instrumental in the decision to move 'on the ground'. This stage is best described as 'walking the city'. This meant I could follow up the leads for projects as well as identify other activities that were 'unadvertised' as I moved around the city. For readability I will discuss the second 'on the ground' phase for Hull and then Copenhagen.

3.3.3.1 On The Ground in Hull

In Hull when on the ground, Google Earth proved useful in identifying green space between residential areas of the city. I used this when I had been given the location of the project but not the name. I was able to use Google Earth to identify the different ways in which the site could be accessed or viewed when an obvious entrance could not be found. When a site was found I took images of the site, noted the location and any features (signage, flyers), which would lead me to the name of the individual, group or organisation that were using the site. In some cases people were present on the site. For some of the projects in this study it took several months to identify the people involved. This was particularly the case for projects, which were undergoing 'ownership' transition, moving from being run by one organiser group to another.

Only a month after commencing this research, I was informed through the first phase of the research that an event was organised at Hull's Guildhall for March 2014. This marked a change in the research from desk-based to in the field. The event, 'Greenshare' was a conference billed as an opportunity for people to share all the environmental achievements of the city over the previous year. This provided the opportunity to meet some of the groups and people who were involved in what may lead me to projects. On the day I signed up to all talks on the programme that related to food and gardens. I had my details ready for anybody I spoke to about the forthcoming study. Whilst attending I signed up to the mailing lists and added the names of any people who might be useful to my database. This meant on the ground data collection and case study identification began four weeks after the initial research start date. From the

conference, other than the leads I had generated to identify projects, I was struck by the number of attendees suggesting I visit projects run by people that were absent from the conference. Although many relevant people were in attendance I wondered for what reason these others did not attend considering its prominence. There was an element of farce in this situation.

Whilst at the conference I also discovered a significant piece of information when I probed about projects I had read about or seen online. The general response when asked was that the person who started it now had another project. There seemed to be a general lack of knowledge of the status of a project, particularly on whether it was operational or not. The most efficient way to find whether a project was operational was to physically try and visit the site itself. This led to a remarkable cycle of moving between desk-based and on the ground research as I collected data from each. An unexpected but highly useful source of data collection was the local area 'community noticeboards' (Figure 4).



Figure 4 'Avenue Community Noticeboard' at the entrance of park in Hull.

These waterproof boards are dotted around the city and are used as an information point by the local area committee teams and residents. Local authorities place information such as planning applications, notices about anti-social behaviour, free local sport programmes and opportunities for resident participation in local planning. Pursuant to this, calls for groups to take part in 'Hull in Bloom' were pinned to the board. Hull in Bloom is an annual city-wide competition for residents and groups to submit growing achievements for assessment within many categories. Residents use the board to put up information about the events being hosted by various groups in the city. These often contained details about environmental groups and networks. The information was

usually advertising forthcoming events hosted by the groups. This provided further leads to activities.

Data collection continued with me implementing this cycle of desk-based and fieldwork research. However, as my ability to find and identify research for UA improved, I was able to discern indicators more effectively that suggested a project might be active. For example, over the first year I noticed unmaintained planters change from being neglected to being in full bloom to then having strawberries, tomatoes and herbs planted. The planters had the first names of the people who tended each planter on them but this did not help in identifying who was responsible for them. So, for several months I made sure to walk that route when I was in the area and one day I saw a woman picking up litter on a corner of the road near one of the planters. I approached and asked whether she knew who was responsible for the planters, and she told me that this was one of her planters. I explained the research and organised a time to speak. I also stood at allotment gates, waiting for someone to enter to find out the name of the person who was, for example, the 'Chair of the Allotment Society' or who is most heavily involved in the running of the allotment site. It was interesting to note that although an individual may not have been in an official role, a plotholder perceived them to be the organiser often they were right. At this point in the research there were twenty-five potential projects found in Hull of which I had only seen and spoken to people involved in sixteen.

3.3.4 On The Ground in Copenhagen.

Initial on the ground research in Hull informed my approach to research in Copenhagen. Fieldwork in Hull suggested that the main way to identify UA projects was to be physically present in the research location. In September 2014 I conducted a scoping trip to Copenhagen. The rationale for this was that projects often operate informally and a project's online presence does not necessarily reflect whether it exists or what it does in reality.

During the scoping trip, the potential project sites were found as well as others not indicated by the initial desk-based investigation. On the public sites I took photos of the site and the location was recorded. Images were also taken of any written materials about the site, such as signage and posters. This usually had information about the site, including project aims, activity sessions and contact details. I found that projects were clustered in two main areas of Copenhagen called Nørrebro and Østerbro rather than the city centre itself.

I had expected a large commune called Freetown Christiania (in central Copenhagen) to have an abundance of UA projects. The area is well known around the world for its political progressivism and virtual autonomy from the city authorities. However, from

visiting and speaking to people there, I found that it was on the site of a former military base. The residents had commissioned soil testing and discovered that toxic chemicals had leached into the soil from explosive materials stored directly in the ground. Results indicated that any food grown on the site would not be fit for consumption and therefore any food grown is done above ground in containers and on only a household basis. It was significant that on the Copenhagen scoping trip, there was not a single public site with people on it, either visiting or growing produce. This proved to me that, unlike Hull more initial scoping was essential.

In conducting on the ground research I was unable to read the Danish noticeboards in the same way as I had done in Hull. However, I could look at the design and semiotics of posters such as green fonts and images of food. When I found these I took photos and translated them afterwards. As I found these new signs for projects I contacted the people involved and this snowballed with them suggesting other projects for me to follow up.

Serendipity intervened for one rooftop project that I had struggled to contact in other ways. Whilst attending the training school in Athens, one of the attendees worked at the University of Copenhagen and was part of a team of three organisers who had set up that project.

In total six research trips were made to Copenhagen; September 2014, November 2015, February 2016, June 2016, July 2016.

To summarise, I made many interesting observations from the fieldwork in Hull and Copenhagen. These are listed below.

- Many of the sites that had previously been identified online had ceased to exist on the ground. This supported what conference attendees had told me about projects, that some had ceased to exist, lacked maintenance or had moved location.
- UA activities take on a variety of forms with very different types of people involved.
- 'Isolated' projects were identified which did not interact with any other projects or related activities in the city.
- There appeared to be minimal centralising influence from, for instance, a local government body, and projects tended to operate insularly.
- Activities were changing in the city faster than knowledge could be shared about practices happening on the ground between potential research subjects themselves and myself.

My knowledge of project names, organiser names and site locations grew over time. While finding and identifying projects I was also collecting other information about the projects during my search. As a sample, this included the aims of projects, timelines of project phases, the wider organisations responsible for their establishment and their own aims. Also, the connections of projects to other projects and groups in the city, projects with multiple sites and plans for projects which did not have a site. This led to the critical need to capture this broad and chaotic data in a way that was materially useful for fulfilling the evolving research objectives. This data gave insight as well as generating questions about appropriate methods, what data and how data could be collected to unpick the many UA activities in process.

3.4 Method 3: Mapping Urban Agriculture Practice (Projects, People and Activities)

This section discusses the method implemented to make sense of the data from project identification and the development of a 'mapping' framework for subsequent data collection. Mapping, in this sense refers to a process of gathering, organising and analysing a vast number of data types in a meaningful way. What separates merely finding and identifying projects and 'mapping' is the acknowledgement of the time and space relevance of the data. Spatial relevance at the initial data collection point was augmented as new relevance became clear from further data collection. The adoption of this mapping approach was conducted from June 2014 and continued into the data analysis. This is explained further below, describing exactly how and what was produced. First it is necessary to describe the rationale behind adopting this approach.

3.4.1 Mapping Considerations and Rationale

Pursuant to the project databases, a lot of 'messy' data was collected which took many forms. This included field notes, images of project sites, newspaper articles, images taken by organisers (such as previous site use), maps and flyers as some examples. A pressing research need quickly became clear, how could all the data be collected, accounted for and analysed when the value of much of the data would be unknown until enough data had been collected, time had passed and researcher knowledge improved. The data also held relational value, not only in time but place and between people and projects. I needed a pragmatic collation method that accounted for these data types and variables to build a narrative of how UA evolved as it was changing around me. The method needed to be able to capture the journey of (established and emerging) projects and the narratives of the people involved. To do this more flexibility was needed, involving going beyond the traditional research method rooted in temporal and spatial particularities such as interviews.

This alternative method was influenced by John Law's work, *After Method: Mess in Social Science Research* (2004). At its core, his work calls for renewed thinking on method which is broader and looser than orthodox qualitative research methods in the field. Law suggests playing with and bending such methods. He also calls for research which approaches method from the understanding that often the "subject of study and its contexts" are in constant flux (Law 2004: 78). With these shifting conditions in mind, Law calls for researchers to challenge and 'unmake' "expectations of security" in established methods (Law 2004: 8). Law describes reality as "ephemeral and elusive" and as a result straightforward answers should not be expected (Law 2004: 2). These articulations by Law aid in understanding my approach to the UA, coming as I do from more of an outsider perspective and so more willing to countenance an alternate

perspective. We are in agreement that rethinking methods can help in researching a phenomenon in a state of re-emergence that is itself both ephemeral and elusive (Marsden & Martin 1999, McClintock 2014 & Tornarghi 2014).

An approach was needed that allowed for the fluidity inherent in UA, which has changing connections and boundaries. This fluidity was evident in finding and identifying activities (See previous section). Mapping was an evolving method, reflecting how projects, people and experiences are in continual fluctuation. It helped in making sense of the 'messy' data collected up to this point and provided a framework for subsequent data collection. I could do the method but also challenge and change it based on further data collected. I could question the relevance of data as my position changed from outsider to outsider-insider. Mapping allowed for the multiplicity of projects, project types and stages of development to be accounted for. At the same time, it allowed me to acknowledge the changing time and space relevance of the data as UA continued to evolve around me. This was not intended to be indulging in novelty for its own sake but reflects hopes to address some of the transferability issues currently evident in the study of UA. One of these issues is the predominance of studies which focus on 'neat' or uniform established UA projects, where food production is the primary focus of the project.

3.4.2 Data Collection Process For Mapping

First Stage: Mapping Data From Finding and Identifying Urban Agriculture Projects.

For the first stage I created an inventory of the data that had been collected in the process of finding and identifying projects. I initially looked for commonalities across the data, identifying four broad areas that the data associated with.

- The first was data that related specifically to a project, such as the project's name, the (literature) type of UA activity the project shared most similarities to and how established a project was whether it was an 'active' project, a site in preparation or simply discussions on the plan for a project.
- The second is closely linked, what the project 'does' or seeks to 'do' and its activities. For example, the project's aims, programme of events or sessions and different modes of accessibility, such as a community garden which is open to the public always or allotments which are open only to plotholders.
- The third data type related to the people involved, people's names, role (such as chairperson or treasurer), whether they worked for an organisation and 'who' the project was for.
- The fourth data type related to what was happening, interacting with or influencing a project more broadly. This included data on organisations active on food in the

city; events in which people discuss food (and growing) in the city and formal processes projects have to go through to be active such as securing land.

Second Stage: Framework For Mapping Subsequent Data Collected on Projects.

At the same time as developing this method I was also continuing to collect data. This included attending the regular meetings of projects, open days and calls for volunteers to embed myself in what was happening. This also enabled me to become known as a researcher to the people involved in projects, vital to establishing the distance needed for research yet also meeting ethical considerations. Physical data included materials that were generated by projects such as flyers, constitutions and emails from mailing lists.

Taking this broad initial approach to mapping facilitated being able to consciously seek involvement in all urban agricultural activities and periphery activities (which may or may not be relevant) whilst creating contacts and building rapport. By taking this approach research subjects began sending me information that may have been of interest to the research. This followed in the form of informal discussions in person, phone conversations and email correspondence. A sense was present that people were keen that the research did not miss any foodscape activity. This was a two-way process of data collection, active and passive research. This process also began uncovering other projects active in the foodscape. Subsequently I began to further consider the commonalities in the data (as outlined above) and characteristics of the data. This led to the development of the mapping framework.

Table 6 outlines the four data forms mapped for each project. These are *narrative*, *material features*, *process* and *context and inference*. Each of these terms are described, the data type collected is explained as well as examples of the type of data the term refers to. Table 6 is critical for understanding the schematic of the mapping process in Figure 5.

Narrative

Narrative as a data form is best described as the first hand personal experience of an individual involved in UA. A key characteristic of this data form was its sequential nature. By this I mean individuals gave ordered accounts, versions of events and representations of their identities within projects.

Narrative data was mainly collected from personal interactions such as conversations with the person involved in a project or projects. The data was collected both on the site of projects and in other locations such as community halls. The difference in how individuals articulated their narratives across multiple locations was accounted for. As an example, this can include data on the site history, knowledge, challenges, personal connections, role of organiser, achievements, experience and attitudes.

Material Features

Material Features are aspects of UA that are 'physical', which can be seen, visually

inspected and touched. These tangible features represent more than what can be visually inspected. They have structural symbolism. By this I mean an 'object' represents a process. The features of a project are not coincidental but have been crafted and deliberated. They are one element of a complex system. Observation of the physical assists in understanding the performativity of enactment. These material features have been decided and shape how people perform UA as a practice.

The majority of data on material features was collected by physically being on the site of the project, for example, planters, greenhouses, food growing, perimeter gates and communal areas. Images taken of the site at intervals across the research period were useful in observing changes to the physical aspects of a project. The data was also collected in the form of materials written by projects such as manifestos and newsletters, as well as what is written about the project such as in print and on social media. The acquisition of more material features on a site provided indications that the project was likely to have either received funding or support from an external source. For example, data included what was physically on the site, site access/openness, site wildlife/conservation, food produced, other produce, written materials and online presence.

Process

Process is the widest ranging data form collected as part of mapping the practice of the UA. Process as a conceptualisation seeks to encapsulate the intangible actions occurring within and across projects that cannot be seen but can be observed and followed. It primarily includes flows of information in many ways. The processes can have varying degrees of formality, formal processes such as local authority systems for land leases. Examples of informal processes can include the 'everyday' routine of a project and rapport building through conversations between people involved in projects. At the same time, as evident in the examples above process can be internal or external. Internal processes are specific to a project whereas external processes can occur across and between multiple projects, wider organisations and different aspects of the foodscape. Some of these processes occurred within a day and others took several years to come to observe such as ownership and land lease security. The nature of UA means many of the processes are social. This includes connections, relationships, negotiation and decision-making as examples.

To collect data of the processes occurring in and across projects research attendance of the sites was necessary. In addition, this included attendance to activities and projects that occurred in other spaces such as coffee shops, pubs, meeting rooms and locations of events attended by organisers. The data to inform mapping took the form of observation field notes, project-produced minutes of meetings and evaluation documents. As knowledge of a project increased the practice of how the projects worked on the ground could be better understood. As an example, data includes changes to project state, communication between the people involved and the decision-making processes in a project. For example, 1. how an idea within a project formed, 2. consideration of the idea, 3. negotiation of the idea, 4. action or disregard of the idea and 5. the evaluation of the idea.

Context and Inference

Context and inference enabled data forms to be collected which reflected the settings surrounding aspects of UA. It relates specifically to the influence of circumstances or the 'external' that caused something to happen. The contextual data gives the frame of reference to understand how and why other things happen. It is an indicator of drivers at play from the perspective of the 'bigger picture'. For example, the effect context had on understanding narrative, material features and processes of a project or projects. Inference is also included within context because drawing inference beyond the literal helps in understanding context. The data form allows the periphery, the explicit (context) and the implicit (inference) to be understood.

To collect data for context and inference it was necessary to engage with broader activities occurring in the foodscape such as local authority meetings, discussions with funders and funding bodies and conferences at different scales (local, regional, national, and European, See below). As example, data relates to site stakeholders, the influence of other projects, employment background and wider organisation interest.

Conferences Attended.

- Hull & East Ridings 2nd Annual 'Greenshare. Guildhall, Hull. 19/03/2014
- Tackling Food Justice in South Yorkshire. St. Marys Church and Conference Centre, Sheffield. 7/11/2014
- Hull & East Ridings 3rd Annual 'Greenshare' Theme: Growing your green potential. The Lawns, Cottingham, Hull. 18/03/2015
- Conference on Urban Farming 'Together we grow the city'. University of Copenhagen, Denmark. 4/02/2016
- Feeding Affordance and Decent Helpings. University of Sheffield. 13/09/2016
- Critical Foodscapes- What does the future hold for urban gardening? Institute of Advanced Study, University of Warwick. 7/07/2016

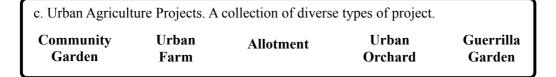
Table 6 Description of four data characteristics identified to map UA practice.

These four data forms have been used to characterise the data and assist in understanding the data collected on UA. Through this process a framework was developed (Figure 5). This identified a number of hierarchical layers that surround an individual project. This includes as described in the foodscape (a), (b) organisations involved in UA, (c) projects as a collection of diverse types operating in the same location, (d) an individual project and (e) common fluidities, the key elements a project has or is seeking. These included the people involved, having organisers and participants, having a site or space to exist as a project and productivity, being active as a project. Figure 6 shows an example of the mapping process for one project. Following the figures the next section outlines the case study projects selected in Hull and Copenhagen.

a. Foodscape

The foodscape or 'food landscape' of an area considers the spatiality of the food system in a geographical region. 'Foodscape' describes the "relationship between food, its spatial context and the viewer" (in this case the researcher) (Mikkelson 2011; 210). Central to the relationship is its dynamic changeable nature. 'Foodscape' provides a lens to understand where and how food 'happens'. For example, the food economy, the food culture, location specific experiences and issues with food such as food insecurity, the governance of food and spaces where food 'happens'.

b. Organisations involved in or who oversee an urban agriculture project or projects.					
Public Sector (Central & Local Government)	Private Sector (For Profit)	Voluntary also known as Third Sector (Not For Profit)	Other		
- Allotment - Children, adult, youth & elderly centre School	- Commercial retail - Urban agriculture project itself.	- Sports centre - Housing, wildlife & community development trusts.	- Global & local networks (food, volunteer, growing principles,		
- Library		- Church	community & enviro.		



Associations

change.)

d. Individual Urban Agriculture Project. An individual project banner may have multiple projects at different stages of development.

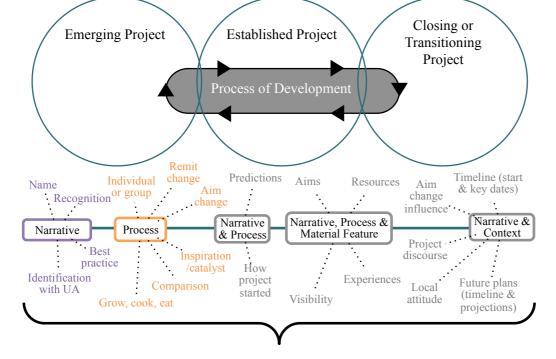
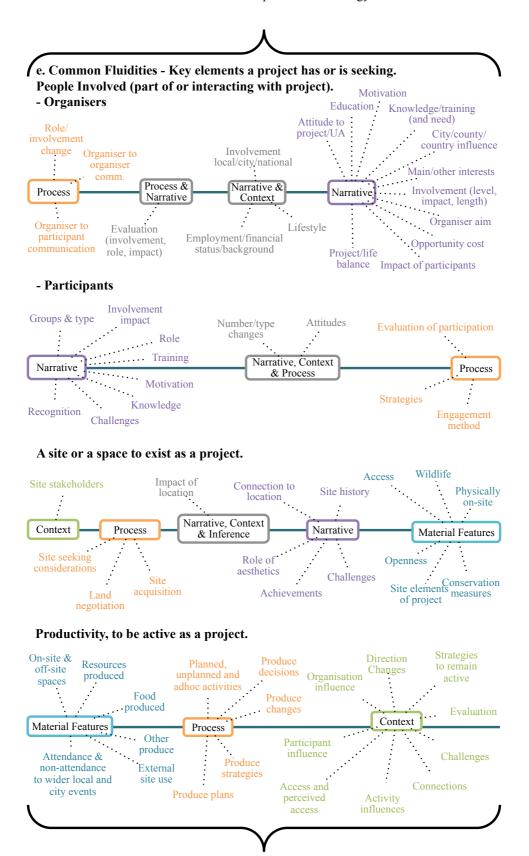


Figure 5 Part 1 of 2: Schematic of mapping process. Part 1 shows the hierarchical relationship between the broader foodscape and an individual project.



Part 2 of 2: Schematic of mapping process. Part 2 shows the key elements an individual project has or is seeking. Examples are provided accounting for the different data forms, which were collected (narrative, process, material features and context and inference).

- a. Foodscape of Hull.
- b. Organisations involved Public and private.
- c. Project Urban Community Orchard with wildlife community garden
- d. **Process of Development** Established project which has been 'at risk' of closure but has undergone a transition to ensure project remained established.

Project

	[1] Local authority (public- governmental organisation) sold half of the site to housing developers (private) Privatisation. [2] Allotment holder wanted to secure future provision of allotments on the site (and against expansion of housing estate even though at the time allotment plots were unpopular) Conflict. [3] NHS (public - governmental organisation) wanted land for 'five a day' initiative
	Foodscape. Aim to increase fruit and vegetable consumption of the area. NHS seeking to establish orchards on multiple sites across the city.
Process	Support Head of Parks (at local authority) chose apple varieties for new orchard and volunteers Inclusion in Process dug the land and planted trees.
	Support NHS withdrew support and perceived that the (independent) group of organisers could run the site themselves.
	Inference Organisers inferred that this was always the plan.
İ	Support Challenge Council removed support.
	Challenge Disagreement about how the group could make project financially self-
	sufficient. Strategy This happened in 2008. Donation of £2 by for whole apples,
·	pressed apples or juiced apples.

Productivity

 	Evaluation Project entered a period of "sink or swim".	
	Support Local authority continued financial support of £500 per annum until project	
İ	was 'self sufficient'.	
Narrative	Evaluation 350 trees planted - organisers began to be "terrified" by predicted yield	
Ivaliative	of trees having conducted research.	
	Challenge Influence [1] Trees planted too close together. [2] Trees never been	
i i	pruned properly. [3] Site flooding. [4] Trees are past optimum yield.	
	Activities Harvest events, Site maintenance events, Big events - 130 attendees.	
	Funding Impact Support Challenge The local area team (GO) gave £400 and	
Context	specified that the project should attract people from that 'ward area'. However	
	organisers knew this was difficult in practice, how could they advertise that they're	
	an inclusive project but only for people from a specific area.	
	Foodscape Witnessed other orchards fail.	
	Produce Plans Challenge Schools and hospitals can't take the produce because they	
	have existing commercial food supply contracts.	
	Produce Strategies Leftover produce but organisers are establishing new	
Process	connections, which deal with the unpredictability of produce output.	
	Challenge Funding - "shocked" at challenge.	
	Criteria specifying "open access" or open for 150 days per annum. Orchard is not	
	because it is situated within a gated allotment site Access.	
i 	Funding Strategies Get community to 'adopt a tree' but idea failed in the	
<u> </u>	transference between organisers Org-Org Communication.	

Site

,			
	Connections Orchard and allotment have no connection.		
	Rationale Plotholders see how much time and commitment it takes of current		
	organisers time.		
Narrative	History Context Land was a farm. Site size: 11 acres.		
	Site History Context Historical and traditional allotment started in the 1920s. P		
	a plan for 'Hull Greenbelt'.		
	Future Land Acquisition Group seeks land alongside site to take over in yield from		
į	failing trees to give trees more space.		
Challenge Strimmers and lawnmowers stolen and site burgled.			
Material	Future Plans Organisers want to expand project offering but need funding for - bird		
Features	hide, - maize for kids, - artwork (sculptures), - equipment and replace some of the		
	failing trees.		
Challenge Cannot claim on insurance for incidents on site.			
Process	Rationale Project does not have insurance for tools and equipment.		
	City Evaluation Organiser describes project as a "hidden gem" but acknowledge		
	that "there are too many hidden gems in Hull".		
Context	Land Acquisition Also on-site a wildlife community garden.		
	Third sector group received funding and volunteers set up a wildlife garden.		
	Funding run out after five years, people left and said thy orchard could have it but		
İ	the organisers struggle Challenge to find the time to maintain it.		

Figure 6 Example of schematic mapping process in use. The project used is the Urban Community Orchard.

Organisers

	Attitude Difference Project treasurer said "no-one likes orchards" and other organisers				
	questioned his involvement in the project.				
Ü !! !! !!	Organiser-OrganiseriChallengerkunck saidr@aoisenebichadingchards" and other organisers				
	kpanektoofreedfhin oder vathreed in een talen to be a see that the composition of the com				
	Knowledge Challenge Katlengenbudkdgeoof gaisderlingding limited skillset to share this				
	Hrmok left gel & fred tirst kyndiert gy as na gergerp ge fregdoorge charaio injoant.				
	Rolewood appochatten get Copooje to travelad geles gathout regular skillsed skillset to share this				
Role wild wight if the cholor we cannot grow and or grantic inpartange events - data projected from the control of the contro					
peolels differenced and protecting all anley ovillaties of comparishing sites of the control of					
Narrative	Gender Phonaste Education Legesting Chanksy Employment Rectite redundancy - retail - satisfy de Devings Education (Legesting Source and Banksy Employment Rectite redundancy - retail - satisfy de Devings Education (Legesting Source and Banksy Employment Rectite redundancy - retail - satisfy de Devings Education (Legesting Source and Banksy Employment Rectite redundancy - retail - satisfy de Devings (Legesting Source and Legesting Source and Legest				
Namative	Kortidattion Employmenti Badaruha dantida Employmentu Kalash) redundancy - retail -				
Narrative	Knowledge Acquisitiont Bould fatur bould eat boat o large pleasainet in sature at under the				
Turrative	incontedge Acquisition in the came a gardener (entrepreneurialism).				
	Org-Org Communication 30 testing boughtary books amonphose a distingue ments out				
	Challenge Perception about different values of each organiser roles (with some organisers				
	Other Ong Communication Meeting entsil waten-cateur and work this aftenighents.				
	Connections Challenge Distiglifferentivables wheather canaic was convertised by the mean series of the contract of the contrac				
	waheed as precipion to with the star assamb prothers an eventhing all and the blics and drug				
	Grantestignsh Ghahlgrasel Diegetarm seetabene what the ordeap divers. For her consequiness				
	would broghe the proplet with mental health problems (including ex-alcoholics and drug				
!! !! !!	Challenge Organises and theys "will need besting und love the mages". Others thought they				
1i 1i 1i 1i	Organiser Blothemens project through joining.				
Narrative &	Knowledge I antiser organiser (whiteause hate all all of the nty asked in person potential				
Process	Ogganiserativus lykitteetsi qoprajaatshirenge) joining. Knandeder Anisiatorrerganisan (wha also bad aneal lotment) askad in parsempotantiales?"				
Narrative &					
Process	Process Role Change of skillset become user ware. Process Prices Process Prices Pr				
Motivation Initial Photes of growing and beauty of green space. Allotment to get away					
Narrative &	Hold pockelsed ask a fire concernious problems by 1860 tires permarkets.				
Context	Moting initial Rice as not in sand, beauty of green space. Allotment to get away				
Narrative &	Then crongssed food and governmentifical rentertholign diswite smarket been				
Context	Beught-Hwah मिक्का के अधि में things to the weddings and funerals).				
	Role Strategy re-mainte, group cahecome as the holes for hough stability that the group				
	USGAn YOU DEWARM ON POOR AND STREET OF THE BOUND OF THE B				
	Strategy Organises with the demands of the project Scale of Took				
Process	icoupling con with a through and an all project scale of the project.				
	Type Change an isobyte on the the minister entired the project remained and energy bewatting to managing personal involvement in the project.				
Process	Process New Programs of the North Committee in the North Committee				
	Process Nucleon gains of New at Hungs of Manage and Constructed in the operature. Nucleon gains of New at Hungs of Manage and Considered in the operature. Nucleon gains of New at Hungs of Manage and Considered the Project future.				
Context &	Stability Though Said sers agent 'Challenge' Though the identity though the said sers agent to the said services agent to the				
Process					
Context &	Ownership back to local authority (from independent to public). Stability Group of organisers aged. Challenge Group considered returning project				
Process	Ownership back to local authority (from independent to public).				
rticipants					
Narrative	Planning Challenge Participation by schools wanted, some success but challenge with				
Narrative	paperwork. Challeng Decination by school of some success but 1 11 ge with				
rvarrative	Type Age Relifed Wealth Wealthy pool. Character Outdoorsy people. Skillset ge with Mediants and engineering skills. Health Long term ill health. Life Stage Students.				
li 	a Retired Wealth Wealthy/noor Character Outdoorsy people Skillset				
ii II II	Culture Principle in nationalities. Figure 2 on S and engineering skills. Health Long-term ill health. Life Stage Students.				
 	Evaluation A Cross-section of society. Fraguery Herent nationalities				
Context	Culture in freent hantoflamines and your Character Outdoorsy people. Skillst Evaluation in and engineering skills. Health Long-term ill health. Life Stage Students. Frequency Some organisers attend everyday. Challenge Tamber of volunteers. Rationale Invisibility of project, in terms of access and requestry Some organisers attend everyday.				
Context	requency Some organisers attend everyday.				
Context Process	Challenge Maintaining relationships - difficult because participants are not paid.				
	Stretagy Foodgage Connections Project is on the books of volunteer ergonisetics				
Process	Strategy Foodscape Connections Project in on the backs participants are not participants.				
	Strategy Fugustance Connections Project is on the books of volunteer or gams at long and the very volunteer or new purely rock-ape Connections Project is on the books of volunteer organisations.				
<u> </u>	Strategy Engagement "Deep and meaningful conversation" with every volunteer or new				
!	person.				

3.5 Method 4: Case Study Projects in Hull and Copenhagen.

This section describes the identification of and role project case studies have within the research. Case study selection built upon the mapping task and the knowledge generated on the practice of projects. This section draws upon existing literature to provide a rationale for the utilisation of case studies as a method in this research. Following this the considerations and criteria for choosing the case studies are explored. The case studies chosen are then outlined alongside the data collection method for each case study based on the specific practice of that project. There are multiple case studies for each location (Cresswell 2012). The way in which the comparative case studies are implemented in this study share most the commonalities with a parallel study, "the cases are all happening and being studied at the same time" within each location across the two study locations (Starman 2013: 34).

Case studies are used to "explore and investigate contemporary real-life phenomenon through a detailed analysis of a limited number of events or conditions and their relationship" (Zainal 2007: 2). This was important for this study because the study was explorative and UA in its current form is considered a contemporary phenomenon (Starr 2010). The method had numerous advantages including strategies for assessing validity including construct, internal, external and reliability (Yin 2009). Case studies as a method have been commended for allowing research 'need' consideration in a way other methods cannot (George & Bennet 2005) and provides the flexibility to incorporate a number of methods. Criticisms of case studies include a lack of rigour (Zainal 2007), generalisability of case studies (Hammersley & Atkinson 2007) and the time commitment needed.

There are a number of aspects that must be considered in adopting a case study approach. The approach requires identification of the case or cases to be studied, what the purpose of the case would be and which methods can assist in generating a deep understanding. Furthermore, consideration of the data analysis approach was needed. This is supported by Creswell who describes that a rich case study approach must include the ability for "themes or issues or specific situations" in each case to be identified. Case studies are further most appropriate in seeking an understanding, which concludes in "lessons learned" (Creswell 2012: 99), "assertions" (Stake 2000) and/or "patterns or explanations" (Yin 2009: 144). A critical consideration for the implementation of case studies in this study was what Creswell describes as "boundaries" in case development (Cresswell 2012: 100). This is a challenge in UA studies because of the numerous forms UA can take, the speed at which new projects are emerging and the complex relationships between projects. Therefore, there was an acceptance of the difficulty in attaining 'clean' case studies. To overcome this a rich description of the purposeful sampling strategies adopted are described.

3.5.1 Case Study Implementation Rationale

There were several reasons case studies were an appropriate and effective method to implement at this stage in the research. During the process of finding, identifying and mapping projects the research had grown to include over twenty-six projects. As the mapping was uncovering an abundance of projects, it became apparent it would not be feasible to study all projects to the same level of detail. The decision to select case studies allowed for the specifics of a smaller more manageable number of projects to be focused on. At the same time the on-going mapping enabled contextualisation for the case study data. By running the methods concurrently, understanding of changes to the foodscape could be identified at three levels, how individual projects changed, how project types changed and how UA changed. Further to this, the mixed method approach assisted in seeing connections between projects and the broader foodscape. For example, how and why a project changed its aims, new types of project entering the foodscape and how collaborations between projects work in the formation, continuation and discontinuation of projects.

As the research is exploratory, the chosen case studies sought to represent the different types of UA projects as identified in the literature as well as emerging types of project. In conjunction with the data collected about the project activities across type and at different scales across the foodscape, case studies facilitated an in depth understanding of a number of other features. This included witnessing projects, particularly the people of UA in real time within the setting of the project, the site itself. This provided specific insight into what people say and do and the link between both. In addition, the meaning attached to practice and how people in projects experience relationships and events.

Current research (Holland 2011, Taylor & Lovell 2012, Firth et al 2011) usually favours the inclusion of only one or two types of activity such as solely the allotments of an area or a combination of city farms and community gardens. There are extant studies which draw upon a number of types of UA however these often conflate other foodscape activities such as artisanal food producers and foodbanks. I was keen to understand why my approach had not previously been adopted. I was determined to overcome any challenges through the careful consideration of case studies and thorough consideration of the weighting of case projects in research.

Furthermore, in research when case studies are implemented, researchers usually apply the same research methods uniformly across each case, such as seeking to understand all case studies through participant action research or ethnography. There is also a tendency not to explicitly describe the research frequency of case study attendance or interaction. This prompted questioning of why data collection frequency was omitted and whether researchers experienced difficulties in maintaining contact with all projects originally sampled as case studies. The positionality of researchers in the UA field confounded

this challenge with case studies often chosen because of pre-established relationships or involvement in a project. This could further explain the lack of research on method and project access.

On a pragmatic basis, case study selection also provided tangibility for the people involved in projects I encountered as something they could relate to and perceptibly understand. This changed and confirmed my role in people's mind-set as being a background research investigator whilst building rapport for implementation of subsequent methods as knowledge and method enactment occurred.

3.5.2 Consideration and Criteria for Case Study Selection

Numerous considerations were accounted for in choosing which projects should form case studies. All considerations were made to provide the broadest insight into UA as appropriate to fulfil the research objectives. Case study implementation was reactionary to the volume of activities found. This led to the early initial selection of case studies within the method. The selection of case studies was a gradual process as more knowledge was gained in relation the criteria below, rather than in one sampling phase. The criteria, as listed below, are not mutually exclusive but inform each other.

Case study accessibility, sampling from mapped for projects.

Logic prevailed in sampling case studies from the collection of projects found during mapping. The people working and volunteering within projects already knew who I was and what the research was about. Further to this I had already begun generating data about them, having completed secondary desk-based research and visited the projects to collect some primary data. Therefore, I considered accessibility and whether a project would give permission to be part of the research. At this stage I was able to acknowledge that some projects did not want to take part in the research.

• Urban agriculture project 'types' as identified in the literature and 'other' types.

To conduct research on UA the different practices considered in the literature needed to be included. Activities that are not currently covered by the literature but share many similarities also needed to be included. This was particularly important because definitions in the field are not fixed and boundaries have not been placed around urban agricultural practices. To be able to comment upon the practice of a specific foodscape, the variety of activity had to be accounted for.

• Availability of a UA site as a research setting.

A necessary consideration was the variation in opportunity to study projects in the setting in which they occur. For example, some projects are 'open' to the public every day, others hold weekly sessions and others are only open for activities over the harvest period. On the other hand, others have no fixed 'times' in which they practice UA. The

location of the research setting influenced decisions because some of the sites used by projects to grow are illegal, so organisers are trespassing on the land and therefore I would also be trespassing if present on the land to conduct research (See Literature Review 2.4.1 *Defining Urban Agriculture, Understanding Activities and Aims*). Additionally, the mapping found that schools were more challenging to gain general access to and therefore presented difficulty in maintaining contact time over the research period.

Development stage of project.

The stage of development of a project was a key consideration in the selection of case studies. This consideration became evident in the mapping as I unearthed a lot about ideas for projects and forthcoming projects in a planning phase. This presented both interest and a dilemma and I questioned whether a case study could be a project that may never 'materialise' or operate in the foodscape. This coupled alongside the other extreme that an 'established' project as a case may close during the research period was thought-provoking. This interesting dilemma assisted in my understanding of why extant researchers focused on projects which were established and sought to minimise the risk of project closure and the implications of that for research by choosing projects which had an element of stability. By 'established' and 'stability', here I loosely refer to having a site, producing food and participants attending activities. This informed the decision to include case studies of both 'established' and 'emerging' projects. The rationale being that each individually would generate new understandings about the other and the intersection between the two may provide insight into why established projects cease. This was critical in the development of the research objectives and further had implications for the number of case studies chosen.

Projects with and without a site.

Initial methods prompted questions about whether a project had to have a physical site to be a project, as all projects had a start point. If a project was in the planning stage sometimes they had a site and were deciding what the project would be and in other cases people had an idea but were in a phase of 'site seeking'. Some projects found operated on multiple sites, this raised questions as to whether the sites individually should be included as a case project or the project overall. Other projects in the city did not have a site themselves but were proponents of urban agricultural activities in the city and actively involved but not location specific. This led to the decision to include networks in the study. There are three main reasons for this [1] the activities of the networks operating in the city are closely related to the activities of UA with many of the same people having key roles within networks and their own growing projects. [2] With this close connection, the networks are where connections are formed between

people and projects for knowledge and resource exchange. Further to this, [3] networks play a critical part in understanding how UA works across scale, within specific locales and at a city level. The networks uncovered from mapping included grassroot networks and national network initiatives. It was observed through the initial mapping task that a difference between Hull and Copenhagen existed, with Hull having a higher prevalence of networks active than Copenhagen.

Operating scale and structure.

Mapping showed differing degrees of operating scale and structure at which projects are active in the city. For example, some projects identified were the result of a national network strategy for developing projects and others were local authority initiated. Many projects were started independently of these within specific communities without a formal organisational structure. Mapping demonstrated this variety and showed interactions between the people involved in projects occurring regardless of this. This emphasised the need for case studies that reflected how projects are impacted by their experience of operating within or without these structures.

These considerations were all used to inform the decision of which case studies to follow in Hull and Copenhagen. These are presented in the following section.

3.5.3 Project Case Study Selection For Hull and Copenhagen

The cases identified in Table 4 and Table 8 are all examples of UA and represent the diversity of practice operational in the foodscapes of Hull and Copenhagen.

The common theme, which can be identified across all projects and case study projects for data triangulation, are project aims. The projects aim to improve peoples' understanding of food to various extents. This understanding could be promoted in numerous ways, encompassing knowledge related to growing, cooking and eating practice. This knowledge understanding can be facilitated on specific project sites. It can also relate to projects which aim to connect the work of those projects but do not have a site, called networks.

The initial project scoping suggested that the same people have run multiple projects in the past. The case studies presented to a certain extent represent the struggles for funding and the need to constantly re-invent a project, even if the vision and values of the organiser or organisers remain the same. Therefore, the case studies represented more about the urban foodscape than just their name situated in this snapshot of time. This was highly research-worthy and is explored further during the research. In light of the interconnectedness of projects, case study projects and other activities being mapped interacted. A smaller number of case studies have been selected in Copenhagen than in Hull because there were found to be fewer projects active.

Hull Project Case Study	ii. Urban agriculture project 'types' as identified in the literature and other types.	iii. Availability of UA site as research setting	iv. Development stage of project.v. Projects with and without a site or sites.	vi. Operating scale and structure.
Therapeutic Community Garden	Literature Type - Community Garden. The location of this therapy focused community garden is on allotment site. It occupies five of the standard allotment plots at the entrance to the site.	Weekly but non-accessible on those days as used for treatment with vulnerable participants.	Established. The project has been operational for over twenty years. Project with multiple sites.	Formal Organisation. Part of the Local Authority services offering recovery and support.
Residential Allotment	Combination of Literature Type - Allotment and New Type. This project is an emerging type sharing many of the characteristics of allotments however it is green space specific with the Local Authority actively seeking local residents to have plots rather than through the conventional waiting list method.	Public access with adhoc participation by plotholders Nb. By the end of the research period the site was private access. Gates covered most of the entrances between houses as part of the plan to change site ownership.	Emerging. At the point the research began, a consultation had been completed with local residents about the project they wanted on site. The project was chosen as a case study when an urban agriculture project was decided for the site. Project has a site.	Formal Organisation. Project initiated by Local Authority with the aim that ownership would be passed to the residents and become independent.
Mobile Container Farm	Combination of Literature Type - <i>Urban Farm</i> and New Type. The new aspect of this is the mobile nature of the site which seeks to utilise unused land within the city, termed "in meanwhile use" by the organisers. The plan is that as the site becomes attractive through occupation, the farm is mobile and can move onto other disused pieces of land.	Site-seeking. Gained site during research period.	Emerging. Without site at beginning of research period. Nb. During research period, project gained site in 2016.	Independent.
Local Food Network	Literature Type - Local Food Networks. This type is identified within the literature however the uniqueness of this case study is that many of the organisers have their own projects.	No Site. Weekly activities and monthly steering group meetings.	Established. Without a site.	Independent.
Permaculture Community Allotment Garden	Literature Type - <i>Community Garden</i> and <i>Allotment</i> . This site combines two aspects of literature identified in urban agriculture practice.	Site-seeking.	Emerging. Without site at beginning of research period. Nb. During research period, project gained site in 2015.	Independent.
Wildlife Community Garden	Literature Type - Community Garden. The project has a growing site to facilitate habitats for wildlife in the city.	Site open to public daily. Weekly and seasonal sessions too.	Established. Project has a site.	Formal Organisation. Project run by a national nongovernmental organisation. Organisation Yorkshire office also occupies the site.
Community Planters	New Type - Sharing characteristics of a community garden and guerrilla gardening practice.	Public access on walkway.	Emerging. With multiple sites.	Independent.

Table 7 Selected case studies in Hull based on considerations identified in UA in 3.3 Finding and Identifying UA Projects.

Copenhagen Project Case Study	ii. Urban agriculture project 'types' as identified in the literature and other types.	iii. Availability of UA site as research setting	iv. Development stage of project. v. Projects with and without a site or sites.	vi. Operating scale and structure.
Elderly Centre City Farm	Literature Type - <i>Urban Farm</i> .	Site open to public daily, with a programme of sessions by target group.	Established with site. Allotment site also present.	Formed by the Kommune (Local Authority equivalent) and now independently run.
Permaculture Community Garden	Literature Type - Community Garden.	Public access, sessions run weekly and on a seasonal basis.	Established with site.	Independent.
Children's Centre Community Garden	Literature Type - Community Garden.	Public access with Community Centre open daily and a seasonal programme. Also used by children from the school next door during break times. A weekday after school club.	Established with site.	Kommune (Local Authority equivalent)
Organic Rooffop Farm	Literature Type - <i>Urban Farm</i> , combined with new type - on the roof of a building.	Weekly sessions held for project participants. Restaurant is open at the weekends.	Established with site. In a process of re-emerging.	Independent.

Table 8 Selected case studies in Copenhagen based on considerations identified in UA in 3.3 Finding and Identifying UA Projects.

3.6 Method 5: Interviews With Organisers in Hull and Copenhagen.

This section focuses on the semi-structured interviews conducted with organisers in Hull and Copenhagen. This formed a substantial part of the data collection. In total interviews were conducted with forty-six organiser representing forty UA projects in Hull and Copenhagen. To understand the rationale for utilising interviews within this research, it is necessary to deliberate the process through which this decision was reached, including the other methods considered and how the interviewing process changed whilst conducting the interviews.

3.6.1 Method Consideration

3.6.1.1 Focus Groups

Having found many UA projects present in the foodscape and developed case studies it became apparent that many of the projects had more than one organiser. Therefore, focus groups were considered as potentially useful to the methodology by enabling the researcher to select individuals and facilitate a platform for those individuals "to discuss and comment on, from personal experience, the topic that is the subject of the research" (Powell et al 1996: 499). As the people involved in projects exist as a group independently of research they are considered ideal for using focus groups with.

A focus group would enable differing opinions of a project to be heard and for ideas to percolate across the group for deeper discussion among differences. The utilisation of focus groups has many strengths in conducting qualitative research including the researcher's ability to ask open-ended questions (Gilbert 2008) and to be adaptive to subject's issues related to the research objectives. Therefore, creating data reflective of 'real life'. The researcher would be able to steer the group back on topic if it deviates from the research remit meanwhile acknowledging the importance and relevance of how the topic deviated. Many advocates of the focus group method cite its cost and time efficiencies over other methods such as interviewing each research subject individually (Frey & Fontana 1991). Researchers cite the differing opinions provided by subjects of focus groups as a potential drawback as it makes the information difficult analyse.

3.6.1.2 Interviews

A semi-structured interview can be described as a "conversation with a purpose" a phrase put forward by Robert Burgess (1984: 102). The basic concept, which underpins semi-structured interviews, is the enablement of interviewees to describe their experiences and the meaning of events taking place in their lives (Mertens 2009). The interviewee prescribes the relevance of the data collected. Interviews are particularly significant due to their personal nature according to leading qualitative researcher Steinar Kvale (2008). This allows for probing around the research questions to find out

more about the specific phenomenon (McNamara 1999). The adaptive capability and diverse qualities of the semi-structured interview process also makes it suitable for collecting the relevant data for fulfilling the research aims that focusses on the specific experience of the people involved.

The theoretical and philosophical basis of interviewing lies in phenomenology of which the purpose is to describe "one or more individual's experiences of a phenomenon" (Zahavi 2012: 2). The essence of phenomenology in "understanding lived experiences" means it is both a method and a philosophy (Mapp 2008). Moustakas described phenomenology as the extensive study of a small number of subjects "through extensive and prolonged engagement to develop patterns and relationships of meaning" (Moustakas 1994: 76). Husserl suggests its primary basis is to describe rather than explain (Husserl 1970).

There is extensive research conducted on the advantages of interviewing (Mason 2010, Brinkman 2014, Tong et al 2007). One advantage is the production of rich narrative data, which often includes descriptions by the interviewees (Gill et al 2008). Interviews enable research to explore the "experiences, motives and opinions of others" in detail (Rubin & Rubin 2011: 3). Also, the utilisation of interviews is particularly appropriate for answering research questions that are explorative (Crouch & McKenzie 2006). This is particularly useful, when, as in this case the topic of study was unknown to the researcher (Rubin & Rubin 2011). Interviews can provide a mechanism for undertaking effective data collection of an area, which may be particularly personal and sensitive to those to being interviewed (Tourangeau & Smith 1996). A further advantage of the interview process and subsequent transcription is the use of verbatim quotes which can be used having captured the language and meaning directly expressed by the interviewee (Symon & Cassell 2004).

On the other hand, a weakness of the interview research method is the responsibility placed on the interviewer in the conduct of the interview. For example, caution must be heeded that the researcher does not dominate conversation or be bias in questioning (King 2004). It is easy to conduct a poor research interview and critical to overcoming this is to establish the interviewer and interviewee relationship and understand the remit of the respective roles. The interviewee should have an active role in guiding the interview and the interviewer should remain flexible. Denscombe (2007: 176) placed the importance of the elaboration of interesting points raised by the interviewee on the interviewer. In the literature, the effect of the interviewer on the interview is referred to as 'the interviewer effect' (Campaneli & O'Muircheartaigh 1998). Another weakness which is well known in interviewing is the time commitment involved. This time commitment is in the time it takes to conduct the individual interviews for the

researcher, the commitment required by the interviewee and the often-lengthy process of transcribing the interviews (King et al 1994).

3.6.1.3 Interview Rationale

Having considered both focus groups and interviews the decision was made to use interviews. The weaknesses of focus groups led to the decision. This includes the potential domination of discussion by people in projects as witnessed in previous data collection methods used (Krueger 2014). Much of the data collected about the people involved in projects during the mapping and for the case studies was conducted on the site of the project. The site of projects held meetings and activities with organisers together in which they were discussing strategies for moving a project forward and overcoming obstacles at the point that they occurred. These were almost a form of informal focus group. Therefore, conducting focus groups would be replicating more of the same data I was collecting by already being on the ground.

The decision to use interviewing instead was made for three reasons [1] to ensure the voice of each person was heard [2] to enable sufficient time for the provision of biographical data and [3] to provide a platform for conflict in the group to be discussed without others present. This proved advantageous because I could collect in depth stories of people's UA experience and the role their work has had on their lives individually.

3.6.2 The Interview Approach

3.6.2.1 Interviewee Selection: Project Organisers

The decision to focus the study on the organisers of UA projects rather than participants marked an important moment in the method journey. To summarise, organisers are a 'hidden' group within existing literature. They are often neglected in favour of studying the people who choose to attend the activities run by an UA project and what the impact of their attendance is. Though it is acknowledged that organisers of projects do change and this study offers a snapshot of a specific time period. As and when organisers of projects change this was incorporated into the research and of interest.

The decision to interview project organisers was made for many reasons. The rationale is multi-faceted; firstly, it is informed by the data collected from the earlier method phases. This includes insight that organisers [1] know the most about the project, [2] experience every aspect of it (including participation changes within project), [3] are catalysts of project change, [4] are part of and shape UA to varying extents and [5] face significant and at the same time different challenges. Furthermore, throughout the research period considerable rapport had been built with organisers and they expressed a desire to be interviewed as part of the research.

Secondly, findings from the literature review (2.4.4 Motivations, roles and stakeholders in urban agriculture projects) have influenced this decision. The general lack of distinction between the different roles people have within projects (except for Armstrong 2000, McClintock 2014, Glover et al 2005). This has manifested itself as a tendency to conflate all people who are a part of a project studied as 'interviewees'. The choice to interview organisers supports the work of Corrigan who describes the importance of a "dedicated leader" as critical to a project's success and knowledge development (2011: 1232).

Participants were also considered for interview on the basis that it would be beneficial to ask participants about their reasons for involvement at the same time. However, having experienced the participant landscape from identifying and mapping, it would be difficult to reach a large enough sample to understand whether there is change as participant commitment is extremely variable. Furthermore, through studying projects that are emerging some projects do not have any participants. A small number of interviews were planned with organisers in a broader sense. These were organisers who worked for a broader organisation in the initiation of a project but do not plan to have a day-to-day involvement in the project once it has been started. This included shorter informal interviews with relevant mapped projects and case study projects which were implemented by the local authority, such as the Residential Allotment.

3.6.2.2 Interview Planning

To build a picture of UA it was necessary to interview as many organisers as possible during the time period. The data collected from mapping the practice of projects in the foodscape and the insights gained from the development of case study projects was critical in developing a plan for the interview guide and subsequent data analysis, as shown in Figure 7. The data collected over the first year and half of the research informed a broad interview guide (Figure 8) but also facilitated the development of highly specific project-related prompts for each organiser. This took the form of specific questions relating to the processes I had observed leading up to the interview. For example, in some instances I had observed organisers make plans for activities to be run by the project, however these plans were never acted upon. The interviews enabled me to ask questions about some of the barriers that had led to this. This also increased my rapport with the organiser as they offered examples of aspects of the project that had been successful or less so knowing that I already had a basic knowledge of that which was the subject of discussion.

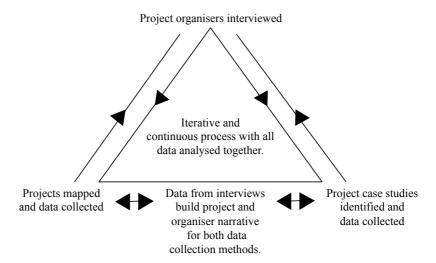


Figure 7 Visual representation of the relationship between organisers being interviewed and the preceding method phases.

A pilot interview was conducted, after which I reassessed some of the questions. These amendments made the question broader or required the development of more prompts to assist the interviewee answering. In preparation for interviewing organisers in both Hull and Copenhagen I produced two interview guides, making them contextually appropriate. To clarify, I simplified the English for some of the questions, pre-empting that I might have to show the written question to assist an organiser for who English was a second language. Furthermore, I translated some of the terms in the questions into Danish such as 'urban agriculture', 'climate change' and 'urban garden', as examples.

Organiser

- Can you briefly tell me a little bit about yourself, what is your story? Connection to Hull/Cop.
- So what do you do in a typical week/day?

The Project

- What is the purpose of your project? What are you trying to do?
- Does your project aim to tackle any (social/enviro/economic/political) issues? how? (Explore)
- Could you describe the work that your project does? (community/local/urban/project/urban agriculture?)
- How did you decide what your project would do?
- Why did you <u>start/join</u> the project? What <u>motivates</u> you to run the project?
- What do you feel is your role within the project? List activities
- What knowledge/skills do you bring to the project?
- Thinking about the people who attend/participate in it... why do you think they come?
- Who are your participants? (or other project organisers) (age, profession, economic situation, gender)
- Do you think the people who attend/want to get involved has changed? If so, why?
- How do you market your project?
- Have you been or are you currently part of any other projects?

Resources

- From who/where did your project receive the most amount of <u>knowledge/skills</u> for the project from? at start/ongoing?
- Do you have any <u>training</u> and what training would you benefit from?
 - Could you describe your projects current funding situation?
 Where did you receive the <u>initial funding</u> for your project from?
 How easy was this to access? What was the money specifically for? and how did you spend it? Do you have to keep in touch with them?
 - Why have you made the decision <u>not to seek funding</u> for the project?
 Do you plan to seek funding in the future?
- How do you feel about the different groups in the city competing for the same funding?
- Why do you think the projects which get funding, do?
- What makes a <u>successful application</u> for funding?
- What <u>methods</u> if any, do you use to keep track of your project for evaluation purposes?
- What <u>resources</u> do you think are necessary to run a project?

Barriers (Project/Personal)

- How do the project organisers communicate?
- What challenges have you faced running your project? Why do you think this is?
- How do you find time to run your project/maintain upkeep?
- What barriers, if any do you feel there are in fulfilling your project aims?
- As a group/individual how do you deal with <u>different ideas</u> about the direction of the project?
- How do you <u>negotiate</u> them?
- Does anything <u>undermine your commitment</u>, and is there anything that could be done about this? (Bring in opportunity-cost)

In the City

- What do the people living in close proximity think of the project?
- In terms of the <u>city</u> where do you think your project fits? (Map)
- What gaps do you fill? Are they specific to Hull?
- Which other projects in the city/out of the city do you draw inspiration/ learn from/compare and contrast yourself too? Which projects are similar or different?
- Why do you attend/not attend related events in the city? And which events do you attend?
- What do you get from them?
- Who do you think should be supporting projects?

Long Term

- What would you like to see your project do?
- What do you predict will be the <u>future</u> of the project?

Extra Questions – I just want to get your views on a few things.

- What does <u>sustainability</u> mean to you and your project?
- How <u>resilient</u> are you as a project? (adaptable to change)
- What do you consider to be urban agriculture? Your project?
- Is there anything else you would like to add?

Figure 8 Example of Interview Guide.

On reflection, the planning of the interview schedule was particularly challenging because the circumstances and experiences of an organiser's involvement in UA is highly personal and unique. The questions were zoned into groups so that when an organiser discussed a topic I was able to follow with related questions. That which is particularly interesting is that some interviewees gave permission to be interviewed solely on the basis that they would be able to discuss a few key topics, such as funding. When this was the case I let the interviewee steer the interview more than for organisers who were more comfortable with a question-answer format. Many of the projects had multiple organisers. I tried to interview as many of the willing organisers as possible from multi-organiser projects. In these cases, I learnt from what one organiser discussed and was able to ask subsequent interviewees about this. This was particularly useful in understanding the reasons behind conflicting views in projects.

3.6.2.3 Sampling Interviewees

The research used snowball sampling. In practice, interviews were first conducted with organisers identified within the case study projects. Following this I consulted the mapping framework, which had identified established and emerging projects and sought to interview the organisers.

Furthermore, the first interviews proved critical in seeking research subjects. During each interview, I made a note of any project name, which I had not already heard about and asked the interviewee about them at the end of the interview. I subsequently contacted the potential organiser and planned an interview. In some cases, an organiser arranged for me to meet the person that initially started the project. In many instances, the history of ownership of a project could quickly be tracked and they were often still heavily involved in it. These organisers were also interviewed.

There were elements of serendipitous sampling for interviews. For example, from a local food coalition I heard about a housing co-operative, which has a community garden. I contacted them and arranged to meet an employee who would show me the garden and introduce me to the gardener developing the site. On the walk from the office to the location of the community garden, the interviewee pointed out a church that had a community garden and a road with a sports club on who had an allotment. After the interview, I walked back to both and noted the building names and any details for contacting them from flyers in the window, as they were both closed. From the front of both buildings the projects were not visible. To highlight just how interconnected projects are during one interview, the interview was interrupted by someone coming to greet the person I was speaking to. This person also ran a project in the city. It was

particularly interesting how in seeking interviewees, I drew upon both people and sites as sources to sample.

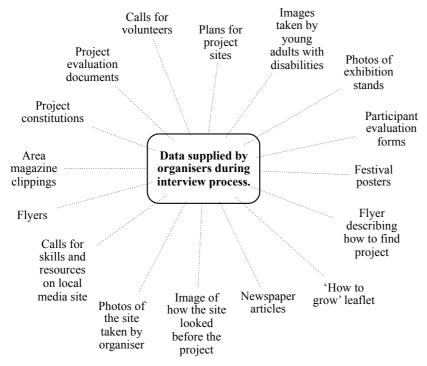
3.6.3 Interviews Conducted

In total forty-six organisers were interviewed from a total of forty different UA projects in both Hull and Copenhagen, as shown in Table 9. The average length of each organiser interview was four hours recording time, however some were considerably longer than this. Alongside over one-hundred and fifty smaller informal discussions occurred with organisers over the research period.

a.	Urban Agriculture Projects	Hull, UK.	Copenhagen, DK.
	Total = 40	Projects = 33	Projects = 7
b.	Interviews with Organisers	Hull, UK.	Copenhagen, DK.
	Total = 46	Interviewees = 36	Interviewees = 10

Table 9 a. Overview of the number of projects in each location. b. Number of interviews conducted in each location and in relation to total number of interviews conducted.

Audio recordings were made of the interviews, which would be transcribed alongside accompanying field notes. In addition, the interview question guide was useful as I noted the topic which an interviewee wanted to discuss first, that which they considered the most important aspect of the project. Alongside this numerous different data types



were collated during the interview process, as shown by Figure 9. This data was considered using the mapping framework to further understand the practice of a project or projects.

Figure 9 Mindmap of data supplied by organisers during the interview process.

Prior to conducting some of the interviews, rapport with the organisers had been developed, and I predicted that some topics may provoke emotional responses. These topics included the reason organisers had initiated or joined a project, how people related to the city and their current feelings towards their involvement in project, as examples. I prepared for this during the interviews by not asking specifically about such issues but letting them emerge as an organiser wanted to talk about them. I think the reason these were emotive topics is that the interviews were often the first time somebody had asked them about what they do and the reasons why they do it. The interviews for some were a form of cathartic release having a safe and controlled environment to discuss the project. This was evidenced in the way in which answers were constructed, validating the length of the interviews and my role as listener. There were instances where an organiser wanted to speak freely about the project before I asked any questions. This suggested that during the time between organising the interview and conducting it, research subjects had thought and reflected on their projects. Organisers had strong feelings about what they felt needed to be reflected in the research. One interviewee was so keen to have their voice heard about their project they decided to arrange the interview to take place on their birthday. This increased the pressure to do the research project justice.

During the data analysis, it became evident that as certain themes emerged careful decisions needed to be made about the degree to which an organiser could be identified from their answer. For example, interviewees spoke about current personal financial situations which had occurred directly because of their involvement in the project. They also spoke about situations in which they may leave their role in a project. In some cases, projects with more than one organiser, an interviewee may have discussed the detrimental role another organiser was having on the project. These topics were not explicitly asked about but were voluntarily shared by the organiser for the benefit of the research. This led to the decision to omit identification of certain topic areas to the project or organiser who said it.

Gatekeepers are the people who control access to a research setting. Organisers are the project gatekeepers. A discussion about gatekeepers is pertinent to the study due to the unique relationship between organisers and project participants.

Participants are transient with evolving commitment; a participant may only attend once or an organiser- participant relationship may have established across many years of a projects existence. There were also examples of pre-existing connections between organisers and participants prior to the projects existence. Organisers have an exclusive

insight into the lives of the people the project seeks to attract and those who attend. This related to family circumstance, mental health, living conditions and other challenges. The organisers enacted a process of self-censoring project information and anonymised stories about their participants. Further to an exclusive insight into participants, organisers understand the conditions of the location and community within proximity to the project. This could be because the organiser lives there or has spent a considerable amount of time in the area. There were many conditions but one example is an understanding of connections and disconnections between certain fractures of that community and the reasons why. When the decision was taken to focus the study on organisers this unique insight would provide a vital role in data collection. Their role as gatekeepers does not only apply to the participants and the location but also to each other. Organisers were protective of the others from their project and as a collective of organisers active in shaping the foodscape of Hull and Copenhagen. The next section explores positionality and ethics in relation to this study.

3.7 Positionality

Knowledge as a process of construction suggests that our understanding of 'reality' is moulded and limited by our background, identity and experiences. The ontological position refers to what we know about the world, the philosophical assumptions we have about the nature of 'reality'. Our epistemological position, how we know the world is shaped by our ontological position (Gilbert 2008). This shaping refers to our assumptions about the way of inquiring into the research subject and establishing 'truth'. Positionality is dynamic, with a researcher's *position* influencing, impacting upon and changed by the research process. *Position* can refer to many psychological processes formed by a researcher's background, identity and experiences. Positionality is best understood as "where one stands in relation to another" (Merriam et al 2001: 441). Positionality is particularly important to this study given its role in influencing the decision to conduct a comparison of projects in two locations.

My position shaped the research process, including what I viewed as important, how the 'researched' responded and how data was interpreted. The purpose of considering positionality in research was to understand the complex relationship between how my personal identity is socially constructed (England 1994) and how that impacted my ability to understand the people and projects of UA. My role was to remain critical and inquisitive whilst also exercising empathic neutrality. To do this I needed to be conscious of how my values and biases are reflected in the research and ensure I was aware of the implications of this throughout my data collection and interpretation. This was particularly important because during the research process, many of the personal interactions experienced were unlikely to occur other than for this research.

It is necessary to outline and explain my contribution to the research in terms of my *experience*, *background* and *identity*. These are all drawn upon to be able to understand the practices of UA. The rationale for this is to add to a research shift in which position is considered with mature reflexivity and evaluation (Crang 2002). Although my position is outlined within this section, the process is iterative and the implications of my positionality were reflected across all stages of the research.

3.7.1 Experience

A unique aspect of my positionality in this field relates to my experience of UA prior to undertaking this research. I had no previous experience of running or taking part in a project nor, for example, had I leased an allotment plot. I am someone likely to have an allotment plot if I was more geographically attached and committed to a specific location, living in one place long enough for it to be worthwhile joining a waiting list. This was a relatively unique position because extant UA research tends to be conducted from an insider position (Blay-Palmer et al 2013). This insider position means many

researchers have previously been involved in UA or closely related activities to varying extents (Brannick & Coghlan 2007). Researchers then conduct research from inside UA, which gives that specific type of insight. Merriam et al described this advantage as being able to "project a more truthful, authentic understanding" (2011: 411). On a pragmatic level, an insider has further advantages including ease of access to UA and in the identification of non-verbal cues from research respondents.

However, there is a general acceptance that as a researcher you can exist in the 'space between', being both an insider, 'going native' (Brannick & Coghlan 2007) and an outsider at the same time (Dwyer & Buckle 2009). One is not preferential but there is value in different perspectives to the field. Corbin-Dwyer and Buckle speculate that researchers can *only* exist in the 'space between' in their perspective of a study area (2009: 61). This is indicative of tendencies to dichotomise the world into binary oppositions.

However, I believe my lack of starting knowledge enabled me to bring a unique perspective to investigate UA. A balance of both insider and outsider perspectives is useful to the research field. My initial outsider perspective enabled me to continually build knowledge, whilst starting with low levels of assumption. In addition, I believe that my detachment from the field in the early stages enabled me to ask provocative questions, of which the provocatory nature was subconscious through an initial naivety. This initial naivety was highly valuable in setting up rapport between the 'researcher' and 'researched'. During the research period, I had seen many academic speakers present research on UA and whilst their insider position was not explicitly admitted in their research many findings conflated research findings with their own personal experience. This was clear in the use of the plural personal pronoun, 'we' by researchers to describe the activities of projects. I would describe my interest in UA as having grown alongside my understanding of the movement as the focus of the research.

3.7.2 Background

Before completing this research, my background included both educational and practical involvement in several different areas. My educational experience includes completing an MSc in Corporate Social Responsibility with Environmental Management and a BSc in Sustainable Product Design. Two research projects were undertaken which included *Socially and environmentally responsible consumers: the impact of life values and satisfaction in product attribute trade-offs* and *Product end of life and waste generation in the beauty and personal care industry*.

Further to this I have conducted environmental audits for a university, which required training accredited by the Institute of Environmental Management and Assessment. I worked for a not-for-profit behaviour change company, which develops products with

the aim of driving positive socio-cultural behaviour change. In addition, I have worked on a collaborative project between a water company and global charity to deliver a water consumption awareness programme in a challenging school. This was completed as part of the UK government STEM initiative (Science, Technology, Engineering and Maths). The initiative encourages students to continue these subjects to Higher Education level. This practical background experience offered an understanding of the complex relationships that exist in the real world between different types of organisation. Similarly, the blurred lines of collaboration between organisations and individuals in enacting change programmes.

3.7.3 Identity

In terms of my identity I am a young white middle-class female who grew up on the border of Surrey and southwest London. I am the first of my family to attend University. My father is a Londoner and my mother grew up in one of the research locations, Hull. I have grown up familiar with Hull, having spent time visiting family in the city several times a year. With my long-standing albeit periodic connection to the research location I had a minor insider view of the city's quirks and customs. I have always remained protective of my Yorkshire roots, particularly due to some widespread disparaging views of Hull, and I hold firm in my view that it is both an underestimated and misunderstood city. To be self-deprecating and downplay the strengths of this predominantly working-class city is typically characteristic of Hull's people. I stand by this insight having lived in Hull for the duration of the research.

As the research developed my outsider position to UA in Hull highlighted the need to develop a comparative study in another location beyond other UK 'ordinary cities'. The reason for this is that it may have been difficult to identify similarities and differences when the examples of projects were the same. For the Copenhagen research location, I had an outsider perspective informed by the gradual acquisition of insider knowledge of the UA in Hull as the research progressed. To clarify: prior to undertaking this study I had never been to Denmark, however several preconceptions existed. The ideas centred around the zeitgeists of 'Danish happiness', the notion of 'living Danishly', and having a highly educated population with both traditional (family) and progressive societal attitudes (such as sustainable development).

My first thought on what research subjects in Hull would notice about me was my accent, as markedly different from the Hull accent. A Hull accent is particularly distinguishable from other Yorkshire dialects because of the city's closed geographical positioning on the North-East Coast and low levels of urban migration to the area, minimising language change. This led to the decision that it was best to discuss the research and organise interviews face to face with potential research subjects, cautious

that my detached outsider London accent may be off putting on the phone. The ability to prove my connection with Hull served useful in helping to build rapport quickly, bridging this quasi insider-outsider perspective. This was particularly useful for conducting the interviews, as interviewees did not have to explain street names or specific iconic features of Hull such as 'Jacksons' to be Jackson's Bakery (William Jacksons Food Group) or specific words such as 'bains' for children. My accent and subsequent potential for judgement was a non-issue in Copenhagen. During the data collection, I learnt that respondents in Hull and Copenhagen shared a character trait - 'straight talking'. People who have grown up in Hull and Copenhagen are remarkably partial to a no-nonsense approach particularly when asking for their willingness to partake in the research.

To summarise, I would describe my positionality as being an outsider regarding UA, but with a unique insider comprehension of one of the research locations to which I am also able to bring an outsider perspective. I am more of an outsider than an insider, and open about that fact, which I believe enabled me to create a unique relationship with the people engaged in the research. This meant I was close enough to be relatable and trusted, whilst paradoxically being 'alien' and impartial enough that respondents trusted the approach taken in my UA research.

In the following section I discuss the impact of the study process on research subjects as well as the impact of conducting the research on me personally. The research has been life shaping. I have matured, shaping my ideas on who I am, the type of person I want to be and the environment in which I want to live. I have learnt more about the human condition than I ever could have expected and I have been privileged to meet such inspirational characters who demonstrate unreserved resilience in seeking and enacting change at many levels. I have gained an understanding of the benefits of UA and can understand peoples' commitment and resolve in the face of challenges. As my understanding of UA grew in each location, I could share the experience of Hull in Copenhagen and vice versa. In each location, the people were interested in the 'everyday' of projects and the idiosyncratic. They wanted to know about the similarities and differences in what projects grow in the other location, what happens throughout the seasons and where the projects are. One discussion that highlights this involved explaining to the Copenhagen organisers that some of the Hull schools had projects. However, the schools have fences which separated the playground from the road, a concept that was highly unusual to them. I was also further able to help a Hull organiser in visiting the case study projects in Copenhagen.

On many occasions organisers have asked me whether I will start my own project based on the knowledge I have gained, but on this I am yet unable to answer.

3.7.4 Ethics

Ethics are a significant part of any research project and must be consciously considered and understood. Ethics can be understood as the principles and guidelines that help researchers uphold their values when conducting research (Gilbert 2008). The practice needs careful balancing of the study pursuit whilst protecting research subjects. This is the researcher's responsibility. Ethical principles include upholding appropriate behaviour standards and understanding the effect of any actions upon research subjects and the research phenomenon itself (Ritchie et al 2013). By acknowledging ethical principles, researchers can promote best practice, establish a culture of concern for research participants and maintain accountability. This ethical awareness must be considered across all aspects of research including post-research impact. Ethics are important, providing an umbrella for deliberating research values and mitigating variables in the face of unpredictability when undertaking qualitative research. Ethics are not bound by subject but are the responsibility of all researchers in upholding research integrity (Neuman & Robson 2014). This section discusses how appropriate ethical practices were upheld and the unexpected played out on the ground when conducting this research.

3.7.4.1 Formal Procedures and Planning

The University of Hull's protocols were followed for ethics, risk assessment and travel planning (Code of Ethics, University of Hull). A key consideration for ethics in this research was obtaining informed consent for the data collection methods. Consent is the permission granted by research subjects to participate in the data collection. Informed consent means research subjects give consent with "full knowledge of the implications of his or her involvement" (Gilbert 2008: 508). In practice, this meant consent forms contained an explanation of the purpose of the research and how the data would be used. A different consent form was created for the research in Hull and Copenhagen. This took into account that English would be a second language for research subjects in Denmark. Whilst planning the research and necessary fieldwork a number of steps were taken to increase my knowledge of conducting qualitative research. This included studying for a Postgraduate Diploma in Research Training, as part of the University of Hull's Postgraduate Training Scheme. For this I completed specific modules on *Qualitative Research*, *The Research Interview* and *Critical Thinking in Human Geographic Inquiry*.

3.7.4.2 Protecting Research Subjects During Data Collection

Researchers have a duty of care to protect research subjects. In practice, all subjects were informed that they were being studied and given the opportunity to refrain from participation in the research. My identity as a researcher was not concealed. This was

communicated from the very beginning before someone had the opportunity to say something they may not have done given my position and interest in UA. Although seemingly easy to achieve, on the ground in the early stages the ability to find the role the person had at an event or a project was quite difficult. As the research developed, organisers would often announce my arrival and why I was there to the obvious people present. Other occurrences were dealt with as appropriate, for example as I conducted an interview walking around a large allotment site, plotholders would often want to speak to the organiser. The organiser would quickly introduce me and explain why I was there before I was invited into private discussions. This gave organisers and participants the choice to withhold information.

Contentious Topics

From the first stages of the research it became overwhelmingly clear that issues around funding and competition for funding were a contentious issue. This needed to be a key consideration in the development of the consent forms for interviewing and careful thought given to how this would be dealt with within the research. I learnt that for some organisers this would be a non-negotiable in their decision to participate in the research. On the consent forms the decision was taken to explicitly declare that information about funding of a project would not be shared with other organisers. Further to this I explained what my interest in funders would be. In light of this, the consent forms contained the statement, "I will not share who your project receives funding from. I am only interested in the type of funder for example private, charity or governmental for the purposes of this research, not the names". When conducting the interviews in which funding played a key part of an organiser's discussions, if a funder was mentioned I sought clarification as to the type of funder they were. However, funder names were used when information is publicly displayed and actively advertised by a project. This was explained prior to data collection and again during the interviews.

Site Unpredictability

One challenge in this research that had ethical implications included the diversity of project sites. Many UA sites are used by the 'public' in different ways. This meant it was difficult to predict what and who would be on the site. This was compounded by the inclusion of projects at different stages of development. I had to ensure my personal safety and the safety of research subjects. As it was not possible to know in advance who might be on any given site a certificate was sought from the Disclosure and Barring Service (DBS), which enabled me to work with children and vulnerable adults. Although the research did not include children they were inevitably on some sites that I visited. I took my DBS certificate to all interviews and site visits and presented it to organisers at the beginning of a site visit.

Some incidents occurred while on research visits, a confrontation occurred between two participants at a community lunch club. As the organiser I had been conversing with needed to deal with this situation, I felt my presence become inappropriate and left the site. Furthermore, on arrival at another project the site was being used for a drug deal. The organiser decided to be interviewed in a local café first and then to return to the project for a site tour. This was a regular occurrence and an on-going challenge for the organisers with the site under surveillance by the Police to evidence the criminal activity. Bizarrely similar situations occurred in both Hull and Copenhagen.

In terms of project site access, as shown in the literature on guerrilla gardening (2.4.1 Defining Urban Agriculture and Understanding Activities), I was aware that a few projects operated illegally on sites or carried out practice across sites which were privately owned with no permission sought to be operating there. As a result of this, the decision was taken not to visit the multiple small pieces of land on which one project operated. For another project included in the research I only walked on the public access walkway that ran alongside the project because people had previously been arrested for being involved in UA on the site.

Data Collection of Materials

During the research process, organisers brought materials about the project that they thought would be beneficial to the research and gave permission for this to be used. This included manifesto copies, flyers with project aims and submissions to funders. Alongside this, as part of the interview schedule one of the questions asked about any formal and informal information collection completed by organisers. Many organisers had only collated formal information when required by funders but asking this uncovered some surprising ways in which organisers had informally collated materials. When probed, they told me they collected this data for no other reason than for the information to exist. Some of these records held sensitive information and careful deliberation was needed to negotiate whether the data could be used and how it could be used. The organiser always made these decisions. One example of this was an informal record of a project collated by an organiser who works for a formal organisation. This record was in the form of a partially chronological scrapbook. Before I gained access to this, I gave the organiser an opportunity to conceal information they did not want me to see. Subsequently, in the presence of the organiser I went through the data and explained which aspects would be of interest to the research and why. This was challenging, as it was the first time I was seeing this data and had to make quick decisions on what was and was not of interest and why. The organiser photocopied this data and gave me permission to use it in the research project. This was a testament to the trust built and co-operation which existed between researcher and research subjects.

When on site, I always asked permission to take images of the projects and explained that I would not take any pictures of the people on sites. If it was not possible to take such images, I did not take any. These images were helpful for being able to recall the material features of a project having collected data on over forty projects. As multiple site visits were undertaken, these images illustrated how many projects had physically changed over time.

One project in the study had a space specifically aimed at young adults with disabilities including learning difficulties. In arranging the research, the organisers asked that I attended the project whilst the group were present during their weekly time slot. This was so I could explain the research to the group and they could show me the site. Most importantly the organisers, who are social workers, described the space as belonging to the young adult group. Having agreed to this I decided it would have been inappropriate to conduct interviews. Instead I took several disposable cameras to the session, which the group used individually and in pairs to capture parts of the garden they had been involved in or enjoyed. As they moved around the site taking pictures the project was discussed. I did not make an audio recording of my time but took notes. These field notes and images would later form data. The young adults really enjoyed taking pictures of the site and wanted to see them. Once I developed the images I retained an electronic copy for the research. I also delivered a glossy printed set back to the project for them to keep or use for a creative project such as a collage in the building on-site, similar to collages the group had already made.

An unanticipated encounter to occur was having a research subject who was unable to read or write. However, the interviewee did not want to tell me this but had been very keen to be part of the research and described wanting to have their voice heard. To overcome this and protect this interviewee, I read the informed consent form explaining each aspect of it whilst another organiser was present who had previously been interviewed. I recorded their consent for the interview. On reflection, what is most interesting about this is a later research finding showing that typically in projects where there is more than one organiser, there is usually one that is highly educated and someone with no formal education. However, as this emerged during data analysis I could not have identified this pattern whilst conducting my interviews.

Language and Cultural Distinctions

Conducting research in another country had ethical implications; the most obvious was that communication would be more challenging as English was a second language for many of the Danish organisers. Organiser groups were either all people who had grown up in or near Copenhagen or people who had moved to Copenhagen from other European countries to work or study. With nearly all organisers having achieved at least a higher education degree, they all spoke English. With organisers who had moved to

Copenhagen from other countries, they worked or studied in English and therefore language was not a barrier. However more time was accounted for with the Copenhagen interviews to allow organisers to find the terminology that best described what they wanted to say. As my understanding of Danish culture and particularly Copenhagen culture increased, I was able to comprehend cultural differences more effectively and assess how best to access projects. This meant a direct approach was considered more appropriate in a Copenhagen context what with Danish subjects typically demanding an outline of the commitment needed in taking part in the research. That which underpinned the ability to build rapport between the research subjects and myself was a shared sense of humour. For example, on arrival to conduct an interview with an organiser in a community centre, the organiser shared that prior to my arrival, the organisers had joked of their worry about offering me a drink because they revered the British reputation for tea drinking. Before commencing the site tour and interview I made everyone 'English tea'. This exchange enabled a relationship to be developed quickly and created a friendly atmosphere for the research setting. The next section explains how the collected data was analysed and introduces the subsequent data chapters.

3.8 Analytical Framework

This section discusses the analytical framework developed to enable interpretation of the data to fulfil research objectives and explore results in relation to the research aims. The format discusses the ways in which the different types of data were considered to provide rationale for the decisions that prevailed. In light of the extensive data collection throughout the methodology initially developing an analysis strategy for the data was quite an overwhelming process. The data analysis is presented in sequential stages to reflect the developmental analysis techniques implemented.

3.8.1 Transcript Codification

The first stage of the data analysis required preparation of the transcripts. Codes were developed to identify each transcript in relation to the organiser interviewed. The reason for this was it allowed the transcriptions to be connected back to the data collected from mapping and case studies. Additionally, developing codes also helped in psychologically moving to a new research phase from data transcription to data analysis. The codes developed utilised the prefix 'HO' for 'Hull organiser' and 'CO' for 'Copenhagen organiser', followed by a number. This offered easy identification of the city that the transcript referred to. It further enabled attribution of smaller more informal interviews to a particular organiser. These identification codes are used for verbatim quotes in the data chapters. Table 10 outlines all forty projects used in this study including data on UA type, structural group who initiated project, whether the project was emerging or established and how many organisers were interviewed as part of that project.

Governmental Organisation Governmental Organisation Governmental Organisation Governmental Organisation Governmental Organisation Governmental Organisation Governmental Organisation Governmental Organisation Governmental Organisation Governmental Organisation Governmental Organisation Non-Governmental Organisation Non-Governmental Organisation Non-Governmental Organisation Non-Governmental Organisation Independent Independ	P.	Project Name (having undergone demarcation)	UA Type	Established or Emerging	Structural Grouping Typology	Organiser Interview Identifier Code
Heath Center – Theappaidic Community Garden Enaphished Governmental Organisation Fletch Center – Community Garden Enaphished Governmental Organisation Community Garden Enarging Governmental Organisation Community Garden Enarging Governmental Organisation Community Garden Enarging Governmental Organisation Liberay - Community Garden Community Garden Enaphished Governmental Organisation Liberay - Community Garden Community Garden Community Garden Enaphished Governmental Organisation Conference of Community Garden	1		Community Garden	Established	Governmental Organisation	HO1
Established Governmental Organisation Adulted Centre - Urban Fann (Next to Allouments) Chean Fann Established Governmental Organisation Adult Centre - Community Garden Community Garden Established Governmental Organisation Library - Community Garden Established Governmental Organisation Library - Community Garden Established Governmental Organisation Community Garden Established Governmental Organisation Library - Community Garden Established Governmental Organisation Alloument Alloument Established Governmental Organisation Alloument All	2	Health Centre - Therapeutic Community Garden	Community Garden	Emerging	Governmental Organisation	HO1
Adult Centre - Community Garden Community Garden Established Governmental Organisation Park Playground - Community Garden Community Garden Community Garden Established Governmental Organisation Community Garden Established Governmental Organisation Community Garden Established Governmental Organisation Community Garden Community Garden Energing Governmental Organisation Allotment Traditional Allotment Association Community Garden Energing Governmental Organisation Allotment Association Community Garden Community Garden Energing Governmental Organisation Allotment Association Community Garden Community Cammunity Cammunity Cammunity Cammunity Cammun Community Cammunity Cammunity Cammunity Cammunity Cammunity Camm	3	Elderly Centre – Urban Farm (Next to Allotments)	Urban Farm	Established	Governmental Organisation	CO2
Adult Centre - Community Garden Community Garden Governmental Organisation Chiffer Steep Governmental Organisation Chiffer Steep Governmental Organisation Chiffer Steep Governmental Organisation Chiffer Steep Governmental Organisation Chiffer Steep Governmental Organisation Chiffer Steep Governmental Organisation Allounent Association Community Garden Governmental Organisation Allounent Association Community Garden Governmental Organisation Allounent Association Community Garden Governmental Organisation Allounent Association Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Community Garden Governmental Organisation Community Garden Community Garden Governmental Organisation Community Garden Community Garden Governmental Organisation Community Garden Community Garden Governmental Organisation Community Garden Community Garden Governmental Organisation Community Garden Community Garden Governmental Organisation Community Garden Community Garden Governmental Organisation Community Garden Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Community Garden Governmenta	4	Youth Centre – Community Garden	Community Garden	Established	Governmental Organisation	HO3, HO4.
Park Playground – Community Garden Community Garden Community Garden Community Garden Community Garden Community Garden Community Garden Emerging Governmental Organisation Children's Centre – Community Garden Traditional Allotment Allotment Established Governmental Organisation Traditional Allotment Allotment Stablished Governmental Organisation Allotment Association Community Garden Community Garden Established Governmental Organisation Allotment Association Community Garden Community Garden Community Garden Community Garden Revalished Governmental Organisation Niellife Charitable Trust – Community Garden Community Garden Community Garden Community Garden Revalished Governmental Organisation Chause Lock Community Garden Community Garden Community Garden Community Garden Community Garden Community Garden Community Garden Despaisation Community Garden Community Garden Community Garden Established Governmental Organisation Permoculture Community Garden Community Garden Established Governmental Organisation	2	Adult Centre – Community Garden	Community Garden	Emerging	Governmental Organisation	HO5
Library - Community Garden Community Garden Emerging Governmental Organisation Traditional Alloment Traditional Alloment Traditional Alloment Traditional Alloment Traditional Alloment Traditional Alloment Traditional Alloment Traditional Alloment Traditional Alloment Traditional Alloment Traditional Alloment Traditional Alloment Community Garden Established Governmental Organisation Alloment Association Community Garden Established Governmental Organisation Development Trast - Community Garden (Basplos) Community Garden Established Governmental Organisation Academy School - Community Garden Community Garden Established Governmental Organisation Community Garden Community Garden Established Governmental Organisation Community Garden Community Garden Established Governmental Organisation Community Garden Community Garden Established Governmental Organisation Community Garden Community Garden Established Governmental Organisation Community Garden Community Garden Established Governmental Organisation Community Garden Community Garden Established Governmental Organisation Community Garden Community Garden Established Governmental Organisation Community Garden Governmental Organisation Community Garden Established Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Governmental Governmental Governmental Governmental Governmental Governmental Governmental Governmental Governmental	9	Park Playground - Community Garden	Community Garden	Established	Governmental Organisation	CO6, CO7.
Children's Centre - Community Garden Community Garden Established Governmental Organisation Allotment Traditional Allotment Allotment Children's Centre - Community Garden Community Garden Established Governmental Organisation Allotment Association Community Garden Established Governmental Organisation Allotment Stational Allotment Community Garden Established Governmental Organisation Development Trast - Community Garden Established Governmental Organisation Community Garden Community Garden Established Non-Governmental Organisation Community Garden Community Garden Established Governmental Organisation Housing Trast - Community Garden Community Garden Established Governmental Organisation Community Garden (Therapy) Community Garden Community Garden Community Garden Community Garden Community Garden (Therapy) Community Garden Community Garden (Therapy) Community Garden Community Garden (Therapy) Community Garden Community Garden (Therapy) Community Garden Community Garden (Therapy) Community Garden Community Ga	7	Library – Community Garden	Community Garden	Emerging	Governmental Organisation	HO8
Traditional Alloument Alloument Alloument Association Community Garden Alloument Association Community Garden Alloument Association Community Garden Alloument Association Community Garden Alloument Association Community Garden Batabished Governmental Organisation Development Trast - Community Garden Governmental Organisation Community Garden Instabished Association Community Garden Governmental Organisation Community Garden Governmental Organisation Community Garden Governmental Organisation Governmental Organisation Community Garden Governmental Organisatio	&	Children's Centre – Community Garden	Community Garden	Emerging	Governmental Organisation	HO9
Traditional Alloment Alloment Alloment Association Community Garden Residential Alloment Residential Alloment Residential Alloment Residential Alloment Residential Alloment Residential Alloment Residential Alloment Residential Alloment Residential Alloment Residential Alloment Residential Alloment Residential Alloment Residential Alloment Residential Alloment Development Trast - Community Garden Residential Community Garden Residential Alloment Residential Resident Residential Resident Residential Resident Residential Resident Residential Resident Residential Resident Residential Residential Resident Remaculture Community Garden Remaculture Community Garden Remaculture Community Garden Remaculture Community Garden Remaculture Community Garden Remaculture Community Garden Remaculture Community Garden Remaculture Community Garden Remaculture Community Garden Remaculture Community Garden Residential Resid	6	Traditional Allotment	Allotment	Established	Governmental Organisation	HO10
Alloment Association Community Garden Community Garden Community Garden Community Garden Community Garden Established Governmental Organisation Wildlife Charlable Trust - Community Garden Established Governmental Organisation Non-Governmental Organisation Development Trust - Community Garden Established Governmental Organisation Community Garden Non-Governmental Organisation Church - Community Garden Community Garden Established Governmental Organisation Community Garden Non-Governmental Organisation Housing Trust - Community Garden <	10	Traditional Allotment	Allotment	Established	Governmental Organisation	HO11
Residential Alloment Alloment Established Governmental Organisation Development Trast - Community Garden Community Garden Established Non-Governmental Organisation Development Trast - Community Garden Established Non-Governmental Organisation Academy School - Community Garden Community Garden Established Non-Governmental Organisation Community Garden Community Garden Community Garden Inceptable Non-Governmental Organisation Community Garden Community Garden Community Garden Established Independent Community Garden (Yung People) Community Garden Established Independent Permaculture Community Garden Community Garden Established Independent Permaculture Community Garden Community Garden Community Garden Community Garden Permaculture Community Garden Community Garden Community Garden Community Garden Sports Club Community Garden Community Garden Community Garden Independent Container Farm Erapsing Independent Container Farm Urban Farm	11	Allotment Association Community Garden	Community Garden	Emerging	Governmental Organisation	HO11
Wildlife Chariable Trust - Community Garden Community Garden Community Garden Non-Governmental Organisation Development Trust - Community Garden Community Garden Community Garden Community Garden Non-Governmental Organisation Church - Community Garden Community Garden Established Non-Governmental Organisation Community Garden Community Garden Energing Non-Governmental Organisation Community Garden (Therapy) Community Garden Energing Non-Governmental Organisation Community Garden (Therapy) Community Garden Energing Independent Community Garden (Therapy) Community Garden Energing Independent Demaculture Community Garden Community Garden Energing Independent Demaculture Community Garden Community Garden Community Garden Community Garden Sports Club Community Garden Community Garden Community Garden Community Garden Urban Farm Container Farm Urban Farm Urban Farm Urban Farm Urban Farm Urban Farm Othan Gordop Farm Urban Farm Urban Farm Ur	12	Residential Allotment	Allotment	Established	Governmental Organisation	HO12
Development Trust – Community Garden (has plots) Community Garden (has plots) Community Garden (Governmental Organisation Governmental Organisation (Aucher) – Community Garden (Governmental Organisation Gommunity Garden (Therapy) Community Garden (Governmental Organisation Gommunity Garden (Therapy) Community Garden (Therapy) Independent (Therapy)	13	Wildlife Charitable Trust - Community Garden	Community Garden	Established	Non-Governmental Organisation	HO13
Academy School – Community Garden Community Garden Community Garden Governmental Organisation Church – Community Garden Community Garden Energing Non-Governmental Organisation Community Garden (Therapy) Community Garden Established Independent Community Garden (Therapy) Community Garden Energing Independent Community Garden (Young People) Community Garden Community Garden Independent Permaculture Community Garden Community Garden Community Garden Community Garden Black and Minority Ethnic Community Garden Community Garden Community Garden Community Garden Sports Club Community Garden Community Garden Community Garden Community Garden Community Garden Permaculture Community Garden Community Garden Community Garden Community Garden Independent Permaculture Community Garden Community Garden Community Garden Lyban Farm Energing Independent Rooftop Farm Urban Farm Urban Farm Energing Independent Urban Farm Urban Farm Urban Farm	14	Development Trust - Community Garden (has plots)	Community Garden	Established	Non-Governmental Organisation	HO14
Church - Community Garden Community Garden Community Garden Non-Governmental Organisation Housing Thats - Community Garden Emerging Non-Governmental Organisation Community Garden (Therapy) Community Garden Independent Community Garden (Therapy) Community Garden Independent Permaculture Community Garden Community Garden Independent Permaculture Community Garden Community Garden Community Garden Black and Minority Ethnic Community Garden Community Garden Independent Sports Club Community Garden Community Garden Community Garden Sports Club Community Garden Community Garden Community Garden Rooftop Farm Urban Farm Established Independent Container Farm Urban Farm Urban Farm Urban Farm Urban Farm Urban Farm Urban Farm Urban Farm Urban Farm Urban Farm Urban Farm Energing Urban Farm Urban Farm Urban Farm Established Urban Farm Urban Farm Urban Farm Energing	15	Academy School – Community Garden	Community Garden	Established	Governmental Organisation	HO15
Housing Trust – Community Garden Community Garden Community Garden Non-Governmental Organisation Community Garden (Therapy) Community Garden (Therapy) Community Garden Established Independent Permaculture Community Garden Community Garden Established Independent Permaculture Community Garden Community Garden Community Garden Independent Guerrilla Community Garden Community Garden Community Garden Independent Back and Minority Ethnic Community Garden Established Independent Guerrilla Community Garden Community Garden Community Garden Permaculture Community Garden Community Garden Community Garden Rooftop Farm Luban Farm Established Independent Loban Farm Luban Farm Energing Independent Luban Farm Urban Farm Energing Independent Luban Farm Urban Farm Energing Independent Urban Farm Community Garden Community Garden Community Garden Community Garden Community Garden Community Garden <td< th=""><th>16</th><td>Church – Community Garden</td><td>Community Garden</td><td>Emerging</td><td>Non-Governmental Organisation</td><td>HO16</td></td<>	16	Church – Community Garden	Community Garden	Emerging	Non-Governmental Organisation	HO16
Community Garden (Therapy) Community Garden Established Independent Community Garden (Young People) Community Garden Independent Permaculture Community Garden Community Garden Independent Permaculture Community Garden Community Garden Independent Black and Minority Ethnic Community Garden Community Garden Independent Guerrilla Community Garden Community Garden Independent Sports Club Community Garden Community Garden Independent Permaculture Community Garden Community Garden Independent Rooftop Farm Community Garden Urban Farm Energing Independent Rooftop Farm Urban Farm Energing Independent Container Farm Urban Farm Energing Independent Urban Farm Urban Farm Energing Independent Urban Farm Urban Farm Energing Independent Urban Farm Urban Farm Energing Independent Urban Farm Community Garden Urban Farm Energing <	17	Housing Trust - Community Garden	Community Garden	Emerging	Non-Governmental Organisation	HO17, HO18.
Community Garden (Young People) Community Garden Energing Independent Permaculture Community Garden Community Garden Enterging Independent Permaculture Community Garden Community Garden Enterging Independent Black and Minority Ethnic Community Garden Community Garden Enterging Independent Sports Club Community Garden Community Garden Community Garden Independent Rooftop Farm Community Garden Community Garden Independent Rooftop Farm Community Garden Community Garden Independent Container Farm Urban Farm Energing Independent Urban Farm Container Farm Urban Farm Independent Urban Farm Urban Farm Energing Independent Urban Farm Urban Farm Energing Independent Urban Farm Urban Farm Energing Independent Commercial-Run - Community Garden Urban Farm Energing Independent Community Change Network Network Established Independent <	18	Community Garden (Therapy)	Community Garden	Established	Independent	HO19, HO20.
Permaculture Community Garden Community Garden Community Garden Independent Balack and Minority Edution Community Garden Emerging Endependent Independent Gueralial Community Garden Community Garden Established Independent Gueralial Community Garden Community Garden Established Independent Permaculture Community Garden Community Garden Established Independent Rooftop Farm Urban Farm Energing Independent Rooftop Farm Urban Farm Energing Independent Container Farm Urban Farm Energing Independent Urban Farm Urban Farm Energing Independent Urban Orchard (with Wildlife Community Garden) Urban Farm Energing Independent Commercial-Run - Rooftop Community Garden Community Garden Community Garden Community Garden Community Garden Independent Volunteer Network Community Change Network Network Established Independent Community Change Network Network Established Independent <th>19</th> <td>Community Garden (Young People)</td> <td>Community Garden</td> <td>Emerging</td> <td>Independent</td> <td>HO21</td>	19	Community Garden (Young People)	Community Garden	Emerging	Independent	HO21
Permaculture Community Garden Community Garden Community Garden Independent Black and Minority Ethnic Community Garden Community Garden Established Independent Guerzilla Community Garden Community Garden Established Independent Permaculture Community Garden Community Garden Energing Independent Rooftop Farm Urban Farm Energing Independent Container Farm Urban Farm Energing Independent Urban Farm Urban Farm Energing Independent Urban Farm Urban Farm Energing Independent Urban Farm Urban Farm Energing Independent Urban Farm Urban Farm Energing Independent Urban Farm Urban Farm Energing Independent Commercial-Run - Community Garden Urban Farm Energing Independent Commercial-Run - Rooftop Community Garden Community Garden Energing Independent Community Change Network Independent Community Garden Network Established </th <th>70</th> <td>Permaculture Community Garden</td> <td>Community Garden</td> <td>Established</td> <td>Independent</td> <td>CO22</td>	70	Permaculture Community Garden	Community Garden	Established	Independent	CO22
Black and Minority Ethnic Community Garden Community Garden Community Garden Independent Sports Club Community Garden Community Garden Community Garden Independent Permaculture Community Garden Community Garden Energing Independent Rooftop Farm Urban Farm Energing Independent Container Farm Urban Farm Energing Independent Urban Farm Urban Farm Energing Independent Urban Container Farm Urban Farm Energing Independent Urban Container Farm Urban Farm Energing Independent Urban Contact (with Wildlife Community Garden) Urban Orchard Established Independent Commercial-Run – Community Garden Community Garden Community Garden Community Garden Community Garden Volunteer Network Network Established Independent Commercial-Run – Rooftop Community Garden Network Established Independent Community Change Network Network Established Independent Procal Food Network <	21	Permaculture Community Garden	Community Garden	Emerging	Independent	HO23
Guerrilla Community Garden Community Garden Community Garden Independent Sports Club Community Garden Community Garden Community Garden Independent Rooftop Farm Community Garden Urban Farm Established Independent Rooftop Farm Urban Farm Energing Independent Container Farm Urban Farm Energing Independent Urban Orchard (with Wildlife Community Garden) Urban Farm Energing Independent Urban Orchard (with Wildlife Community Garden) Urban Orchard Established Independent Commercial-Run – Community Garden Community Garden Community Garden Independent Commercial-Run – Rooftop Community Garden Community Garden Community Garden Independent Volunteer Network Network Established Independent Giobal Environment Network Network Established National Network Local Food Network Network Established Local Network Productive 'Street Bed' Network Network Established Local Network Perme	22	Black and Minority Ethnic Community Garden	Community Garden	Emerging	Independent	HO24
Sports Club Community Garden Community Garden Community Garden Independent Rooftop Farm Community Allotment Garden Community Garden Independent Rooftop Farm Urban Farm Established Independent Container Farm Urban Farm Emerging Independent Urban Farm Emerging Independent Urban Farm Emerging Independent Urban Orchard (with Wildlife Community Garden) Urban Orchard Established Independent Commercial-Run – Community Garden Community Garden Community Garden Independent Commercial-Run – Rooftop Community Garden Community Garden Independent Volunteer Network Network Established Independent Volunteer Network Network Established Independent Community Change Network Network Established Local Network Productive 'Street Bed' Network Network Established Local Network Permaculture Network Network Emerging Local Network Permaculture Network Ne	23	Guerrilla Community Garden	Community Garden	Established	Independent	CO25
Permaculture Community Allotment Garden Community Garden Emerging Independent Rooftop Farm Urban Farm Established Independent Container Farm Urban Farm Energing Independent Urban Farm Urban Farm Emerging Independent Pop-Up Farm Urban Orchard Emerging Independent Urban Orchard (with Wildlife Community Garden) Urban Orchard Established Independent Commercial-Run - Community Garden Community Garden Community Garden Community Garden Commercial-Run - Rooftop Community Garden Community Garden Emerging Independent Volunteer Network Network Established National Network Community Change Network Network Established Local Network Local Food Network Network Established Local Network Productive 'Street Bed' Network Network Emerging Local Network Permaculture Network Network Emerging Local Network Permaculture Network Network Emerging Local Ne	74	Sports Club Community Garden	Community Garden	Emerging	Independent	HO26
Rooftop Farm Urban Farm Established Independent Container Farm Urban Farm Emerging Independent Urban Farm Urban Farm Emerging Independent Pop-Up Farm Urban Farm Emerging Independent Urban Orchard (with Wildlife Community Garden) Urban Orchard Established Independent Commercial-Run - Community Garden Community Garden Community Garden Community Garden Volunteer Network Notwork Extablished Independent Volunteer Network Network Established National Network Community Change Network Network Established Local Network Local Food Network Network Established Local Network Productive 'Street Bed' Network Network Emerging Local Network Permaculture Network Network Emerging Local Network Guerrilla Gardeners Network Network Emerging Local Network Growers Network Network Emerging Local Network	22	Permaculture Community Allotment Garden	Community Garden	Emerging	Independent	HO27
Container Farm Urban Farm Emerging Independent Urban Farm Urban Farm Emerging Independent Pop-Up Farm Urban Farm Emerging Independent Urban Orchard (with Wildlife Community Garden Urban Orchard Established Independent Commercial-Run – Community Garden Community Garden Community Garden Community Garden Volunteer Network Network Established Independent Volunteer Network Network Established National Network Community Change Network Network Established National Network Local Food Network Network Established Local Network Permaculture Network Network Emerging Local Network Permaculture Network Network Emerging Local Network Guerrilla Gardeners Network Network Emerging Local Network Growers Network Network Emerging Local Network	56	Rooftop Farm	Urban Farm	Established	Independent	CO28, CO29, CO30.
Urban Farm Urban Farm Emerging Independent Pop-Up Farm Urban Orchard Established Independent Urban Orchard (with Wildlife Community Garden) Urban Orchard Established Independent Commercial-Run – Community Garden Community Garden Community Garden Independent Commercial-Run – Rooftop Community Garden Community Garden Network Established National Network Volunteer Network Network Established National Network Community Change Network Network Established National Network Productive 'Street Bed' Network Network Emerging Local Network Permaculture Network Network Emerging Local Network Permaculture Network Network Emerging Local Network Guerrilla Gardeners Network Network Emerging Local Network Growers Network Network Emerging Local Network	27	Container Farm	Urban Farm	Emerging	Independent	HO31, HO32.
Pop-Up Farm Urban Farm Emerging Independent Urban Orchard (with Wildlife Community Garden) Urban Orchard Established Independent Commercial-Run – Community Garden Community Garden Community Garden Independent Commercial-Run – Rooftop Community Garden Community Garden Network Established National Network Volunteer Network Network Established National Network Community Change Network Network Established National Network Local Food Network Network Established Local Network Productive 'Street Bed' Network Network Emerging Local Network Permaculture Network Network Emerging Local Network Guerrilla Gardeners Network Network Emerging Local Network Growers Network Network Emerging Local Network	78	Urban Farm	Urban Farm	Emerging	Independent	HO33
Urban Orchard (with Wildlife Community Garden) Urban Orchard Established Independent Commercial-Run – Community Garden Community Garden Community Garden Independent Commercial-Run – Rooftop Community Garden Community Garden Independent Volunteer Network Network Established National Network Community Change Network Network Established National Network Local Food Network Network Established Local Network Productive 'Street Bed' Network Network Emerging Local Network Permaculture Network Network Emerging Local Network Guerrilla Gardeners Network Network Enterging Local Network Growers Network Network Emerging Local Network	50	Pop-Up Farm	Urban Farm	Emerging	Independent	
Commercial-Run – Community Garden Community Garden Community Garden Community Garden Independent Commercial-Run – Rooftop Community Garden Community Garden Community Garden Independent Volunteer Network Network Established National Network Community Change Network Network Established National Network Local Food Network Network Emerging Local Network Productive 'Street Bed' Network Network Emerging Local Network Permaculture Network Network Emerging Local Network Guerrilla Gardeners Network Network Enterging Local Network Growers Network Network Emerging Local Network	30	Urban Orchard (with Wildlife Community Garden)	Urban Orchard	Established	Independent	НО35, НО36, НО37, НО38.
Commercial-Run – Rooftop Community Garden Community Garden Community Garden Community Garden Independent Volunteer Network Network Established National Network Community Change Network Network Established National Network Local Food Network Network Established Local Network Productive 'Street Bed' Network Network Emerging Local Network Permaculture Network Network Emerging Local Network Guerrilla Gardeners Network Network Entablished Local Network Growers Network Network Emerging Local Network	31	Commercial-Run – Community Garden	Community Garden	Emerging	Independent	HO39
Volunteer Network Network Established National Network Global Environment Network Network Established National Network Community Change Network Network Established National Network Productive 'Street Bed' Network Network Emerging Local Network Permaculture Network Network Emerging Local Network Guerrilla Gardeners Network Network Established Local Network Growers Network Network Emerging Local Network	32	Commercial-Run – Rooftop Community Garden	Community Garden	Emerging	Independent	HO40
Global Environment Network Network Established National Network Community Change Network Network Established Local Network Local Food Network Network Energing Local Network Productive 'Street Bed' Network Network Emerging Local Network Permaculture Network Network Energing Local Network Guerrilla Gardeners Network Network Energing Local Network Growers Network Network Emerging Local Network	33	Volunteer Network	Network	Established	National Network	HO41
Community Change Network Network Established National Network Local Food Network Network Established Local Network Productive 'Street Bed' Network Network Emerging Local Network Permaculture Network Network Emerging Local Network Guerrilla Gardeners Network Network Extablished Local Network Growers Network Network Emerging Local Network	34	Global Environment Network	Network	Established	National Network	HO42, HO27.
Local Food Network Network Established Local Network Productive 'Street Bed' Network Network Emerging Local Network Permaculture Network Network Emerging Local Network Guerrilla Gardeners Network Network Emerging Local Network Growers Network Network Emerging Local Network	35	Community Change Network	Network	Established	National Network	HO43
Productive 'Street Bed' Network Network Emerging Local Network Permaculture Network Network Emerging Local Network Guerrilla Gardeners Network Network Extablished Local Network Growers Network Network Emerging Local Network	36	Local Food Network	Network	Established	Local Network	НО44, НО9, НО42.
Permaculture Network Network Emerging Local Network Guerrilla Gardeners Network Network Extablished Local Network Growers Network Network Emerging Local Network	37	Productive 'Street Bed' Network	Network	Emerging	Local Network	CO45
Guerrilla Gardeners Network Network Established Local Network Growers Network Network Network	38	Permaculture Network	Network	Emerging	Local Network	HO27
Growers Network Network Emerging Local Network	39	Guerrilla Gardeners Network	Network	Established	Local Network	HO46
	40	Growers Network	Network	Emerging	Local Network	HO46

Table 10 Outline of all forty projects used in this study including data on UA type, structural group who initiated project, whether the project was emerging or established and how many organisers were interviewed as part of that project.

3.8.2 Codifying Organiser Transcripts To A Project Narrative

The ability to identify the transcripts in relation to the project discussed was a particularly critical stage in making sense of the data. As planned in the interview phase, multiple organisers from the same project were interviewed. However, during the interview process it became clear that organisers often had roles within several projects across the city. The transcripts reflected this with organisers moving between multiple projects to illustrate differing points when answering questions.

To overcome this, a project code was also developed to distinguish between projects using the prefix 'P' followed by a number. A top-level project code was applied to all transcripts including case study projects. This top-level project code reflected the first project capacity in which I had sought to interview them. I was then able to group multiple transcripts about the same project together. These identification codes and transcripts were then attributed to the project or discussion whilst acknowledging one organiser can be part of multiple projects. Having developed the mapping framework it was easy to relate the organiser to a project and the data insights that had been collected to the point of interview and post-interview. Having set up this system, I then re-read all the transcripts. A secondary level project code was assigned in instances where an organiser spoke about their involvement in another project. These were either standalone projects or could be identified alongside top-level project codes. This ensured the unit of analysis was the projects and not the organisers.

3.8.3 Finding and Labelling Contextual 'Demographic' Data.

The interview schedule questions provided a basis for a small proportion of comparable data across the transcripts. These were the opening questions used to build rapport and create prompts for the organiser. They elicited similar responses from organisers but were project and experience specific. This data was a mixture of quantitative and qualitative.

I termed this 'demographic data' whilst it was implemented however it is more aptly described as the contextual data of both organiser and project specific information (examples in Figure 10). To develop my understanding of this I read each transcript and systematically highlighted this type of data. I then looked for the same data in the mapping framework and for case studies. I made sure to use both project and organiser

codes to extract this data and create a large table.

Project/s Name **Employment Status In Project** Frequency of Openness Organiser Name Role in Project Project Aim **Interview Location** Site/No Site/Site Seeking Food Produced Start Date of Project Physically Present on Site Food Distribution Length of Time Involved Activities Run on Site Motivation Involvement If Not Start Access to Project Other Roles

Figure 10 Examples of the headings used in first level analysis codes for contextual data.

Prior to conducting the semi-structured interviews, I had planned to use NVivo software to analyse the transcripts and began to do so, however this method hindered my ability to interpret the data. By this I mean, it was harder to analyse the transcripts without easily being able to view the context of the data in relation to the outputs of the mapping task at the same time. If I had continued to analyse the data using the software I felt some of the project narrative would be lost. For example, how a project's aims changed over time and in different circumstances. In some instances, from the mapping I gained an understanding of how projects presented aims in the public realm, such as in promotional material, speeches at conferences and to funders. This differed from the aims described during the interviews. Retention of this narrative was critical in seeing how aims changed over time. This issue with the software was further problematic in identifying contradictions of opinions by interviewees from the same project, and for recognising where interviewees discussed the role of other organisers in the project. These differences in opinions and contradictions between organisers were relevant to the study to understand the individual nature of self-identification by organisers in UA.

The decision of what to include and exclude changed as more transcripts were read in this way. As this comparable data became more evident, the table grew to include more row headings. This iterative process meant having to go back to the previous transcripts and find the data to be included. These tables were originally collated by hand and as the table expanded it was word-processed. An attempt to do this in Excel was made but the size of the data and row height restrictions meant it was not possible. Subsequently I printed out the transcripts, used post-it notes and envelopes to identify themes and commonalities in the organiser experience.

3.8.4 Demarcation of Project Names and Categorising UA Project 'Type'

In UA literature, studies typically provided either the operating name of the project, how it was branded or told the type of UA the project represented such as community

garden or allotment. In this study, up to this point projects had been known as their 'project name', such as 'Rainbow Community Garden', 'Bespoke', 'Bakersville' and 'Food4Hull' to name a few. Others had been prescribed when no explicit name existed or had not been decided, usually based on location such as 'Selby Street' or 'planters in West Hull'. The names, often abstract, did not noticeably reflect the UA project types that they represented (or differed to), which I needed to gain an understanding of (see literature review, 2.4.1 Defining Urban Agriculture and Understanding Activities). Names and their nuances are important to the narrative of projects. However, I decided that to give equal weighting to all projects whilst providing the reader with a contextual understanding, the project names would undergo a process of demarcation. This further served to make the research understandable by those within and outside the UA field. On a pragmatic level, it also aided in distinguishing between the forty projects I had extensive data about.

Typically, a process of demarcation fixes boundaries and is associated with having a limiting factor. Conversely, within this setting demarcation gave all projects a name that reflects their individuality. There is an inevitable degree of perception in this practice however I sought to mitigate the effects of this. I drew upon the data and materials I had collected about them throughout the process and evoking organiser articulations about the project. During the interview process, I asked each organiser to give the project's operating name and another name they could be identified by which described what they do on the consent forms. For some organisers this was obvious for others it was more difficult. For example some organisers identified their project as an allotment based on the food that was grown (as similar to an allotment), in these cases I referred to literature for classification. The majority of these were found to have traits mostly associated with community gardens. However I was cautious of the literature because what are known as allotments in Hull and Copenhagen are considered community gardens in a US context. During interviews I sought clarification when a project operated by more than one name. Figure 11 describes the four aspects which influenced the demarcated project names.

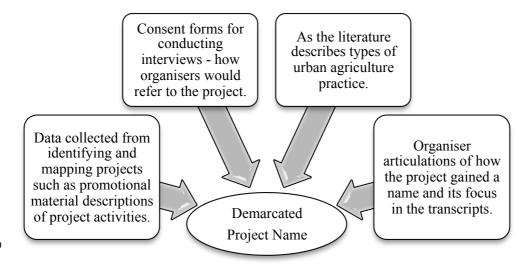


Figure 11 The four different data types accounted for in the process of demarcation for the forty project case names.

The contextual information reflected different project features, including, target audience, project location, the type of organisation running the project, the predominant focus (permaculture and wildlife for example), a reflection of planned impermanence (in the case of the farms) and whether there were multiple activities combined in a site. This process further assisted in the development of the comparative study as it created an access point for understanding across all cases which contextualises the experience of both locations to other locations. This also creates entry points for transferability of this study.

3.8.5 Multi-level Theme Development and Code Definition

The next stage of analysis included reading each transcript several times, identifying, highlighting and categorising the three or four most important features of that interview. There were three reasons for this. The first it provided a greater understanding of each individual organiser's experience of UA. The second it enabled me to overcome the challenge of having conducted lengthy interviews by enabling more efficient memory recall of specific project and organiser features. For example, logically and contextually relating data elements, such as 'within x project, one organiser described in detail an experience of x'. The third, this provided a starting point for identifying themes across all of the data. I then repeated this process with the project data.

These themes were used to separate all of the transcript data whilst retaining project and organiser narrative. To the meso-level theme categorised data, project and code names were attributed to every piece of text. These were printed out and physically cut up (See Figure 12). Using A1 and A3 sized paper, the data was manually sorted and re-sorted to allow themes to develop. At this point all other data collected from mapping framework, case studies and during the interviews were included within the theming process. This enabled me to identify data, which related to 'narrative', 'material features', 'processes' and 'context'. Also, the data collected from the identifying and mapping of projects were connected with the transcript material. For example, when an organiser discussed an event, I could see the information collected about that event specifically. For examples, who attended the event, who organised, what the aims of the event were, how it related to UA and what the organiser interest was in attending.



Figure 12 Images of multi-level theme development.

3.8.6 Introduction to Chapters; Presenting Data Themes

The following four chapters present the findings of this research (Figure 13). The decision has been made to use project cameos to retain narrative in the data chapters. Cameos are a format for presenting rich data. In this study cameos are descriptions of how an organiser experiences a specific theme on the ground. Cameos provide more context about the specific circumstances of a project that encapsulate how an organiser experiences the issues which are being discussed. Alongside the experience of the organiser, a short description of the project is presented with images taken during the research process. This further draws upon the typology to highlight the similarities and differences in experiences based on whether the project is part of a broader organisation and network or not. The decision to use cameos allows for stories that resonate with the readers and practitioners of this study and illustrates features from across the forty projects studied. Furthermore, cameos enable both experts and non-experts to understand the experiences of organisers. The cameos play an illustrative role and allow the themes identified to move beyond being a collection of stories by exploring how a theme is experienced in that moment of time. Realising some of the abstract themes in this way assists in telling a bigger story about UA as shown in the chapter formation.

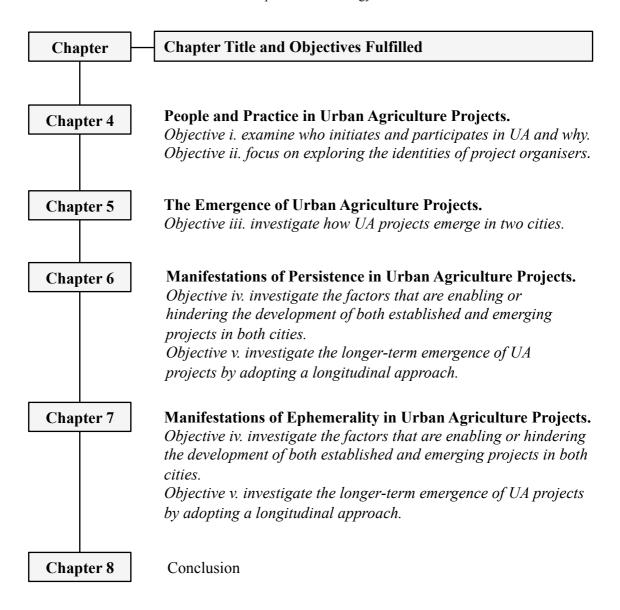


Figure 13 Outline of data chapters and which chapter fulfils specific research objectives.

Established and Emerging Projects in Hull and Copenhagen.

4 PEOPLE AND PRACTICE IN URBAN AGRICULTURE PROJECTS

Introduction

This first analysis chapter is contextual and aims to present background data collected on UA projects. The rationale for presenting a contextual chapter is to establish the topic and outline the perspective from which this study is completed, prior to demonstrating how subsequent findings have been reached. Results are presented from the two cities used in this research: Hull and Copenhagen. The chapter draws upon the typology developed in the method chapter (See 3.7.6) and the literature review section, *Motivations, Roles and Stakeholders in Urban Agriculture Projects* (2.4.4).

The first section (4.1) briefly summarises what was identified in the UA foodscapes of Hull and Copenhagen. The section introduces the people involved in UA, how UA is practiced, what UA projects exist and the typology implemented to draw common characteristics across UA projects in terms of who initiated the project. Additionally, to assist in readability of the data chapters, within this section I will signpost to where comparative findings between Hull and Copenhagen are discussed in more detail.

The second section (4.2) provides new insights into who participates in UA and why. Clear delineation of the people involved in projects and their respective roles remains unexplored from an academic perspective, with some exceptions (Armstrong 2000, Firth et al 2011). Research emphasis is typically placed upon project participants and their reasons for attendance. This section seeks to redress the imbalance by providing insight into the lives of organisers. This section will also explore the relationship between organisers and participants and the insights that organisers have into participants and project participation more broadly. Over the course of this study, organisers have demonstrated a unique insight into the people involved in their projects. The chapter seeks to fulfil Objective (i.) by examining who participates in UA and why and Objective (ii.) by exploring the identities of organisers. This approach includes how they relate to and describe their role and commitment in UA. Fulfilling these objectives in this chapter can provide insight into Aim 3, to explore UA from the perspective of the organiser, and will also address Aim 4 by comparing the experience of UA organisers in

Hull and Copenhagen. By doing so we begin to see how UA is best understood as a "dynamic, embedded network of actors, places and activities stretched across different social, political and physical geographies" (Crane et al 2013: 76 drawing upon McClintock & Cooper 2009).

The third section of the chapter (4.3) adds to debates on the practices of UA. It considers the role of knowledge as it was expressed by organisers. To do this I draw upon the background knowledge of organisers. I will show that UA as a practice is considered by organisers to be the result of a dual process of learning between organisers and participants. This section will also show the limited role that food and its production has in the activities of projects by describing what UA projects do. To supplement this the section will outline the limited food that is produced and how the produce is distributed. This section addresses Objective (ii.) by exploring the identities of organisers and Objective (v.) understanding how UA is practiced on the ground by utilising a longitudinal approach. The section fulfils Aim 1 by exploring how this practice differs between different structural groups and Aim 4 by comparing practice in Hull and Copenhagen.

4.1 The UA Foodscape in Hull and Copenhagen

This section briefly contextualises the UA foodscapes of Hull and Copenhagen. To do this the section explores project variations and the development of a 'structural grouping' typology. The section then introduces and compares the organisers of UA projects in Hull and Copenhagen and identifies observed variations in project practices.

The data showed that many variations in UA projects in Hull and Copenhagen exist. Variations included the structure in which projects are set up in, whether they are funded, how they are funded, how physically open they are, in the aims of what they are trying to achieve, what they produce, where it goes and the other activities that a project or site is used for to outline a few. The most surprising finding of this study was the abundance of UA projects both established and emerging in Hull in comparison to Copenhagen (See Chapter 5 *The Emergence of Urban Agriculture Projects*).

4.1.1 Projects

UA types present in the foodscape of Copenhagen and Hull included community gardens, guerrilla gardens, allotments, networks and urban farms. Hull additionally had an urban orchard. There were thirty-three UA projects present in Hull but only seven in Copenhagen. In order of prevalence community gardens were the most common UA type (23), followed by networks (8), urban farms (5), allotments (3) and urban orchards (1). Half of the projects studied were in the process of emergence and the other half were established meaning that they are "active", "open" and producing food (Nelson et

al 2013: 569). UA project sites often exhibited a combination of different types of UA. For example in Hull an allotment site may also have a community garden. However Copenhagen projects exhibited far more site hybridity than Hull projects.

Urban agriculture projects do not necessarily exist and operate in isolation but cross boundaries of organisations and sectors. For example UA project exhibited connections with food banks, community food shops, commerce and housing development trusts to name a few. At the same time, there are extremes of this 'connection' and 'isolation' for established projects, some that are part of a national organisation and others that are one person establishing in isolation. Projects can operate overtly playing on their 'hidden' nature or 'covertness' to create intrigue for potential participants. See Chapter 5 *The Emergence of Urban Agriculture Projects*.

4.1.2 UA Project Initiator Typology

Shared experiences were identified across UA project organisers in Hull and Copenhagen. However shared experience these were not specific to a UA project type such as community gardens. The differences in how UA was experienced suggested that there was something else at play that was shaping the narrative of UA project organisers. The need became apparent to develop an approach to understand the variables that were at the root of these shared project practices and organiser behaviours. In many cases different types of UA project experienced these similarities and differences. For example, an urban farm may experience one of the themes more similarly to some of the community gardens in the study than other urban farms. The literature remains open to reconceptualisation of the boundaries of UA, in an inclusive way. As previously described, projects are fluid and experience degrees of flux differently. Evident in the data was the importance of the journey of the project. It was pertinent that how a project started is not always reflected physically in the sites that I visited. For example, one project began as growing produce in a bathtub outside a council building, then developed a new site away on an allotment site and then later created another 'new' project back at the council building. These are interlinked projects initiated by the same project organiser.

These variations in the experience of projects led to the development of a typology for understanding the common experiences of organisers as a snapshot in time. This is particularly important given the 'messy' explorative nature of this study. A typology allowed me interpret the data in the most practical way given the inclusion of established and emerging projects. Many ways of categorising the data into a typology were considered for organising the data collected (Table 11).

Consideration	Description
UA project 'types' as identified in the literature.	A seemingly obvious typology would have been to categorise the forty projects into different practices as identified in the literature. The challenge with this approach is current literature contentions and it would not allow for new forms of UA practice to be acknowledged. However, I have decided that in the data chapters I will use the project names as described in the demarcation process to identify the experience of project in terms of the UA 'type' they are most similar to.
The 'size' of a project was also considered.	Categorisation of project size was considered given literature debates about 'scaling' of UA projects operating in close proximity. Size could have been used in several ways. One way would be the number of organisers in each project. However, this variable is too changeable when looking across the research timescale. The physical size of site could be used however this approach may fail to acknowledge that the same project can have multi-sites and other projects are between sites. Finally, size could have been considered in terms of amount of food produced, however this is not quantified by most projects and therefore it would be difficult to obtain enough data for.
How 'established' a project is as outlined in research objectives. Established meaning a project has a site, is food producing and has participants attending activities.	Using how established projects are as a typology would present a challenge. The spread of projects as distributed across time could lead to misrepresentation with a small pre-2008 group and a large group of projects, which have been started and run since the 2008 economic crisis. Further to this the value judgement needed in deciding when a project officially started would be contentious. Across the interviews with organisers there was often conflicting ideas about at what point the project 'established'. This disagreement was the case for projects with one organiser and projects where there was more than one organiser, who in separate interviews had different views about when the project came to be. Although not chosen for the working typology, this is discussed in Data Chapter 5.

Table 11 Considerations for developing a typology of the forty UA projects studied.

The final decision made was to use a typology based on the individual, group or organisation from which a project has been initiated to account for possible wider organisational involvement in the running a project or projects. I have termed this 'structural grouping' rather than organisational structure to reflect that an individual or group independently runs many of the projects with no affinity to a wider organisation or network.

The final typology decided has four groupings. These include **governmental organisations** (GO) which refers to projects started and run by the local authority. There are also **non-governmental organisations** (NGO); these are organisations which have a non-profit status. They take many forms and work at different scales (national, regional, local ward areas in Hull and Copenhagen) to provide a service or deliver resources. **Independent** is another group, these are projects that are controlled from within and they have no affiliation to a GO or NGO. The final grouping is **Network**; these can have charitable status and be formal or informal. Similarly to NGOs they

operate at different scales including nationally and locally. Networks are best understood as interconnected people with a common aim or interest.

In terms of who initiates UA projects in Hull and Copenhagen, they are mostly established independently (15) and by governmental organisations (13) with a much smaller number of project initiations by local networks (5), non-governmental organisations (4) and national networks (3). Projects in Copenhagen were more likely to be established independently or by a governmental organisation. The next section briefly outlines key similarities and differences in Hull and Copenhagen in terms of the people involved and the practices of projects. This section will signpost to where a summarised observation is discussed in more detail.

4.1.3 People

The people involved in UA in Hull and Copenhagen can loosely be categorised into two main groups; organisers, people who are active in running the project and participants, people who attend the activities of a project. Organisers most commonly both initiated and continued to run the project that they had established (4.2.1 *Project Organisers and Nature of Involvement*). However there was more evidence of organiser transience from project to project in Copenhagen than in Hull. Organisers in both locations have a mixture of formal and informal backgrounds and use their myriad of skills in the project or projects they seek to establish (4.3.1 *Project Organiser Background and Knowledge*). Organisers in Copenhagen tended to have more formalised higher education qualifications than organisers in Hull.

More likely than not organisers are part of multiple projects, which are both UA related and completely separate activities, both in and out of the foodscapes of Hull and Copenhagen (See 4.2.1 *Project Organisers and Nature of Involvement*). UA project organisers in Hull and Copenhagen are involved in multiple foodscape and non-foodscape activities beyond UA. Copenhagen organisers are more likely to engage in other foodscape activities that are more food and environmental-related whereas Hull organisers are more active in political parties and/or campaigning.

Broadly what motivated organisers in Hull and Copenhagen to be part of UA were similar, they were mostly commonly motivated to be involved with food and growing. However there were small differences with regard to philanthropy. Some Hull organisers were motivated to be part of UA as a philanthropic activity whereas Copenhagen organisers were more motivated to include UA as part of their broader lifestyle choices. See Section 4.2.2 *Organiser Motivations*.

Project participation is generally experienced similarly in Hull and Copenhagen (See Section 4.2.3 *Organiser Insights into Participants*). Organisers are close to their participants on a project and personal level and hold varying attitudes towards how

satisfied they are with participant numbers. Organisers in both cities have developed a unique insight into the lives of their participants. Organisers seek to attract and engage participants to a project in similar ways. However Hull organisers were more pessimistic in terms of how easy it was to attract new participants to a project. Copenhagen organisers were more likely to include potential project participants in the process of establishing the project, for example building planters for the site rather than just planting. Project participation was considered one of the greatest barriers to keep a UA project established in Hull and Copenhagen. This is explored in detail in Chapter 7, 7.3 Fragmentary Participation.

Organisers demonstrated high levels of commitment to their project and felt a strong sense of duty to their project and their participants (Chapter 6, 6.3 *Managing Involvement and Feelings of Duty*). However Hull organisers described their involvement as being more precarious in the UA project and were more emotional in vocalising their feelings towards their project. In general Hull organisers felt less secure in their role than their Danish counterparts.

4.1.4 Practice

In Hull and Copenhagen there were many similarities in terms of project practice. Although there were differences in terms of what was enabling or hindering the emergence of and continued establishment of a UA project or projects.

Fundamentally what projects grew in terms of food and the session's organisers ran were the same in both locations. Food produced by projects is distributed through both formalised and informal channels, if considered by organisers. Organisers in Copenhagen had more formalised mechanisms through which produce was distributed including the existence of a weekly fruit and vegetable box scheme distributed to members of a Rooftop Urban Farm's Association. See 4.3.2 *Project Activities* and 4.3.3 *Produce Distribution*.

Time of year and seasonality affects how active projects are in Hull and Copenhagen. Over a year period there was a loss of momentum by organisers and often a reduction in participant opportunities. However, over a year the nature of the tasks changed within a project, with winter providing time to apply for funding. Hull projects tended to be 'open' and 'active' throughout the year whereas many projects in Copenhagen closed for the winter because it was not possible to grow anything due to the climate.

Hull and Copenhagen project organisers were extremely committed to achieving action within the realm of the project (6.2 *Commitment to Action and Recognition*). Although Hull organisers sought recognition in various ways for their involvement in UA but for Copenhagen organisers this was a non-issue. Organisers in both locations experienced

the same challenges in trying to evidence to funding bodies what it was that their project had achieved.

Project aims shared similar characteristics in Hull and Copenhagen. UA projects aimed to *i*. create the provision of space to grow food, *ii*. to increase sociability, *iii*. to provide opportunity and *iv*. to provide choice. 6.1 *Project Identity: Aims and Discourse*. How organisers negotiated aims and the purpose that they served were similar. See

Projects in Hull and Copenhagen similarly received funding from multiple different sources (6.4.1 Funding Status and Experience and 6.4.2 Funding Access and Perceived Competition). Organisers were likewise hindered by funder preferences and had to adopt strategies to secure a project's future (6.4.3 Funder Preferences and Criteria). Additionally organisers found it difficult to manage funding body relationships and expectations. Copenhagen organisers held different values to Hull organisers with regard to who they are willing to have fund the project. In Hull organisers wanted the values of prospective funders to align with the project's aims however this was not the case in Copenhagen.

The length of time it took for a project to emerge was a challenge (7.2.1 *Time Period of Emergence*). A lengthy emergence time period and a general loss of momentum by organisers affected Hull projects more than Copenhagen projects. However this is likely due to the slower project emergence rate of projects in Copenhagen. Projects in Hull and Copenhagen were both the target of anti-social behaviour and organisers were emotionally affected by such incidents (7.2.3 *Anti-social Behaviour*).

Hull and Copenhagen organisers agreed that issues around ownership were inherently active in projects (7.1 *Organiser Sense of Ownership*). They agreed it played out in complex ways because it affected all aspects of the project; ownership required protection, was subjected to internal testing by other organisers and was often a source of opportunity. However Copenhagen project organisers viewed the potential for opportunity in UA more positively in terms of providing new organiser roles and more projects. Copenhagen organisers were more welcoming of project ownership changes because they observe that with change benefits to the project may occur. Hull organisers considered ownership changes as a threat to their organiser role which would detrimentally impact the continued existence of the project.

4.2 Demographies of Actors in Urban Agriculture Projects

While literature on UA is constantly evolving and improving, the 'people' of UA projects remain consistently absent or inadequately labelled, as shown in the literature review (Holland 2011, Glover et al 2005). There are a number of possible reasons for this. The first is the lack of existing studies which seek to distinguish the roles of people

in projects (Glover et al 2005: 84). Secondly, the wide spectrum of changeable formal and informal roles exhibited by people within projects found in this study compounds the issue of categorisation. The third is the high prevalence of insider perspectives within the field. Insider perspective is frequently gained through personal experience in a project role or through scholar-activism (Angotti 2015: 336, Tornarghi & Van Dyck 2015). The closeness of researchers to the field of study has also contributed labelling challenges. People within projects are often grouped under disparate terms such as coordinators, garden organisers, urban farmers, staff, participants, project managers, community gardeners, 'just' gardeners, leaders, volunteers or simply interviewees. These loaded and ambiguous terms have led to repeated calls to investigate "who gardens and why, as much as how they garden" (Guitart et al 2012: 370) and "why people become, and stay, involved in community gardens" (Turner 2011: 509). Before understanding 'why' people participate in UA, it is necessary to present context by increasing understanding of 'who' is participating in UA.

The two types of 'people' identified in this research includes project organisers and participants (as shown by in Figure 14). Firstly, organisers are considered. This includes outlining the nature of their involvement, their prior experience and what motivated them to engage in UA. There is general academic acceptance that organisers have greater levels of responsibility and commitment to their projects than participants (Glover et al 2005: 86).

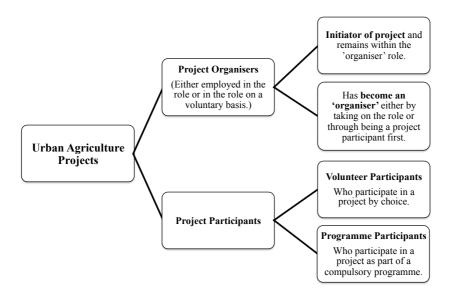


Figure 14 The 'people' of UA, distinguishing between project organisers and project participants.

To clarify, the word 'participant' has been chosen to encapsulate the people who attend UA projects but do not take on additional responsibilities for the running of a project. This term is preferable to 'volunteer' because in some instances a participant's attendance at a project may be compulsory (Figure 14). For example, there are people

attending as part of a programme of physical and mental recovery or criminal justice service rehabilitation, as well as minors participating as an alternative to the mainstream education system. It would be disingenuous to presume that it is always the participant's choice to be there. For example, the organiser of a city farm explained who was involved in establishing the project, "we've got lots of fellas around here, because what we needed to do was to get this up and running, I have used a company that is putting people out for six months training. These lads are not forced, but they are not going to be the permanent people working here although we have one and I won't point out who it is, who is an ex-offender, we will keep on using people like that" (HO33 City Farm). Furthermore, the term 'participant' is applied because of how organisers identified and felt about the term 'volunteer' itself. Frequently interviewees had issues with the connotations of what being a volunteer meant, one organiser equated volunteering as "free labour". Furthermore, organisers expressed feeling that the term did not account for the value that participation in a project brought.

4.2.1 Project Organisers and Nature of Involvement

This study has identified two types of organiser engaging in UA. First, an initiatororganiser, one who starts a project and remains actively involved. Second, there are organisers who have joined a project after it has been 'established', either via employment or on a voluntary basis and have since engaged in a UA organiser role. Organisers, who joined during the 'emerging process' were considered project initiators by the original project starters. The emerging process of a project being the period after the decision to start an UA project has been made but initiator-organisers are yet to have a site, be producing food or open to community participation. Emergence is discussed in the next section. Across the forty-six organisers studied the majority had started and continued to be part of a project in comparison to the number who had joined later (initiator-organiser n=34, organiser through joining=12). This was the case in both Hull and Copenhagen. Whether an organiser started or joined a project was further dependent on whether a growing site had previously been established as a project before an organiser sought to re-establish it. This is discussed in detail in chapter five, which focuses on the emergence of UA projects. From this point onwards the collective term 'organiser' is used to encompass the two main types of organiser unless stated otherwise. It is important to recognise that these two types of organiser exist, as it has implications for project aims, ownership and attitude towards the activities of the respective project.

To briefly consider demographic data on organisers, although organiser age was not specifically asked, the range encompassed people from their early twenties to their late eighties. The gender split of organisers was relatively equal and this was the case across the typology groupings and for both Hull and Copenhagen (female n=25, male=21).

However, within the projects that are more food network focused, there are markedly more women. This is particularly evident in Hull where there are more networks operating than in Copenhagen. Men are more likely than women to have joined a project as a participant and become an organiser than to have initiated their own, however there are exceptions. In terms of the nationality of organisers they are predominantly White British and Danish, however this is unsurprising due to the ethnic composition of both Hull (which is 85.55% White, ESRC 2009) and Copenhagen (which is 76% White, Statistics DK 2016).

There is a key difference between organisers which shapes their individual experience of UA. This is whether an organiser is employed and paid to be in that role or works solely on a voluntary basis. This is increasingly important to identify in the field given the evidence that suggests funding and economic barriers are frequently experienced by projects (Reynolds 2015: 250, Milbourne 2012: 951, Dowler & Carahar 2003: 10). Milbourne (2012), one of the few researchers to distinguish between "co-ordinators" and "participants" in his study of community gardens acknowledged the distinction between "voluntary" or "employed" organisers at the point of project initiation.

For organisers in this study *being employed* or *working on a voluntary basis* were transient states which could both be experienced by the same organiser throughout a project's existence. For example, within a single year one organiser may experience running the project on a volunteer basis to then being funded for a certain number of hours a week and in some cases granted additional funds to establish another project. In Copenhagen, an organiser is more likely to be paid than in Hull, primarily due to the dominance of projects that are run by governmental organisations or alternatively are independent but have been able to make the project self-sustaining financially.

In terms of the typology, organisers who work for a non-governmental organisation (NGO) in Hull and Copenhagen are typically employed by the organisation with the UA project forming a part of their job requirement. For example, an organiser could run an UA project as well as an outreach programme in schools focused on conservation. Independent organisers are most likely to experience a combination of being both employed because of their project or on a voluntary basis. Similarly, many organisers who work for governmental organisations (GO) experience this. 'NGO' and 'GO' will be used throughout the following chapters to simplify the structural grouping typology. Organisers of projects can also be employed by an organisation to run a project or multiple projects. For example, one organiser in Hull was managing multiple projects across the whole city, stating that "this community garden is just 15% of what I do" (HO13 Wildlife Community Garden). The organiser explained that the multiple projects were funded differently with each contributing to paid employment through delivery. Organisers of national networks are typically employed; however, organisers of local

networks are not. A small number of organisers of both independent and local network projects appeared content with their involvement being on a voluntary basis. Most organisers of local network and independent projects attributed their inability to create a paid position through their involvement in a project, as a huge challenge in keeping their projects active. This is discussed more thoroughly in Chapter 6, section 6.4 *Seeking Economic Security*.

To understand the nature of their involvement, organisers have a different role to a project participant but what this 'role' consists of needs unpacking. Glover et al (2005) introduced differentiation between "leaders" and "non-leaders" in their community gardens study. Leaders had a "greater social responsibility, commitment and obligation to their gardens" than non-leaders (2005: 86). In the study Glover et al acknowledged a significant limitation of their study. They assumed that research subjects who self-identified as leaders took on more responsibilities than non-leaders however they did not confirm this assumption when sampling research participants.

To highlight the breadth of roles organisers have in projects, during the research organisers variously labelled their roles to help self-identify the capacity in which they practiced UA. Terms included, allotment secretary, occupational health therapist, employed volunteer support worker, social worker, community gardener, city farmer, chairperson, project developer, facilitator, treasurer and organiser itself. Some organisers struggled to give an account of what their role as an organiser to the project meant. Organisers attributed the role as being wide-ranging and unpredictable, often consisting of several roles within the same day. For example, an organiser of a Community Change Network said "I could be one minute at a strategic operations meeting, I could be at a partnership or on the executive board or I could be digging a flowerbed. There is no typical day and it could be all of those in one day" (HO43).

There was a perception by organisers of independent projects that organisers whose project was part of a GO or NGO had more defined roles. The organiser of an independent project in Hull listed some of the tasks they had to complete in establishing their project, "so when you set up an organisation, you need a constitution, you need to have policies, things like that in place, you need to apply for funding that was all kind of new to me doing that. And yeah it took a lot of time and it was in terms of the amount of money I was earning from that it just became really unsustainable the amount of work that I had to do and then physically deliver on the project... Because I'm doing about six or seven people's jobs. Within an organisation you might have a finance officer, might have a volunteer coordinator, might have someone who does the accounts, all of these jobs. I'm doing it all at once" (HO23 Permaculture Community Garden). In practice, few organisers in GO and NGO projects had the capacity required to undertake the roles mentioned above. Organisers from the different structural groups were managing both

the project finances and participants. Furthermore, organiser roles are not confined to the sites of projects themselves, with many recounting that most of the planning and monitoring of a project occurred in another location, such as an office in the wider organisation, home, cafes, pubs and in a few cases on public transport.

One organiser for an NGO, who self-identified as a "community gardener", compartmentalised the week into days to describe the variable nature of his role. This included, three days spent as the Development Trust's community gardener and delivering sessions elsewhere in the wider organisation, of which the project is a part and located on the same site. The sessions engaged volunteer groups, schools and networks. One day was spent at another 'connected' project within the city. The remaining day was office-based, spent writing funding bids and reports on funding already received (Community Development Trust Community Garden HO14).

Another organiser for an independent project clarified her involvement in one project as being "one of the main active people" and a role in another project in which she describes, "facilitating the other organisers" (HO42 Global Environment Network). In Copenhagen, there were further indications that an organiser role was changeable and often differed from their expectation of the role. A community garden organiser explained this difference, "Well at first I thought I was going to do mostly gardening but then not really, because permaculture is about landscaping the garden so you don't have to garden. I mean it's good; it's political, which I love" (CO22 Permaculture Community Garden).

Organisers in Hull are more likely to be involved in numerous UA projects and activities at the same time. This differs from the organiser involvement in Copenhagen, where they are more definitively fixed to one project. For example, organisers in Copenhagen tended to leave a project fully to establish new projects, whereas in Hull organisers tended to remain active to a certain capacity even if they start a new project (See 6.3 Managing Involvement and Feelings of Duty).

One unanticipated but shared communal experience experienced by organisers in Hull and Copenhagen was the amount of involvement they had in other non-UA related groups in the city. This included both broader foodscape and non-foodscape activities. In many cases organisers also had active roles beyond being a participant in their other activities. Organisers discussed engagement as variable, on a daily, weekly and ad hoc basis (e.g. for specific events). Figure 15 shows the types of broader groups which organisers have roles in, this included food-related involvement, more general local involvement, engagement on a national level and explicit identification of political engagement beyond membership.

Food-related Involvement	Localised Involvement	National Involvement
Not-for-profit Café Breakfast Clubs (School and other) Coffee Morning for Community Elderly Community Supported	- Church - Homelessness Charity - Women's Institute - Friends of 'specific area or service' - Hull All Nations Alliance - Historical Groups	- Kindling Trust - National Agro-ecology Alliance - Friends of The Earth - Permaculture Association
Agriculture (C.S.A.) Farm - Organic Food Business	- Worker's Education Association Courses (separate to project)	Political Involvement
- Care Farm	- Black History Partnership - The Hull Coin (Crypto-currency project) - TimeBank Hull	- Anti-Fracking Campaigning - Anti-Fluoride Campaigning - Political Parties (including Green Party)

Figure 15 Organiser involvement in activities alongside UA work.

There was a noticeable difference between Hull and Copenhagen in terms of the closeness of the other activities to UA. Hull organisers engaged in a greater number of activities which are broader in topic such as both UA and a history group. On the other hand, Copenhagen organisers were more likely to engage in activities which shared similarities with the project such as the National Agro-Ecology Alliance and CSA farms. Drawing upon the typology, independent organisers tended to be involved with activities at local and national levels. Organisers from GOs and NGOs showed a greater tendency to compartmentalise their UA work, often citing a need to distinguish between employment and interest. This suggests that there are a number of factors which have led an individual to engage with UA.

The next section explores organiser motivations.

4.2.2 Organiser Motivations

Throughout the research process, one topic that gained an overwhelmingly passionate response from organisers was their personal reasons for being involved in UA. To clarify, the term 'motivation' refers to the personal force and/or circumstances that led an individual organiser to engage in UA. This section addresses literature calls for a careful exploration of narratives from the organiser perspective (Smith et al 2015, Turner 2011, Guitart et al 2012).

To be explicit: this study has uncovered a clear difference between the motivations of an individual organiser and what a project aims to do. There is currently very limited literature which acknowledges this differentiation with the two normally presumed as being almost conflated as one and the same (except for Guitart et al 2012 and Ballamingie & Walker 2013: 529). Before exploring organiser motivations, it is necessary to distinguish and explain what motivations and aims are present in UA projects. To add clarity to this section the theme of emergence is introduced. The

separation of these three elements is as a direct result of how organisers themselves articulated them as being distinct.

5.2.1.2 Uncoupling Motivation, Emergence and Aims

This section briefly outlines and describes the relationships between the motivations of project organisers (4.1.2), how a project emerges in the foodscape, and project aims. Cameo 1 illustrates how an organiser articulates three project elements as distinct.

The **motivations** of project organisers are highly individual. They are the drivers which propel a person to attempt to engage with UA. In projects with more than one organiser multiple motivations influence and mould the direction of the project. Motivations act as a starting point for organisers to engage with each other in order to work out their personal similarities and differences in relation to UA.

Project aims are how projects can say what it is that the project both seeks to do and engages in. Aims are the plans for projects; they are the culmination of what an individual or group of individuals is striving to achieve. Aims are the benchmark by which engagement in certain activities is decided, having undergone crafting through careful negotiation and decision-making processes.

Organisers articulate aims and motivations as separate. Although an organiser's motivation has influence on project aims, as established in materials such as manifestos and constitutions, aims are broader than that, and do not simply express the motivations of an individual organiser. This is particularly evident when a project has multiple organisers, with project aims encompassing differing motivations stemming from the various organisers.

Over time the aims of established and emerging projects change and are shaped by the process of seeking to create and subsequently sustain the project. Furthermore, project aims are more changeable than motivations. In the following chapter, aims are explored more thoroughly in terms of their role in how projects assemble identities.

Aims, in part, are the product of competing motivations. Each organiser brings their own motivations to discussions on project aims and subsequently develop a set of aims which account for their differing motivations. The outcome of aim development is that an organiser group move beyond motivation 'difference' to work towards a common goal. Thus, the aims encapsulate each other's ideas on what they want to 'change' or 'achieve'. However, the least transferable motivations of organisers do not materialise within aims. When an organiser steps back or leaves a project there are fewer competing motivations that need to be satisfied. This also works the other way when a new organiser joins a project.

The **emergence** of a project relates to the decision-making processes which leads to the existence of a project. It can be observed in the initial actions of the organisers. A project's emergence is also the result of conditions, which have enabled organisers to create or appropriate 'space' to grow. The connection between organiser motivations and conditions, which both form project emergence, stems from the fact that motivations are the catalyst for organisers to engage in the process of emergence of their project. Ballamingie and Walker also separated aims and emergence in their work (2013: 529).

Cameo 1

To illustrate the difference between motivations, aims and emergence I draw upon the articulations of the organiser of a Health Centre Therapeutic Community Garden. The garden was established by a GO in Hull in 2000.

The project had three aims, [1] "to create a space for reflection that people are able to engage in for wellbeing", [2] "for people to experience cycles of growing and eating food" and [3] "for people to learn how things happen by accident rather than by design".

The aims of the project were different to the individual's motivation for being part of UA. The organiser narrated having "a passion for environmental things" and wanting to share that with "disadvantaged groups". She acknowledged that growing up on a farm had given her an "environmental grounding" and wanted "to be able to give that back".

The project emerged from an expression of interest by clients at the recovery and support service. The clients wanted to use growing to help their "mental health issues". The project began at local authority offices in a bathtub, then moved to an allotment site, expanding from one plot to five and organisers have since developed the original space back at the building. They now use the small space for people in the first few weeks of recovery and the idea is that they graduate to the larger site at the allotment when they have gained confidence. The organiser said that the site occupies the "unwanted allotment plots at the front which are exposed", she attributed the downward popularity of allotments in the late 1990s as a factor in the project's ability to emerge and expand (HO1).

Conceptualisation of these elements in this manner is useful for comparing the experience of the projects in this study with extant studies on UA projects, both by type and as a wider whole.

4.2.2.1 Organiser Motivations

One of the significant findings found in organiser motivation was the range and individuality across the motivations beyond the anticipated food and growing zeitgeists. The following sections consider the different motivating factors that organisers cited as the personal force which led to their engagement with UA. The motivations are presented in order of the frequency of their description by organisers, from most common to least. These motivations included (i.) to be involved in food and growing, (ii.) to engage specific, hidden and minority groups within the city, (iii.) to be philanthropic, (iv.) to the change the 'identity' of a location (v.) as a result of a life stage or event or (vi.) to create change through 'difference' for the future.

The motivations of organisers in Hull and Copenhagen shared similarities. Organisers in both locations were motivated by (i.) to be involved in food and growing, (ii.) to engage specific, hidden and minority groups within the city and (iv.) to the change the 'identity' of a location. However, organisers in Copenhagen were more motivated to (vi.) to create change through 'difference' for the future than organisers in Hull. At the same time organisers in Hull more frequently cited (iii.) to be philanthropic and (v.) as a result of a life stage or event. Organiser motivations were similar regardless of structural group.

i. To be involved in food and growing related motivations.

Food and growing motivations ranged from the general to highly specific. Organisers' motivations included a general need to be involved in "everything to do with food". Some felt a sense of duty to share their personal journey and discovery about the role of food in their life. This perceived reconnection with food is supported by Firth et al (2011). This motivation was expressed by organisers who have established an allotment plot over decades and wondered what they could do next in terms of food for others, as well as those whose change of food habits had positively impacted their own individual health. Motivation also grew from an educational concern about how people of all ages were going to know where food comes from without physically seeing and experiencing it being grown close to where they live (See Cameo 2).

Cameo 2

In the late 1990s a teacher established a School Community Garden however when they left the garden became overgrown. The school caretaker had too many responsibilities and struggled to maintain it. In 2009 when the current organiser's wife started working at the school, an individual took the garden on to restore it. The organiser was motivated by identifying a disconnect between rural food production and the city. He explained that food was "grown out in a field somewhere" and questioned, "how are children and people going to know where food comes from?". The organiser's solution was to "get them involved, doing things, in an urban little space, or just a planter, they are seeing how it's grown, how it's done, what it tastes like, looks like". Having restored the site, the organiser has observed the popularity of community gardens at other schools and hopes his project can be a "focal point for cultivating seeds and seedlings for other schools in the city" (HO15). The project now runs sessions both during school term time and the summer holidays. During term-time there is a gardening club run as part of the school's extra-curriculum programme. During the summer holidays other childrenfocused groups maintain the space. The organiser also runs themed sessions such as a jam making session using a portable cooker and a saucepan to show growing and cooking in the same space. Some of the fruit and vegetables are put into a tray for school children to help themselves to at break time. Some produce is given to the children who are part of the club.

Others were motivated by their perception of what they are seeing and learning about the food system including the dominance of and reliance by society on supermarkets for food consumption. For example, the organiser of a Global Environment Network in Hull recounted "my desire to become involved in the food movement was a film called 'Food, Inc.' in America and until I had watched that I hadn't quite realised the extent of factory farming and the pollution issues and the cruelty as well. I hadn't also realised the power of the supermarkets in terms of their power over suppliers and their lobbying

power in the States and their lobbying power over the legislation... I think we probably do with breakdown of the big four [UK Supermarkets] so that led me to set up a page on the website that was titled reducing the reliance on supermarkets and it was trying to highlight some local suppliers that people use, that people could use in preference to supermarkets" (HO42).

This supports the primary motivation finding by Turner, who found motivations often "revolved around a desire for independence" (2011: 514). It is also interesting how this organiser articulated their involvement as being part of a "food movement". Organisers are motivated by the belief that there are alternative ways of producing food for community consumption. For organisers who are students, live on income support or state support programmes, there was often the specific citation of the high cost of healthy and quality supermarket food and the potential for alternative food production to reduce household spending. These findings support literature claims with both Armstrong (2000) and Poulsen et al (2015) identifying subsistence as a primary motivating factor. Turner termed this "a bid for economic freedom, but also for freedom of choice" (Turner 2011: 514).

Often when food-related motivations, which were specifically related to food production through growing, were cited, a strong proportion of the organisers felt they had a general interest in all activities related to gardening. Often this was a continuous theme throughout their lives, not merely because they had initiated or joined an UA project. The theme that gardening was a life-long interest and the relationship between gardening and food production was a new discovery and natural progression from general gardening. For those organisers, many had developed their interests through personal research including reading, listening to speakers and formal study. A small group of organisers were motivated by a commitment to specific types of growing, for example the utilisation of permaculture principles or organic growing. These organisers use their project as sites of experimentation to test ideas and practice what they have learnt (See Cameo 3).

Cameo 3

The organiser of an independent Permaculture Community Garden in Copenhagen conflated his motivations alongside how he became an organiser. *He* recounted cycling alongside the site frequently. The site is situated next to an established bicycle route, a commuter route used to connect the city centre with the surrounding residential, areas. At the time the organiser did not know what the site was and one day in 2012 he stopped because there were people on the site. They told him about permaculture which he had never heard of. The organiser then went "home and read about it", which led him to "fall in love with the idea" and to start going to the project. The principles motivated his engagement with the space as a project participant and when other organisers left to establish a rural farm, he became the organiser. The site became a way for him to experiment and "practice permaculture" (CO22). The space has several planters in diverse shapes. There is a shed for tools and lockers storing kitchen utensils and 'store cupboard' food such as flour, rice and salt in them. The site hosts many different sessions including general

garden maintenance, honey tasting, permaculture workshops, beekeeping workshops, harvest parties, building a cob oven workshops and sessions about the project itself.

ii. To engage specific, hidden and minority groups within the city.

Reaching and working with specific demographics of the city was key to many organiser motivations. This includes disadvantaged groups such as those experiencing unemployment, poverty, ethnic minorities and people with disabilities, as well as young people and children particularly. An organiser of a Guerrilla Gardeners Networks wanted "to show people who aren't in the best health, or looking for work or don't have much inspiration in their life, just to help them connect with something, which can help get them out of their own situation. Spread around some hope and positivity" (HO46 Guerrilla Gardeners Network).

For the older demographic of organisers one strong motivation was to teach children originating in a commitment to impart knowledge through their involvement in the project. Surprisingly this knowledge was not confined to growing and food knowledge, but also ways to increase confidence and provide a role model for young people who are lacking a parental figure. One organiser perceived deficiency of "social awareness in young people". There was a strong theme of 'empowerment' of others in these motivations. For organisers who were most strongly motivated by engaging with specific groups, food and growing were scarcely mentioned outright. Though it featured it was articulated as secondary to engagement in terms of their project. Motivation to help certain demographics was experienced differently in Hull and Copenhagen. In Hull, motivation focused on targeting 'hidden' or 'disadvantaged' groups for the project, whereas organisers in Copenhagen were more like to view engagement of different demographics more literally, bringing all groups of people together on a site.

iii. To be philanthropic.

When organisers engaged in UA as a philanthropic activity this provoked both a hesitant and impassioned response. They spoke about the ability "to give back" (HO1 Health Centre Therapeutic Community Garden) to both the people of the city, and the city overall (or a specific area of it). These organisers perceived the city as having given them a feeling which they felt needed to be reciprocated back to the community. For example, it was often said that the city had fostered a feeling of "opportunity" and "inclusion", especially for organisers who had moved to the area. One pragmatic articulation of philanthropic motivations involved using UA projects to do something "worthwhile" and "meaningful" with the education or skill set they possessed. Furthermore, the practice of physically 'doing' to effect meaningful change motivated them rather than any financial incentives. Even for organisers that shared one another's altruistic motivations, there was tentativeness expressed that to be motivated by this would not be regarded as sufficient by organisers who have more fixed views about the

practice of UA as inherently political. The organisers who felt cynical of others engagement in UA for philanthropic reasons traditionally worked on a voluntary basis. Even when rapport was established between researcher and organiser, reflexive apprehension was clear, primarily because organisers felt that charitable egoism emphasised class differences. Philanthropy featured more strongly for Hull organisers in terms of being a motivating factor. However, in both locations when philanthropy was a personal factor, meaningful change and increased social capital were important.

iv. To change the 'identity' of a location.

One unanticipated but very strong motivation emphasised by organisers was the location specific context that formed their motivation. This included changing "the stigma of an area based on reputation", "to transform an area" and "the feel of the land". This included the possibility of bringing a community back together and creating a new identity through the creation of an UA project on a site. This was manifested in the ideas of many organisers, many of whom explicitly pointed to the ability to control location identity through the appropriation of space. For example, an organiser who established a therapeutic community garden in 1997 detailed their motivation as, "well initially I was that fed up with North Hull having such a bad name. It was constantly in the papers, North Hull yobs and you say to people. I live on North Hull and they were looking as if... And I know by the way I have been treated, you would go somewhere and the professional there, even if they were nice, you were treated different and so I was from North Hull and I sometimes could be cut out of meetings. So, there was all of that but also, I wanted to make sure that if the [omitted Trust name] had a load of money, they was going to leave something on the estate. So, it just, seeing these two people wanting allotments, me eventually coming in here, it was a bit like when I walked in and I stood just near that second bed bearing in mind there was nothing here, I got a lovely feeling. I don't mean that I saw it like this but I knew it was right; this was going to be a community garden" (HO19).

This strongly echoes the motivation of an organiser who established a community garden in 2014 on the outside space of a sports club, "I don't want them [people living in proximity to and those attending the sports club] to live in a community that just looks like crap I want them to be proud and happy of where they live and I want them to have a solid identity. I think that helps children and families and it helps them grow and develop, be part of the community" (HO26 Sports Club Community Garden).

Motivation based on the identity of a location was an especially strong theme for organisers who had established a project in the 1990s and early 2000s. In particular, how organisers localised the perceived need to change an area's identity produced interesting disparities between Hull and Copenhagen. Hull organisers were more

focused on changing identity in a broad way, "the community", "local people", "this area" and "the city". The organiser of a wildlife community garden describes the specific characteristic of 'the city' as a motivating factor, "there is something about Hull. I mean I always think it has been seen as an underdog and I do like an underdog. And feel like if I can work my hardest on something that is about improving the environment, green space, and a space for wildlife and food and plants. Then in a city that could hopefully may benefit from that then that's great" (HO13 Wildlife Community Garden).

On the other hand, in Copenhagen it was more space specific, with organisers motivated to overcome problems localised to specific sites they wanted to change. However, the reasons cited for location-based motivations were similar to Hull including, lack of accessible functioning green space and anti-social behaviour.

v. As a result of a life stage or event.

Life events were cited as a catalyst to motivate an individual to engage in UA. These events included an experience in education, both physical and mental health, a near death experience as well as a broader understanding of their life circumstances. For example, "research is showing touching soil, there's a chemical in the soil that actually helps with mental health and I mean I've had my own mental health issues over the years and I find gardening really therapeutic so when I was a bit down when I took my grandkids on I decided to get involved in the gardening projects and it's snowballed from there" (HO21 Children's Planters Community Garden).

Education and the impact of touching the soil contributed to one organiser's motivation, "I mean my mum always cites me as a child being in the garden doing stuff, digging stuff up. I always had pet insects and centipedes and had a fascination with the natural world and then going into the degree I went into and you see the importance of the environment" (HO13 Wildlife Community Garden).

This supports Turner's finding that health benefits, both physical and mental were motivating influences (Turner 2011). Similarly, education was a motivating factor for another young organiser but in a different way, "I went to Brooklyn ranch to do an internship there, they had this trainee programme and it was the best time. The whole year I had away from the architecture school was the best year I have ever had. It opened a passion that you didn't know, it was just crawling into me, it wasn't something that I had planned, it made sense in my head, suddenly I was in it and it was so interesting and I loved it. It snowballed and kept adding more and more" (CO29 Organic Rooftop Farm). The Copenhagen organiser's passion gradually developed through working at a city farm in New York. Other authors have also observed this

"internal drive" that research participants in this field had difficulty "pinpointing" what they had no control over (Turner 2011: 514).

For older organisers, particularly of independent projects, life events such as retirement were cited as a motivating factor which had enabled them to reconsider what they wanted to spend their time doing. Retirement further enables some organisers to overcome the time commitment needed to run a project.

vi. To create change through 'difference' for the future.

The final motivating theme was articulations of broader agendas that led to organisers' engagement in UA. Such agendas included UA as a mechanism for encompassing "ideas of sustainability", by aligning activities with sustainable development. Some organisers felt a passion for "environmental things" or a desire to "make a difference". One organiser exclaimed that they had "a save the world complex".

Other conceptualisations of a broader agenda related to the need "to innovate", "to think of the future" and as described in the next quote, start "looking at things differently" An urban farmer organiser explained this motivation, "we have got to look at things differently and I see it coming out of the cities and towns where there is a chance for urban agriculture. We've got to get away from this element of 'oh I am just growing because I enjoy it'. If people want to do that that's fine but if you're going to make something to make an impact you've got to do it differently. You've got to plan what you're going to grow and how are you going to [inaudible]... you can sell it or if you want to work it for community and how do you give it up and how do you help communities but it's got to be looked at differently so yeah that is my driving force behind all of this" (HO31 Mobile Container Farm).

4.2.3 Organiser Insight into Participants

UA sites are widely accepted as social spaces, spaces where bonds and relationships are formed between different people (Glover et al 2005, Armstrong 2000). As outlined in the ethics section of the method chapter (3.6.3), organisers have an exclusive insight into the lives of project participants. This section gives new insights into participants and participation from the atypical perspective of the organisers. The insight organisers have is twofold; on a *project level* and a *personal level*.

In terms of the *project level* organisers have an awareness of participant types and patterns of participation over the project's existence. Looking across the UA projects studied there was no overriding trend visible in the types of participants, however each project had a "*unique*" set of participants. Of note is a key difference in participation between Hull and Copenhagen in that Copenhagen organisers had experienced tourists attending activities, "*it's a really nice thing because it's different to the offering of the*"

tourist office you [tourists] can have another insight of Copenhagen" (CO6 'World' Children's Centre Playground Community Garden).

An organiser of a Hull Church Community Garden identified some participants as being "core", "with a lot on the fringes" (HO16). The organiser of a Permaculture Community Garden in Copenhagen similarly experienced this, "it's usually a core group but I couldn't say who or why it's just very random I would say" (CO22 Permaculture Community Garden). This was the general response from organisers of UA projects, which did not aim to be demographic-specific. When asked about participation in projects, organisers gave highly specific responses about who they considered "core" participants. For example, "[participant name omitted] is retired, he was a council employee. He comes and likes the social activity. [Another participant] is a younger person with a disability so he doesn't work but he can come and help us do some stuff here. One's a young fella with a medical-behavioural issue, two people came and helped and supported him. It works, we have local residents and we have had help and support from the sheltered housing across the way" (HO5 Adult Centre Community Garden).

Organisers also recounted changes in participation patterns from when the project emerged to its later establishment. The following organiser elucidated participation patterns, illustrating how *she* influenced who participated and how initial apathy changed because of the project's continued existence, "there were more adults involved at the beginning. There was a lot of energy put into it and a lot of publicity. A lot of those people came from my own networks rather than the local community, although there were people from the community because I am in it. I live there so I know. People were very, 'I don't why you are bothering love, it won't work' then they were surprised saying 'we didn't expect it to last this long" (HO23 Permaculture Community Garden).

This demonstrates the close relationship the majority of organisers have with participants. This was evident across the structural groupings and in both Hull and Copenhagen. Organisers could identify who participates, recognise why they seek participation, their attitude towards other participants and how their journey progresses within projects. For example, the organiser of a Wildlife Community Garden identified having "students from the University who are doing geography, biology, zoology type degrees and they recognise very astutely that they need to have some more hands-on experience and they're great because they're really enthusiastic and energetic and get a job done but they aren't long-term and are quite difficult to skill up because they'll be quite sporadic in whether they come or not" (HO13).

Organiser insight on a *personal level* related to an individual's employment status, family circumstances, mental health or living conditions, just as examples. Some projects managed by GOs or NGOs were specifically started as therapy projects. In

these projects, organisers had a project and personal level of insight but did not necessarily gain this insight through a relationship of sharing information about each other's lives but because the participant had been referred to the project by the health service. The organiser of a Therapeutic Community Garden started by the Health Centre illustrated some of the challenges faced by their participants, "in the client group we've got people who experience psychosis and schizophrenia but the site is also accessed by people from across the team which is more recovery and psychological intervention so those are people with personality disorders, anxiety, depression, eating disorders so quite a wide variety of people" (HO1).

The most common experience of UA organisers was to have learnt about the lives of participants through conversations as they are working the site. In terms of living conditions one organiser explained that a participant "sleeps on the streets, he's spent hours and hours down here" (HO16 Church Community Garden).

One organiser was clear to draw a distinction between their project having therapeutic qualities, but that they did not explicitly advertise the project as providing therapy. They identified having participants with "serious mental health problems" and that the garden was achieving therapeutic qualities by being "calming" for the individual but the organiser stressed that, "we don't say this is going to make you feel better because who can say what makes people feel better but we have had feedback from different people saying 'oh I love coming here, it is nice and calm" (HO19 Therapeutic Community Garden).

There was an acceptance by organisers of a broad spectrum of other attributes, which distinguished participants. Organisers recalled seeing different personalities, levels of confidence, knowledge, culture and language in who participates. Organisers also acknowledged that each person who participates has a "uniqueness" and that a person's journey in participation is individualistic.

Organisers in Hull and Copenhagen explained knowing that participation occurred at different points in people's lives. Organisers also perceived that participant involvement was highly individual yet were also able to identify common themes in participant groups. The organiser of one NGO wildlife garden explicitly identified the motivations of two groups of her participants. One group had "almost self-diagnosed or self-prescribed being outside for dealing with mental health problems, isolation or sometimes even physical issues such as ME" and another group "older middle-aged, who have retired...who may have had decent jobs and are ready to give something back or they are just desperate to get out of the house" (HO13). The organiser went further to describe those who have "self-prescribed being outside" as being "the most complex but they are the ones who get the most out of coming to the garden" (HO13). The same

organiser identified that this was hard to manage, acknowledging that *she* "can't offer them all support" Other articulations about participant motivations were more simplistic but equally insightful. The organiser of a community garden based at a children's centre in Copenhagen observed how older children attended alone because "they just need a space where they can go" (CO6).

Organisers learnt from observing participation and acknowledged that the reason people attended was often broad and sometimes conflicting. For example, people attend UA projects to spend time interacting with other people and others use it to "get away from people", "there are those who just want to work, get their hands in the soil, work, head down, they don't really want to talk to people. They want to do their task because when they're doing it they aren't thinking about stuff. Then you get some people who just come and talk, that's a real, real challenge" (HO13 Wildlife Trust Wildlife Community Garden). The organiser had observed that these competing participant motivations presented a challenge.

Furthermore, organisers observe participants motivated to use the project to get exercise, to be outside, to be away from their home due to dissatisfaction with living arrangements, because of unemployment, to gain skills, to build CVs, to make their local area better, to increase the value of their house and to gain access to communally grown food.

In a small number of cases, particularly in low income areas of both Hull and Copenhagen organisers were reticent to offer participants the food produced at the site because they feared the participant would view it as 'charity'. The reason for this was that organisers who had a personal insight into a participant's life did not want to contribute to an individual's feeling of embarrassment or stigmatisation based on the reason for their attendance.

Most organisers were content to have participants from all demographic groups with different motivating reasons for attendance. However, a small minority of organisers had attempted to engineer who participated in their project, for example the organiser of a community garden established on leftover allotment plots explained, "we encourage young families because we want a nice mix of people" (HO11 East Hull Allotment Association Community Garden).

4.3 In Practice: Knowledge, Activities, Production and Distribution

This section discusses the backgrounds of project organisers and the 'knowledge' that they bring to their involvement in UA. This is important to help assess the role that knowledge and learning has for organisers and UA more broadly. Additionally, it will briefly explore what food UA projects produce, where the produce goes and outlines the activities that projects engage in. It will compare the activity outputs, food production and distribution channels of projects in Hull and Copenhagen.

4.3.1 Project Organiser Background and Knowledge

This section considers the background of organisers. The discussion is pertinent to this study given a surprising theme to emerge. The theme was the significance of *knowledge* to the nature of organiser involvement in UA. Organisers explained different levels of existing knowledge and experience which they brought to UA practice. Additionally, different attitudes existed amongst organisers in terms of the role they considered knowledge to have in their UA project. To address these findings this section considers the pre-existing knowledge of organisers, how they seek and gain 'new' knowledge for the project, and how they are using UA to re-imagine 'old' knowledge for new practice in the urban environment.

4.3.1.1 Pre-existing Knowledge: Before Project Emerges

To understand the pre-existing knowledge of organisers formed through their relative backgrounds, formal and informal experiences have been separated as follows.

In terms of **formal experience** understanding the level of education and employment history of organisers both highlights the diversity of the people involved and produces interesting patterns. In terms of the educational attainment of organisers in both locations, there are clear distinctions between those who are highly educated and those with no formal education. Degrees at University level held included; environmental science, social science, agriculture, architecture, geology, geography, management, biochemistry, food, horticulture and the arts. Further knowledge was gained from courses on organic agriculture, diplomas in permaculture and social and therapeutic horticulture, counselling certificates, NVQs (National Vocational Qualifications – UK) in childcare and training in how to manage volunteers.

A pattern to emerge was the high proportion of organisers who completed their formal education as mature students. This is interesting as it suggests UA by some is considered part of a career change. Furthermore, in *all* instances where there is more than one organiser of a project, there is a combination of an organiser with a degree level education and another organiser with no formal education. This suggests that there may be benefits to UA practice in having different types of organiser experience for a

project. The independent projects were more likely to be initiated by someone without a post-eighteen education. The list below gives an overview of the types of employment roles organisers have had based on the structural grouping typology.

- Governmental Organisations Nursery nurse, occupational health therapist, artist, librarian, youth and sport social worker and local authority work in other roles.
- Non-Governmental Organisations Volunteer support worker, council (waste and recycling), organic farming consultant, adult education tutor, gardener and community liaison officer.
- Independent Family support worker, youth worker, school governor, researcher, probation officer, social worker, farmer, architects, conservation and nature reserve management, council (parks and administration), orchard restoration, mental health charity founder, military food policy, learning mentor, teacher and gardener.
- **Network** Pub owner, sales, food quality, university administration and English tutor.

Organisers also had more informal experiences which they had brought to their project. These were mostly based on childhood experience, the influence of parental behaviour or where they grew up. Childhood experiences included studying food at school and memories of growing at school. The influences of parents included having a smallholding out of necessity, spending time on their parents' allotment and seeing the results and accompanying parents to the local allotments to do the weekly vegetable shop. Other organisers had a farm upbringing, recalling that they "lived in the fields" and "grew up playing on the allotments and people would let you in and give you food to try". A Community Garden organiser linked her childhood experience and the role of the garden in knowledge production, "my own personal gardening I guess has grown alongside the project really. I came to the project not having much knowledge of the growing. I mean I grew up on a farm but I haven't got any knowledge of gardening and growing so this has all come alongside" (HO1). In Copenhagen, a unique GO mechanism exists whereby individuals or families can apply to be taken through a growing season on allotments, delivered in sessions prior to taking on your own allotment.

Many organisers who had previous formal or informal experience with food production expressed that they wanted to share knowledge about food through the project site. Organisers expressed "shock" at the limited knowledge they found amongst participants regardless of it being a child or adult focused project. This "shock" was expressed by the organiser of a therapy-based community garden for adults, "I guess one of the things that shocked me is that people come down with such a limited knowledge of food, how food is produced, the range of food" (HO1).

Chapter 4: People and Practice in Urban Agriculture Projects

Another organiser found that the children they encountered had a very limit knowledge, "there weren't many kids who knew what blueberries looked like, they had heard of blueberry muffins and we just let them pick them off and taste them" (HO19 Therapeutic Community Garden). This was supported by the organiser of a project within the grounds of a school, "I can always remember the first time, I picked up a lettuce, the first lesson, I brought some vegetables with me, what are they and where do they come from, not one of them could tell me how they had been grown, not one. It's about learning they need light, they need warmth, need all this type of thing, nutrients, water, if they haven't got it then they die, simple as that" (HO15 Academy School Community Garden). Organisers also identified their own limited knowledge of how to grow as shown in Cameo 4.

Cameo 4

The Adult Centre Community Garden was started in 2014 by a GO in Hull. The local authority manages a community and business incubation centre. The manager had an idea to re-think the use of the outside space. The outside space around the building used to be grass costing £700 pounds a year to maintain (Figure 16). The organiser, who is employed by the local authority, decided to reduce this cost and create an opportunity to grow food on the housing estate. The organiser had no previous knowledge on how to grow, describing how "[a participant] is like me [organiser] he is garden phobic. We didn't know 'owt about gardens, so it's good here". The project now grows a large range of fruit, vegetables and herbs. Participants at the project take some of it home and any excess is put in a wheelbarrow for anyone walking past to take. The organiser feels that the project is "a learning process" and that they have "acted upon mistakes made in the first few years of the project" (HO5).



Figure 16 Planters outside the Adult Centre Community Garden.

4.3.1.2 Re-imaging 'Old' and Gaining 'New' Knowledge

This section considers how UA organisers are using their project sites to produce 'new knowledge'. In this production of new knowledge organisers also try to transfer 'old knowledge' to the project. By this I mean, organisers were concerned about a loss of understanding in the city on how food is produced in the countryside and wanted to use their sites to keep this knowledge.

The empirical data suggested an importance of knowledge development on a site as a dyadic process between organisers and participants with organisers asking what people want to grow and then together working out how to do it. Various organisers cited this dual learning as critical for commonality and rapport building, thus establishing a site of "experimentation and creativity".

Interestingly in some instances initiator-organisers pointed to the scarcity of training in how to grow food as an important catalyst for starting the project. One organiser found training opportunities but they were not local and therefore it would have cost money to attend, requiring money they did not have. Training was considered important to building confidence, "it felt like training meant people couldn't say you don't know what you're doing" (HO21 Children's Planters Community Garden). This challenges the notion that the role of UA is only to teach people how to grow food.

Knowledge was considered by organisers to be an attribute that developed over the process of establishing the project. The organiser of a therapeutic community garden listed tasks they had had to learn to do as part of the project stating "I think if you work for a community group, you have to do whatever needs to be done really. We are like jack-of-all-trades, aren't we? We re-roofed the shed; I mean it does leak occasionally. Me and [other organiser], we do bits of joinery and things like that, and I've always done the stuff like that. I have had to learn how to do crafts because of the workshops for kids and turn your hand to everything" (HO20). Interestingly this project demonstrated another manner by which knowledge was created. One participant who began spending time at the project went on to complete a horticulture degree and has since become an employee of the project, taking on an organiser role. Many organisers experienced growing as "trial by error of what grows", "we're learning from our errors" and some "can't tell what we've grown". Some stress that they "learn from other projects and see what they do well".

Other organisers alluded to the attributes of gardening and gardeners that make for a specific type of knowledge building. For example, the attributes of gardeners, "gardeners are inherently nosey. The want to know why someone has done something a certain way and pass judgement on it" (HO14 Community Development Trust Community Garden). Many organisers also highlighted the attributes of gardening itself. An unexpected way in which UA was conducive to knowledge building was in the symbiosis between the process of growing and nature as being "forgiving" to a mistake made during the 'process', for example "I just thought I'd just get on and do it myself what I can. I think it's part of the growing thing, learning that you just do what you can... it is an important thing in life. You learn you do what you can, you work with what you've got and if it doesn't work there is always next year and it will grow back (laughter) and it does because you think you have got it all wrong but then everything grows back and you just feel you have something right...it has worked. You have allowed it to work in a way" (HO9 Children's Centre Community Garden). Some organisers also described specific attributes of food that were conducive to knowledge generation. One organiser claimed food to be "ageless" and bluntly commented that

"everybody eats" meaning that it did not matter the age of someone, any participant could always learn more about or change the food they consume.

Interestingly, much organiser discussion focused on food growing knowledge and not on how to run the project, nor how knowledge was produced to fulfil all the activities run on UA sites. Furthermore, organisers sought inspiration from visiting other projects, including other projects, which have now closed. For others UA enables them to put theory into practice such as permaculture, formal training and horticultural degrees as shown in the motivation section.

When organisers (typically of independent projects) did not have formal or informal training to use in their UA project they sought 'new knowledge' for the project from the participants themselves. Organisers viewed participants as holding knowledge or skill sets which could be harnessed to benefit the project. For example, cultural knowledge was shared between organisers and participants at a NGO community garden who discussed different food growing and preserving styles.

There was a general acceptance by organisers that they sought knowledge by any means available. Informal examples were visitors to the site offering "tips" and nearby employees at other organisations offering advice. One organiser in Copenhagen went to "see other projects" to "absorb all of the knowledge". Several NGO and GO project organisers had access to training budgets but rarely had the time to pursue the opportunity.

Aging project organisers were fearful of losing 'old' new knowledge related to food production and wanted to provoke renewed enthusiasm for this knowledge and saw opportunities for this in a new urban environment (See Cameo 5).

Cameo 5

A Traditional Allotment was established by the local authority in East Hull in the 1950s. The site has thirty-seven plots. The organiser explained that although the allotment was established in 1950, in the early 2000s only eight of the plots were being worked. This led the local authority to reconsider the use of the land and they speculated closing half of the allotment. This led the small number of plotholders to form an association who were given eighteen months to turn the site around. The organisers obtained funding from a national charity to improve facilities on the site including a shipping container for making tea and coffee. To ensure the popularity of the site and secure its continued use for growing the Allotment Association created an independent Community Garden and plots closest to the entrance in 2010 (Figure 17). The aim is to attract local people, allowing "young families, people with disabilities and those over sixty years old to have a go at growing". One organiser felt "fear of losing knowledge" and that it would beneficial to have people of different ages to allow for a transfer of knowledge. The aim is that "if they like it they will put their name down for a plot or help other plotholders by sharing a plot so some older plotholders do not lose the social contact of coming here" (HO11).



Figure 17 Allotment Association Community Garden developed at the entrance to an allotment site.

4.3.2 Project Activities

This section outlines the activities UA projects engage in. It discusses both the food and non-food related activities of projects and considers the broader role and function that food itself has within projects. The section gives insight into the limited consideration organisers had given to distribution of produce. As a starting point in literature it has been accepted that UA projects engage in activities beyond food growing. Saldivar-Tanaka and Krasny describe projects as hosting "numerous social, educational and cultural events" (2004: 399).

Within this study there was evidence that the activities of UA projects are exceptionally diverse with organisers more likely to outline activities which are non-food related than

food-related when asked, "what does the project do?". This point is important to consider the additional roles and alternative purposes of UA. Table 12 outlines some of the simpler activities related to the production and consumption of food as described by organisers. The second column of the table shows some of the non-food activities which occurred on-site. In most of the cases, a mixture of the two occurred on the site simultaneously. For example, some organisers and participants may be planting and harvesting food, whilst other people (not directly active in the project) are sitting and thinking in the garden whilst having lunch on a work break.

Food production and consumption related activities.	Non-food production related activities.				
 Planting and harvesting. Pruning. Watering. Grow produce for other projects. Growing food. Cooking and eating the food. Grow and eat produce that requires no cooking. Make food (from produce not grown on the site). Growing, cooking and eating the produce on-site. Eat the food grown on site. Produce preparation and collection (vegetable boxes). 	 Sit and think. Conversation. Setting up the site. Cleaning and maintenance. Decorating and creating new features. Integration of volunteers when no specific activity. Giving out seeds to people who come in. Local workers coming in to eat their lunch. 				

Table 12 Comparison of food production and consumption related activities and non-food production activities.

When organisers recalled how they distributed produce they often began to explain how the food held symbolism, standing for more than being only a consumable. For example, for some organisers the physical food became symbolic of the result of the process of participants having learnt and accepted that mistakes are inevitable. For others food production had the function of being representative of the symbiosis between food and wildlife promoting a better understanding of how aspects of the environment are connected. The ability to produce food was attributed by organisers to provide a sense of "possibility" and "empowerment" for participants. Benefits for participants stemmed from them seeing a plant grow or a site changing which they had a part in creating. Many organisers considered food production the mechanism through which it is possible to foster a sense of 'possibility'. The production of food became a statement, a symbol of what can be done with limited resources. Food production also acted as means of asset creation, with projects now having something to swap and to give cuttings from.

In addition, the process of producing the food also provided a prompt for people to talk about the nature and provenance of food. Organisers felt that their projects showed "real food". Organisers felt that the food, which people normally consume from the supermarket, is only one type of food that is too clean and uniform in appearance. Organisers described needing to show people that there is wonder and added nutritional benefits in "weird food". One of these initial benefits is healthy eating, with organisers

describing how witnessing how food grows could assist in changing a participant's diet. For example, "they're better even if they just eat a couple of berries" or "add a tomato to a cheap and nutritionally deficient sandwich" (HO19 Therapeutic Community Garden).

Many organisers in Hull and Copenhagen mentioned that the growing process and food grown on site had cultural symbolism. Food production for some was a "reminder of home". This use of 'home' was used broadly, with some associating this reminder with their childhood and living on a smallholding. For others, it was representative of 'home' such as the country they had grown up in. At the same time food could be "helping minority groups understand what is grown here", a way to communicate and promote integration. Some organisers identified the potential of UA in the promotion of the 'food culture' of the country in which the project is situated.

An organiser of a community garden explained how the physicality of their site is designed to reflect what it is the project does, claiming that "if we wanted to only produce food, the whole space would be growing, so by not [doing so] there is an expectation that we don't only grow food" (HO13 Wildlife Trust Community Garden). The activities and remit of projects were also considered in more abstract ways with organisers describing their time spent to "establish a presence" and to "build the history of the site". For example, one emerging permaculture community garden had planted a cherry tree in remembrance of an organiser who had passed away. This suggests that projects become more personal and important to organisers through the journey of establishing.

How often organisers spend time on a project site differs widely. Generally, organisers try to spend as much time on-site as possible. Some organisers, often those who have been retired and are part of an independent project, describe spending at least a few hours every day on site. This contrasts with some projects where people are active on the site for only a few hours each week. One organiser in Hull organiser expressed dissatisfaction with the time available on-site as it was also used to run a treatment programme. This was the case across the structural groups. In terms of the activities on site, some organisers describe having three activities run per year and others have over one hundred and forty per annum. The literature has acknowledged the diversity of activities offered by UA projects. Saldivar-Tanka and Krasny identified "neighbourhood and church gatherings, holiday parties, children's activities, school tours, concerts, health fairs and voter registration drivers" occurring on UA sites (2004: 399). This study supports these findings. Table 13 shows the range of activities run by projects.

Activities on site.	Activities away from site.
Children Activities After school club. School holiday programme. Art sessions. Homework sessions. Treasure hunts. Adult Activities Plays. Therapy treatment sessions. Concerts and general music events. Looking after the beehives. Building site features such as a cob oven. History sessions. Morris dancing. Wassails. Host speakers. Weddings. Running placements for ex-offenders or local young adults. Manual job focussed activity sessions. Events Open days. PR sessions. Launch parties. Workshops about the project itself.	For Organisers Lack of expectation of task completion off site. Reflection (General and about the direction of the project). Time for consolidation. Handing out leaflets. Arranging for others to use the site. Meetings. For Organisers and Participants Using the local church's kitchen to prepare produce. Off-site 'train away days' – to visit nurseries and estates with large grounds. Pub and coffee shop visits to try local produce. Planting on other project sites. Preparation for renting site out.

Table 13 UA activities completed on and off-site. Activities categorised by target group, children, adults and more general events.

4.3.2.1 The Urban Harvest

In discussions, it became clear that organisers did not differentiate between the edible and non-edible plants that were grown on a site. They gave an equal weighting of importance to the growing of food and other plants or trees on the site. This was considered important for organisers because they needed horticulture to enable agriculture to thrive, particularly in an urban environment. Some organisers had faced criticism from the public for creating "wild areas" with the public perceiving this as resulting from site neglect. While most projects grew fruit, vegetables and herbs, projects in Hull were more likely to grow fruit than the projects in Copenhagen. Table 14 displays the food grown by projects to demonstrate this.

Produce type.	Plant family.	Examples found at projects.			
	'Carrot Family'	Carrot, celery, coriander, fennel, parsley and			
	Apiaceae	parsnips.			
	'Nightshade'	Tomatoes, potatoes, aubergine bell peppers			
	Solanaceae	and chilli peppers.			
Vegetables	'Flower Head'	Lattuce and antichaling			
	Asteraceae	Lettuce and artichokes.			
	'Cabbaga Family'	Radish, daikon, broccoli, cabbage,			
	'Cabbage Family' Brassicaceae	cauliflower, kale, collards, pak choy, brussel			
	Drussicacede	sprouts, turnips, horseradish and watercress.			

	'Squash Family' Cucurbitaceae	Squash, pumpkin, courgette and cucumber.
	'Pea Family'	Green beans, runner beans, peas and
	Fabaceae	chickpeas.
	'Grass Family'	Sweet corn.
	Poaceae	Sweet com.
	'Bulb and Stem	
	Family'	Onions, shallots, leeks, garlic and chives.
	Amaryllidaceae	
	'Fruit Family'	Apples, pears, plums, damsons, cherries,
Fruit	Rosaceae	raspberries, blackberries and strawberries.
Fluit	'Heather Family'	Blueberries.
	Ericaceae	Bluebellies.
Herbs	'Mint Family'	Basil, mint, oregano, thyme, sage and
Herbs	Lamiaceae	rosemary.

Table 14 Food grown on UA project sites in Hull and Copenhagen as categorised by organisers into 'vegetables', 'fruit' and 'herbs'.

In terms of **vegetables** there were many examples of the "conventional" produce you would expect to have seen growing on the sites (Saldivar-Tanaka & Krasny 2004: 399). Organisers chose to grow vegetables which produced a high yield, had a humorous quality or a 'surprise' factor that would create interest and "*curiosity*" for a project participant, such as sweetcorn. Produce grown that was 'surprising' included food organisers expected many people (adults and children) had not seen growing before. Organisers used the site of projects as a place to experiment with what could be grown. For projects which had established a longer history and knowledge on how to grow certain vegetables, organisers joked about what they could try and grow, testing the climate and site conditions.

Often the growing of **fruit** was more of an achievement than the growing of vegetables with organisers often stating, "we have managed to grow", a fig tree, grapes, pears, damsons and plums as examples. Fruit grown that was seen as less of an achievement included rhubarb, tomatoes, strawberries, raspberries and blackberries. Although considered a lesser feat these types of fruit were critical to projects because they were likely to be more identifiable by people coming to the project and can be quickly and easily picked and eaten, needing no preparation. Organisers allowed participants to freely pick and eat the berries as they were working. Projects that have no food preparation areas tended to grow more fruit. In some cases in Hull, what was grown was dictated by the site's previous use, for example many of the sites had fruit trees and these were incorporated into the plans of what organisers wanted to grow on the site. While this was not the case in Copenhagen, organisers did incorporate any existing trees into their site plans.

Many projects also grew **herbs** due to the perception that they were low maintenance, produced a reliable and 'useful' yield which complimented the vegetables and

contributed to a pleasant sensory experience of the site. Many projects also grew edible flowers, such as nasturtiums for the "shock" and curiosity factor, with organisers explaining to participants that some flowers can be eaten. In addition, some projects were beginning to explore medicinal plants. Organisers in Copenhagen were also keen to introduce medicinal plants.

A small minority of projects have beehives however the production of **honey** was something that projects had varying degrees of success with. Often projects had had beehives in the past but due to limited success the beehives were either removed to make room for more growing or organisers had facilitated assistance by other external groups (beehive specific and more general groups with expertise) to achieve more success in producing honey.

The 'cultural' value of what was grown was considered important, with organisers describing how as participants had joined the project they had brought new knowledge. Often this was about produce that they wanted to grow or thought it might be possible to grow, stemming from, for example, Kurdistani, Ghanaian and Spanish perspectives. Organisers in Hull and Copenhagen explained an increasing Eastern European influence regarding growing and preservation. Organisers observed how participants had taught other participants how to pickle the produce when there had been a surplus. Tradition and heritage were also important qualities of what had been chosen to be grown on site. This was exhibited most strongly by the Urban Orchard in Hull, which focused on growing vulnerable and native species (as shown in Figure 18).

L	IST OF APPLES C	GROWN	
VARIETY	HARVEST	EAT BY	CULINARY, DESSERT OR CIDER
BEAUTY OF BATH BLENHEIM ORANGE BRAMLEY CHARLES ROSS CHRISTMAS PERMAIN COURT OF WICK ELSTAR FALSTAFF GEORGE CAVE JONAGOLD JONATHAN JUPITER LAXTON'S SUPERB NEWTON WONDER PITMASTON PINEAPPLE REDSLEEVES RIBSTON PIPPIN SUNSET SUNTAN TYDEMAN'S LATE ORANG WINSTON WORCESTER PEARMAIN	EARLY AUG EARLY OCT OCT MID SEPT NOV OCT OCT AUG OCT SEPT SEPT OCT SEPT AUG SEPT AUG SEPT SEPT OCT SEPT SEPT OCT SEPT SEPT SEPT OCT SEPT SEPT SEPT SEPT SEPT SEPT SEPT SEP	TWO WEEKS JAN MARCH DEC JAN DEC JAN DEC AUG MARCH JAN MARCH FEB DEC FEB SEPT JAN DEC FEB APR APR OCT	D C/D C C D D CIDER D C D C D C D C D C D D C D D C D D C D D C D

Figure 18 Information sheet produced by Urban Orchard showing the varieties of apple grown, harvest time, when the apple should be eaten by and type of apple (culinary, desert or cider).

Some organisers had chosen what to grow based on how tactile the plant was. Organisers wanted plants on site that were "touchy feely" to appeal to the senses of participants. Planting was nearly always dictated by the site location with a gradual knowledge build-up of growing knowledge for that location. A community garden organiser, with no prior gardening knowledge, had initial limited success with produce and realised that they had been planting in the shade of the building. This led the organisers to re-design the site. The growing season is experienced very differently in Hull and Copenhagen because of how the seasons are experienced. Despite the limited produce grown in winter by projects in Hull, organisers still maintain and prepare the site for early springtime. They also use this time to apply for funding to run activities or replace tools. Copenhagen organisers, by contrast, close projects for winter. The reason for this is twofold, many of the Danish organisers return to smaller rural towns outside of the city and the European students usually return home for the Christmas period. Copenhagen organisers viewed this time as important for reflection on the project and for working out how to improve the project for the following year.

4.3.3 Produce Distribution

Having briefly addressed the types of edible produce that are grown on project sites, it is necessary to consider where the produce goes and the varied channels through which it is distributed for consumption. Discussions on the end-point of the urban harvest mainly arose during the initial site 'tours' of projects led by the organisers. There were three clear and specific ways in which organisers discussed what happened to the produce. These are (i) formal and planned, (ii) informal and ad hoc and (iii) unplanned. Across the forty projects there was a relatively even split across these three categorisations.

i. Formal and Planned

Many of the projects had formalised channels, where organisers had collectively decided where the produce was going to go. Typically these decisions had been made either prior to development of the project or during the first season of growing. The Organic Rooftop Farm in Copenhagen showed the most formalised model of distribution. The organisers planned the growing to yield appropriate produce to make vegetable boxes for association members. The farm also has an on-site restaurant, which the organisers accounted for in planning and receives any surplus from the vegetable boxes. The School Community Garden grew produce appropriate for break-time snacks. They grew carrots and pears which needed limited preparation.

Other projects had planned distribution in which the produce would be prepared into meals. This was most common for community gardens, for example in Hull produce goes to an on-site café, 'Pay as you feel' lunch club, 'Pay as you feel' church lunch club

(which has 40+ people weekly) and broader cooking specific groups. One important distribution method is provided by the Grower's Network which hosts an event, 'Feastival' each September in Hull city centre. Leftover produce from many of the projects in Hull, including the community gardens, farms, orchard and allotments is collected and cooked into meals to celebrate the harvest by sharing it with the people of the city.

Organisers in Copenhagen hosted produce-specific events on-site based on what they produced, including a mojito and a honey 'party'. The organiser of the 'World' Children's Centre Community Garden explained that produce was cooked elsewhere and brought back to the site for the children to eat. This meant that the children could spend more time outside removing the need to leave the site to have dinner. This project is now seeking to develop a community kitchen to expand on this opportunity.

Elderly residential homes, village hall coffee mornings and NGOs which support the older population were another popular outlet for the produced by projects in both Hull and Copenhagen. One organiser in Hull (of the School Community Garden from above) gave rhubarb to an elderly residential home because *he* considered it a "*memory food*".

ii. Informal and Ad hoc

The second way in which produce was distributed was more unofficial and relaxed with organisers describing what happened to food as more in the moment, just occurring as and when they had produce and what felt right. The most common informal way the food was consumed was by participants of the project itself, the people who had helped grow the produce or had just been a part of the project. This was more commonly seen in the projects in Hull with organisers and participants taking the food home for dinner or cooking the produce on site on a barbeque to supplement participants' existing food. Organisers put produce on a picnic table from which anyone could take the produce or putting the produce in a wheelbarrow on the walkway outside the project, inviting people to help themselves. The walkway was a thoroughfare for the local "school run". When asked about where the produce ended up it was common for organisers to respond with "people who come in from the street", "people we know and randomers" and "people take this and that". For projects distributing on an informal basis, some produce was "wasted". When this occurred, organisers were determined for this not to be the case by developing deeper relationships with external groups.

iii. Unplanned

Unexpectedly, a strong theme to emerge was the limited thought organisers had given to how produce would be distributed. For some projects produce destination was just something that had not been considered, and common responses by organisers included "that's a good question", "we haven't really thought about it" and "the growers will eat it?". For other projects produce distribution uncertainty was the result of an

unexpectedly large yield predicted and the failure of wider project planning from the organisation which had initiated the project. The NHS, for example, initially funded the project below as part of a 'Five-a-Day' fruit and vegetable initiative. The organiser explains her response and the impact this had, "I said 'how do you think we are going to get rid of ten tonnes of apples then?' and they said, 'well it's going to the schools and hospitals', so I contacted the schools and hospitals and they said 'we don't want them because we've already got contracts' Supply contracts for fruit so well that's two openings that were major openings for the fruit. It's like having an order cancelled, it's like Tesco calling up and saying we don't want your cauliflowers, you can stick your cauliflowers, don't want them. That was really shortsighted because the NHS didn't ask the NHS' other departments if they actually wanted them" (HO38 Urban Community Orchard).

For some organisers, a lack of knowledge about what they were growing was the cause for a lack of distribution consideration, questioning "what is it...what do I do with it...how do I cook it?" A surprising theme to emerge was the decidedly cautious attitude exhibited by organisers about how to distribute the produce. They found it difficult to give produce to participants without making people perceiving it as though it is 'charity'. To clarify, making a participant feel as though they are being offered the produce invoked the perception that they are experiencing poverty.

CHAPTER CONCLUSION

The chapter has presented contextual data on UA projects. It has established the topic and outlined the perspective of the study. Furthermore, it has demonstrated the way in which cameos are used to describe how organisers experience a theme on the ground. Table 15 summarises research findings and addresses the implications of the finding.

The first section (4.1) introduced key similarities and differences between the Hull and Copenhagen UA foodscape. Additionally the section signposted forwards to relevant sections within the data chapters where each similarity of difference is discussed in further detail. The second part, Section 4.2 differentiated between the 'people' involved in UA projects to fulfil research Objective (i.) identifying organisers and participants. The section gave reasons that organisers find the term 'volunteer' problematic. Section 4.2.1 considered the nature of organiser involvement in UA by providing some demographic data and identified how whether an organiser was employed through their work or worked on a voluntary basis affects their experience of UA. Based on this the typology was invoked to consider disparity in their experience depending on whether the project was independent or part of a GO, NGO or network. The variety of roles organisers had in projects was explored including how they related to and identified with their work. This demonstrated that organisers often engaged with broader

foodscape and non-foodscape activities. It was observed that Hull organisers engaged in more activities both in terms of quantity and range than the organisers of projects in Copenhagen.

Section 4.2.2 moved from understanding 'who' participates to why they participate as outlined in Objective (i.). Each motivation was explored and differences were observed between organisers in Hull and Copenhagen. A key observation identified was that an organiser's motivation often differed markedly from a project's aims and the circumstances of its emergence. The relationship between these three elements was introduced which assists in building on the narrative of project organisers in subsequent chapters. Section 4.2.3 explored the unique 'expert' insight organisers have of their project participants. The insight is on a *project level* and a *personal level*. *Project level* being knowledge of their participant types, patterns of participation during the existence of the project in different activities as run by a project. Organisers also have insight on a *personal level* into participants' lives and circumstances such as employment status and living conditions.

The third part of the chapter, Section 4.3 focused on UA practice as described those involved in UA. The latter part of the chapter primarily sought to fulfil Objective (ii) exploring organiser identities. Section 4.3.1 discussed the formal and informal backgrounds or 'knowledge' organisers had in relation to their ability to start and run an UA project. In considering formal patterns in educational terms there existed a high prevalence of organisers having studied as mature students. Furthermore, projects with multiple organisers often had a mixture of education attainments, typically with one organiser having a formal academic education and one organiser with no formalised education. The section outlined the previous employment roles of organisers and observed similarities across organisers of the typology. Presented alongside this were some of the informal ways organisers have sought to acquire knowledge, which they subsequently intend to use in their project. This highlighted a general limited knowledge of how to grow and, more unexpectedly, showed that UA projects are not necessarily focused on the transference of knowledge from organisers to participants. Organisers use projects to gain knowledge through a process of 'growing' between organisers and participants. This contextualised Section 4.3.2 which considered the wide-range of activities hosted by organisers. Section 4.3.3, considered the urban harvest and briefly evidenced what food projects produce and showed that although UA projects do grow and produce food this had a limited role in the offering of many projects. Consideration was given to where the food produced by projects goes in Section 4.3.4. This found three ways in which produce is distributed, the formal and planned, informal and ad hoc and the unplanned. The limited role growing has for projects gave explanation to why many projects had not planned where the food produced would be distributed.

Chapter 4: People and Practice in Urban Agriculture Projects

Chapter 4 has established the topic, described the people involved and outlined what UA projects do in practice. The next chapter builds on this context to explore how projects emerge in a city's foodscape.

CHAPTER 4				
	ctice In UA Projects	IMPLICATION		
4.1 The UA Foodscape in Hull and Copenhagen	 4.1.1 Projects Far more projects are established in Hull than in Copenahgen. UA types present in the foodscape of Copenhagen and Hull included community gardens, guerrilla gardens, allotments, networks and urban farms. Hull additionally had an urban orchard. Equal number of projects that are established and emerging. UA project sites often exhibited a combination of different types of UA. Some UA projects are connected with other food networks and other projects operate in isolation. 4.1.2 UA Project Initiator Typology 	Relevant Stakeholder: UA Researchers Recommendation: Future UA studies that seek to look explore the range of activities operating within a specific should [1] acknowledge new types of UA practice such as urban orchards, [2] explore site hybridity further ensuring descriptions of when site hybridity is present and [3] go further in their mapping of the connections that exist between a singular UA project and other food networks operating across the study location. Relevant Stakeholder: GOs, NGO's, Networks Recommendation: Consider diversification of provision for UA projects including the establishment of urban orchards specifically. Relevant Stakeholder: UA Researchers Literature Relevance: My work supports the finding		
	 Shared narratives were evident across UA projec organisers. The project journey to becoming established is important to organisers and is often reflected in physical aspects of the site. Who seeks to establish the project (whether an NGO, GO, independent or network) impacts the experience of the UA organiser. 4.1.3 People Many different people are involved in UA 	by Firth et al finding that UA projects in Hull and Copenhagen are "initiated and managed by community groups, although an increasing number have input from external organisations" (Firth et al 2011: 556). Future studies should seek to replicate the use of my structural grouping typology to identify to what extent the same initiators are present in different urban contexts. Relevant Stakeholder: UA Researchers Future Research: UA researchers should further		
	 Many different people are involved in OA projects. Hull and Copenhagen organisers are motivated to be involved with food and growing. Philanthropic motivations were complex. 4.1.4 Practice What projects grew in terms of food and the session's organisers ran were the same in both locations. 	explore the involvement by organisers and participants in UA as a philanthropic activity. Additionally explore any tensions that arise in organiser groups from motivations differences. I suggest that the sensitive class-based issues this evokes provides rationale for its lack of prevalence in existing studies. Relevant Stakeholders: UA Project Organisers Recommendation: A skillswap workshop for organisers would be useful for them to share knowledge about growing methods for foods that		
		work well within each city. Additionally at such a workshop organisers should share their plans for future activities to allow organisers to signpost participants to the activities of other projects as befits their interests.		
Demographies of Actors in Urban Agriculture Projects	 4.2.1 Project Organisers and Nature of Involvement Identifying organisers and participants. Organisers find the term 'volunteer' problematic. Hull organisers engaged in more activities both in terms of quantity and range than the organisers of projects in Copenhagen. 	Relevant Stakeholders: UA Researchers Literature Relevance: The findings add to the work of Glover et al (2005), McClintock (2014) and Armstrong (2000), who have begun to unpick the roles of individuals by exploring the key differences between organisers and participants. Organisers have a "greater social responsibility" to their projects than participants and this relationship should be addressed in social claim studies (Glover et al 2005: 86).		
		Future Research: Work would be welcome which seeks to understand the reasons for organiser's engagement and disengagement from particular food and non-food related activities in the city broadly.		

	 4.2.2 Organiser Motivations Organisers in both locations were motivated (i.) to be involved in food and growing, (ii.) to engage specific, hidden and minority groups within the city, (iii.) to be philanthropic, (iv.) to the change the 'identity' of a location (v.) as a result of a life stage or event or (vi.) to create change through 'difference' for the future. Organiser's motivation often differed markedly from a project's aims and the circumstances of its emergence. 4.2.3 Organiser Insight into Participants Unique 'expert' insight organisers have of their project participants. The insight is on a project level and a personal level. 	Relevant Stakeholders: UA Researchers Literature Relevance: As researchers we risk overstating the claims for UA and equating claims with the benefits of UA rather than an individual's personal motivation or motivations for being involved. Organisers are realistic that their projects are supplementary not alternative. Relevant Stakeholders: UA Researchers Literature Relevance: Armstrong (2000: 321) described "co-ordinators" as being "familiar with local neighbourhoods"; I would go further to assert that organisers become the experts of the community in which their project situated. Relevant Stakeholders: GOs and NGOs Recommendation: When making local decisions			
4.3 In Practice: Knowledge, Activities, Production and Distribution	 4.3.1 Project Organiser Background and Knowledge High prevalence of organisers having studied as mature students. Previous employment roles of organisers and observed similarities across organisers of the typology. A general limited knowledge of how to grow and, more unexpectedly, showed that UA projects are not necessarily focused on the transference of knowledge from organisers to participants. Knowledge development on a site as a dyadic process between organisers and participants. 	enlist the assistance of UA project organisers, who through their engagement in community-based projects have become experts of the experiences of hidden groups that attend their project. Relevant Stakeholders: UA Researchers Recommendation: This study has begun to explore the role of knowledge in UA projects. I have identified that organisers consider knowledge development to be a dyadic process whereby organisers and participants learn together. I suggest a future study which looks specifically at the ways in which knowledge transfer occurs between organisers and participants. Such as study should make recommendations for improving skill levels in UA projects.			
	 4.3.2 Project Activities Although UA projects do grow and produce food this had a limited role in the offering of many projects 4.3.3 Produce Distribution Produce was distributed in a number of ways, the formal and planned, informal and ad hoc and the unplanned. Food is wasted by UA projects. 	Relevant Stakeholders: UA Researchers Future Research: The finding that food growing was not always an UA project's priority supports work by Holland (2011: 292). In light of this UA researchers should be cautious in making assertions about the role of the UA project that is the subject of their study. Relevant Stakeholders: UA Researchers Future Research: The field should be welcome to studies which seek to quantify the amount of land used for UA and the quantity of food produced. Relevant Stakeholders: Funding bodies Recommendation: Organisers who did not consider their project to be UA cited a lack of market to trade their produce. Funding bodies should welcome applications for projects which seek to support the distribution of UA produced food. Relevant Stakeholders: UA Organisers Recommendation: UA project organisers require greater consideration as to who will consume the food produced. I recommend sharing of existing			

Table 15 Summary of research findings from the chapter and implications of findings. Implications identify the relevant stakeholder of the finding and makes recommendations.

Established and Emerging Projects in Hull and Copenhagen.

5 THE EMERGENCE OF URBAN AGRICULTURE PROJECTS

Introduction

This chapter discusses how UA projects emerge in the foodscape. There is a general acceptance in the field that UA is experiencing a resurgence, which continues to evolve as a complex process (McClintock 2014: 166, Tornaghi 2014). Research has tended to focus on projects which are well established. They are 'active', 'open' and producing food (Nelson et al 2013: 569). This chapter adds to the debate by bringing existing and long-established projects active in Hull and Copenhagen alongside projects which are newly emerging and establishing in the same locations.

The theme of emergence is a particularly critical concept given the inclusion of projects that were at different stages of establishment in this study. Emergence in this chapter refers to the process in which an UA project seeks to and becomes visible and active in the foodscape of a city. This draws upon Ballamingie and Walker's work in which projects described themselves as "continually in the process of becoming" (2013: 540). Central to this is understanding the processes projects in Hull and Copenhagen go through as they emerge into a city's foodscape. How projects collectively and individually emerge is a 'performative practice', meaning a project's emergence is the result of several processes and factors interacting. Through exploring these interactions in the chapter, when and how projects emerge can be observed and explained. The relationship between time and space are both central to how projects emerge. For pragmatic reasons when and how projects have emerged are considered in turn.

The first Section, 5.1 will look at when projects emerged in Hull and Copenhagen and Section 5.2 looks at how projects emerged in both cities. The final part of the chapter Section 5.3 explores geographies of project emergence, where projects emerge and why they emerge where they do. The final section will contribute to the active debates on the 'uneven' or 'even' geographies of project emergence (Borelli 2008, Nelson et al 2013, Taylor & Lovell 2012, Smith et al 2013).

The sections should be considered together as when, how and where occurs at the same time for a project to emerge. The rationale for separation in this way is to enable each theme to be considered thoroughly. Furthermore, this should allow UA researchers to be able to identify whether other cities are witnessing similar processes and factors in emergence. The chapter brings a much-needed "longitudinal approach" to the study of

project development, as outlined by Objective (v.) (Glover et al 2005: 89). Maximising opportunities to observe emergence with a longitudinal approach addressed the need for time and space studies of the processes experienced by projects (Kingsley & Townsend 2006).

The chapter seeks to fulfil Objective (iii.) by investigating how UA projects emerge to answer Aim 4 by comparing the emergence of projects in two cities. This assists in answering research Aim 1 how UA emerges for different types of project and Aim 2, what happens in projects which are emerging or established. The chapter provides a starting point for fulfilling Objective (iv.) with the following chapter seeking to understand enabling and hindering aspects of projects in relation to the experience of 'emerging' or 'being established'.

5.1 When UA Projects Emerged in Hull and Copenhagen.

This section explores when UA projects have emerged. The following section opens discussions about how projects are studied in research. The implications of considering and engaging with projects in new ways can provide original insights into how UA has emerged. This has beneficial impacts for moving the research field beyond current confines. This is particularly pertinent for studies that look across UA projects beyond the isolation of an individual case study. There are claims (Marsden & Martin 1999, Tornarghi 2014) that UA is 're-emerging', that we are experiencing an increasing growth of project numbers in cities, which is changing the urban foodscape. The patterns of when projects emerged provides a basis to understand the nature and complexities of emergence.

There are two specific literature challenges which this section seeks to redress. The first challenge relates to naming and categorising UA. Projects in the literature are described in two ways. The first is that in studies of one project, the name of that project is kept, e.g. how people within that project describe it such as 'Pickering Road Community Orchard'. The second and most common is that the names of projects are removed, the quirks and nuances are removed and projects are aligned with a type of UA. For example, these 'types' include community gardens, allotments, urban farms and school gardens. This reduces the opportunity for understanding the context from which projects emerge.

The second methodological challenge is that much of the literature on emergence considers project establishment retrospectively (Firth et al 2011, Crane et al 2012, Armstrong 2000, Holland 2011). This means that there is an underlying assumption in the literature that a project only becomes 'worthy' of study once it has achieved specific milestones, which are inferred and not explicit. This includes having a project site, a name, being 'open' and growing food as examples. The impact of this is that a lot of

broader UA activity is missed and the myriad of ways projects emerge is not considered. This presumes that the project established was always intended to become an UA project. The risk in this approach is that the very early beginnings of project formation are omitted.

Three approaches have been adopted to explore patterns in when the UA project emergence in Hull and Copenhagen. The approaches relate to specific layering of project data to allow patterns to be observed and explained. To briefly introduce the three approaches, [1] the first approach takes the normative literature approach in which academics would remove project names and categorising by UA type such as community garden. Project types are then charted against project start date. This approach is used to highlight the limitations of current research design in UA, as explained above.

In the [2] second approach, each project name has contextual information added. This information was generated through a careful process of demarcation drawing on project names, interviews with organisers, site signage and formal and informally produced written materials. This enables differentiation between specific project types to comprehend more about the uniqueness of each project. This still draws upon the normative categorisation of UA project type. For example, the orchard is actually an urban community orchard with a wildlife community garden, within an allotment site. The community garden becomes a church community garden or a sports club community garden. The city farm is an organic rooftop city farm.

The [3] third approach utilises the structural grouping typology to understand the 'who' and 'where' of project emergence. The 'who' of project emergence identified which organisations or individuals are involved in UA and when. The 'where' of UA emergence can be understood by drawing upon the rich data names in phase 2. It is possible to attribute which types of organisation or individuals are involved in more specific aspects of UA. For example, the location of a project or the project focus such as demographic or therapy based. In addition, it is possible to start to understand the influence of established projects on where and when new UA projects start.

5.1.1 Approach 1: Project cases in start date order presented in the normative field categorisation by UA project 'type'.

Within UA literature it has become the norm to categorise a project by its conventional 'type' to understand which types of UA project emerged when. Figure 19 shows when the projects studied emerged using this norm. The figure shows which UA type they were whether an allotment, network, city farm, orchard or community garden.

Project Emergence from 1950 - 2008.

Allotment (H)	Allotment (H)	Network (H)	Comm Garder				Community Garden (H		City Farm (C)
A1956nt	All 1960nt	Net l/980 (H)	Coppe	inity (H)	mity Communication (H) Garden		Communit Garden (H	Or 2004 (H)	City 2008 (C)
Dr.1950+ II	maraanaa	from 20	ο 1 99	995	199	7	2000	2004	2008
Hoject L	mergenee	7 110111 20	20	15.					Network (H)
					!		ı		Network (H)
						Net	work (H)		Network (H)
						City	Farm (C)		City Farm (C)
						City	Farm (H)	Network (H)	City Farm (H)
				Netw	vork (C)		mmunity rden (H)	Community Garden (C)	Community Garden (H)
Network (H)	Commu Garden				nmunity den (C)		mmunity rden (H)	Community Garden (H)	Community Garden (H)
Community Garden (H)	Commu Garden		work (H)	Community Garden (C)				Community Garden (H)	Community Garden (H)
Community Garden (H)	Commu Garden	-	nmunity rden (H)	Community Garden (H)		Community Garden (H)		Community Garden (H)	Allotment (H)
2009	2010	0 2	2011	2	012	:	2013	2014	2015

Figure 19 Approach 1: Project cases in start date order presented in the normative field categorisation using only UA project 'type'.

As shown in Figure 19 there is the expected long-standing prevalence of pre-established allotments in both Hull and Copenhagen. This was followed by a steady emergence of community gardens in the 1990s. During this steady emergence, there is innovation and variation in project types entering the foodscape. Urban orchards and farms begin to emerge. As this occurs the number of community gardens emerging increases. Several more urban farms were established between 2013 and 2016 and a re-emergence of allotments was present. This pattern of emergence is similar to that found by Milbourne (2012). This view only offers a basic insight into which UA types emerge without specifics of their nature or acknowledgement of what else is happening in the foodscape which influences this. Additionally this only provides a limited insight into when projects emerged, without showing how or why a project emerged.

5.1.2 Approach 2: The addition of contextual data to each project case.

In Figure 20 contextual data has been added to the name of each project. By adding narrative more details about temporal patterns of emergence can be observed.

Project Emergence from 1950 - 2008.

East Hull Traditional Allotment (H)	West Hull Traditional Allotment (H)	Volunteer Network (H)	Wildlife Community Garden (H)	Therapeutic Community Garden (H)	Health Centre Therapeutic Community Garden (on allotment site) (H)	Urban Community Orchard (with community garden) (H)	Elderly Centre City Farm (with allotment plots) (C)
1950	1960	1980	1990	1997	2000	2004	2008

Project Emergence from 2008 - 2015.

1950	1960	Olaspter 3	: Th t9990 nerge	nce 1997 rban	Agr izodo ure P	roje 200 4	2008
East Hull Traditional Allotment (H)	West Hull Traditional Allotment (H)	Volunteer Network (H)	Wildlife Community Garden (H)	Therapeutic Community Garden (H)	Therapeutic Community Garden (on allotment site)	Community Orchard (with community garden) (H)	City Farm (with allotment plots) (C)

						Growers Network (H)
				Local Food Network (H)		Guerrilla Gardeners Network (H)
				Rooftop Farm (C)		Pop Up Farm (C)
				Mobile Container Farm (H)	Permaculture Network (H)	City Farm (H)
			Productive 'Street Bed' Network (C)	Black and Minority Ethnic Community Garden (H)	Guerrilla Community Garden (C)	Commercial- run Rooftop Community Garden (H)
Global Environment Network (H)	Allotment Association Community Garden (H)		Permaculture Community Garden (C)	Permaculture Community Garden (H)	Sports Club Community Garden (H)	Church Community Garden (H)
Community Planters (H)	Permaculture Community Allotment Garden (H)	Community Change Network (H)	'World' Children's Centre Playground Community Garden (C)	Children's Planters Community Garden (H)	Library Community Garden (H)	Housing Trust Community Garden (H)
Academy School Community Garden (H)	Community Development Trust Community Garden (has allotment plots) (H)	Health Centre Therapeutic Community Garden (H)	Youth Centre Community Garden (H)	Children's Centre Community Garden (H)	Adult Centre Community Garden (H)	Residential Allotment (H)
2009	2010	2011	2012	2013	2014	2015

Figure 20 Approach 2: The addition of contextual data to each project case.

1990 - 2000 Through the inclusion of a breadth of projects it is possible to see that the community gardens emerging between the 1990's and 2000's emerged with a highly specific focus on food production, wildlife or health and therapy.

<u>2000 – 2008</u> Between 2000 and 2008 new types of projects emerge, urban orchards and farms. However, these form part of existing projects typically community gardens and allotments, in some instances both. Two or more projects occupy the same site or alongside one another, hybrid projects. For example, the health centre's development of a therapy community garden that grows food across many plots on a previously established allotment site and an orchard developed alongside a pre-existing wildlife garden within the boundaries of an allotment site. Interestingly this mirrors the most common motivations identified in the previous chapter which were to be involved in food and growing and to engage specific, hidden and minority groups within the city. Also evident were national networks entering the cities and establishing local network outposts.

2008 - 2013 We see a noticeable increase in project numbers with emerging projects focusing on two specific themes: [1] to target groups of the population including elderly, children, youth, disability and black and minority ethnic groups and [2] to utilise specific growing principles such as organic growing and the permaculture

principles. National networks proliferating food issues within agendas, which filters down to local network offices and their project aims.

2013 – 2016 The upward trend in project numbers entering the foodscape continues. There is a shift from projects operating on their own sites (except in the case of urban farms) to projects emerging from existing services and infrastructure including, rooftops, sports clubs, libraries, churches, housing development trusts and playgrounds. Milbourne identified the most common means through which a project was started as being "the closure of an existing community resource, such as the school or community centre, by the local authority, which prompted local groups to campaign for the continued use of the building and/or its surrounding green space as a community resource" (Milbourne 2012: 950). This differs slightly to the findings of this study which suggests there has been a protectionist shift since 2012. By this I mean groups have begun to identify community resources before they are 'at risk' of closure to the community. People have begun to revalue the community resources that remain having observed other closures. The result has been people starting UA projects to occupy the space surrounding existing assets. Independent groups particularly use the development of an UA project on a site to show the value of the existing service as a community asset. Groups do this by demonstrating that the space is used and is providing a service in the hope that the community resource will be protected from closure because of its perceived increased community value. Furthermore, we see commercial-interest in UA. This has occurred because of its popularity. The most obvious example of this increased interest was the development of the shopping centre's rooftop community garden.

Within this period traditional fixed project states are also challenged with space considered differently. Projects have emerged in a less fixed state with planned impermanence. By this I mean they exhibit narratives of being 'pop-up', 'mobile', 'container' (using shipping containers) and 'planters'. This suggests that some projects are emerging with the aim to be ephemeral, existing for a short period of time. This is explored further in the next section. At the same time local and more radical grassroot projects emerge such as guerrilla gardens. These projects emerge and establish faster than other types of UA project because organisers start them without landowner permission.

5.1.3 Approach 3: Identification and layering based on typology.

Figure 21 utilises the pre-determined structural grouping typology to identify patterns in who is starting UA projects and when.

Project Emergence from 1950 - 2008.

East Hull Traditional Allotment (H) East Hull Traditional Allotment (H)	West Hull Traditional Allotment (H) West Hull Traditional Allotment (H)	Volunteer Network (H) Volunteer Network (H)	Comn Gar (H Wild Comn Gar	munity Comarden Ga (H) (Idlife Thermanity Commarden Ga		peutic nunity den Deutic nunity den lunity den I)	Health Cent Therapeutic Community Garden (or allotment sit Health Cent Therapeutic Community Garden (or allotment sit	Community Orchard (win community Te Urban Community Orchard (win	h (with allotment Elderly Centre City Farm (with allotment
1950	1960	1980	19	90	199	97	2000	2004	Network H)
Project En Governmenta	nergence	from 200) 8 - 20)15.	•			1	
Governmenta	Organisatio	on .				Loc	cal Food		Guerrilla
									Growers Network (H)
Non-Governr Independent							cal Food work (H)		Guerrilla Gardeners Network (H)
Network						Roofto	op Farm (C)		Pop Up Farm (C)
							e Container arm (H)	Permaculture Network (H)	City Farm (H)
				'Stree	uctive et Bed' ork (C)	Mino Cor	ack and rity Ethnic mmunity rden (H)	Guerrilla Community Garden (C)	Commercial- run Rooftop Community Garden (H)
Global Environment Network (H)	('ommur	ion nity		Comr	culture munity en (C)	Cor	maculture mmunity rden (H)	Sports Club Community Garden (H)	Church Community Garden (H)
Community Planters (H)	Permacul Commur Allotme Garder (H)	nity Comr	nunity ange ork (H)	Playground			nildren's lanters mmunity rden (H)	Library Community Garden (H)	Housing Trust Community Garden (H)
Academy School Community Garden (H)	Commur Developn Trust Commur Garden (allotme plots) (1	hent Health Thera Comr Garde H)	Centre peutic nunity en (H)	Youth Centre Community Garden (H)		Children's Cent Community Garden (H)		Adult Centre Community Garden (H)	Residential Allotment (H)
2009	2010	20	11	20)12		2013	2014	2015

Figure 21 Approach 3: Identification and layering based on organisation structure of each project within the pre-determined typology.

Non-governmental organisations (NGOs) Community gardens are the most common UA project type established by NGOs in Hull. These organisations specifically include Academy Schools, Community Development Trust, Church and a Housing Trust (Cameo 6). There was no evidence within this time period of NGOs establishing UA projects in Copenhagen, however there was a plan for a project on the outside green space of a Church. The emergence trend by NGOs has been more sporadic since the 2008 economic crisis, with a reduction in funding for the third sector reducing the number of UA projects emerging. Funding for larger-scale projects remains. Projects that have emerged in this way are organisations, which have long histories and continuous activities in specific areas of a city. This was evident in Hull and Copenhagen. Such organisations work around specific themes and service provision such as conservation, education, community regeneration and religion. This supports the

notion that some projects emerge as "spin-offs from broader funded projects in the area" (Milbourne 2012: 951).

Cameo 6

In 2015 an NGO Housing Trust in Hull refurbished a property and converted the building into flats. The flats provide social housing for people who have reached individual living status. However, the house and its relative position on a bend in a Victorian road meant there was a "huge garden to the back of the property". The decision was taken to portion the land with "some outside space for the residents" and to develop the rest into a community garden (Figure 22). At the time of the research the site was being cleared ready for development. The organisers had started growing in a small number of planters. The aim of the project is to "create a welcoming sensory space to encourage the local community to grow their own". The organiser said the project was needed because the area has high levels of deprivation. The local authority has bought the property next door to redevelop. This has a similar sized garden and will be incorporated into the Housing Trust Community Garden.

with de incorporated into the Housing Plus Community Garden.

Figure 22 An emerging community garden initiated by an NGO Housing Trust.

Governmental organisations (GOs) In Hull and Copenhagen allotments are managed by the local authority (the Kommune in Copenhagen). However, in Hull, two types of allotment exist. There is the historical prevalence of 'traditional' war allotments, as well as a new form of 'residential' allotment. An example of a residential allotment is provided in Cameo 7. The difference between the two is why they are initiated and who they are for. How they look on the ground is visually very similar. Traditional allotments were created by the state primarily for food production and open to anyone living in the city who expresses an interest in having a plot and has the means to pay rent for the space. Local authorities also create residential allotments but they are created to change ownership of the land from the local authority to residents within proximity to the green space. This has a dual benefit of minimising state costs in green space maintenance and to reduce allotment waiting lists.

Cameo 7

In 2015 The local authority in Hull (GO) decided to change ownership of a strip of land. The land occupies space between the back of homes and a railway line. The land has been primarily used by dog walkers. To avoid the land being bought by private landowners through compulsory purchase the local authority wanted to transfer ownership to the residents. The local authorities found residents interested in the space by leafleting homes, holding meetings and ensuring they had input into the design of the land. During early consultations several suggestions were put forward including a playground and a wildlife pond. The residents chose an allotment site. The local authority team were pleased with this decision as it meant they were increasing allotment provision in the city. Interestingly this site was previously allotments for the residents during WW2. Now the land has been fenced and left for the residents to divide into plots with a small number of plots having been started. The result is a Residential Allotment.

GOs in Hull are further predominantly responsible for the emergence of many community gardens. The focus of these is often on the therapeutic aspects of UA or the engagement of specific demographics of the population, for example the youth centre's community garden, utilised for weekly sessions by a group of young adults (18-25) with a mixture of mental and physical learning disabilities. In Hull, the local authority is reconsidering the space of its service infrastructures and re-evaluating land value enabling independent groups to manage the space as a community garden by improving site access. This supports the finding of Firth et al who found "most community gardens are initiated and managed by community groups, although an increasing number have input from external organisations" (2011: 556). In Copenhagen GOs are responsible for the projects that exhibited the most site hybridity. For example, one project on a single site had allotment plots, a city farm and community garden. The organisation was also responsible for an elderly centre, a dementia facility, care home and community centre.

National Networks There is a general lack of national networks evident in Copenhagen. During the research period, it was difficult to establish whether they do not exist or are more broadly encompassed by 'green' networks, or indeed whether my outsider perspective kept them 'hidden'. However, discussions at the Conference on Urban Farming in Copenhagen (February 2016) confirmed a lack of national networks with suggestions of setting up a specific network. On the contrary, national networks operating in Hull are active in community garden emergence with Volunteer Networks, a Global Environmental Network and a Community Change Network themselves establishing community gardens or helping other groups to access or manage spaces.

Local Networks In Copenhagen there is evidence of small local networks engaging in UA with a network supporting the facilitation of 'productive street beds' to grow food and plants in the space outside residential homes. However, this is specific to one area of Copenhagen; Vesterbro. In Hull, local food networks include permaculture and guerrilla networks. Similarly to national networks, these facilitate and support other groups in their project emergence. Furthermore, they are themselves responsible for the emergence of some community gardens, although they are primarily engaged in

'planters', i.e. multiple smaller-scale projects, normally within a specific area such as a gap between a row of houses on a residential or commercial street (Cameo 8).

Cameo 8

A Guerrilla Gardeners Network was started in 2015 after a conversation between two people who are also currently part of other projects in the city. The two organisers discussed neglected GO planters and identified potential for intervention through planting. They decided to target areas a "reasonable distance" from where they live. The organisers have not sought permission to grow on the land. As a result planting and watering is done in the early hours. They wear "high-visibility clothes like the council workers" so that people do not question them. This local network aims to "create visual edible produce for passers-by in surprising places" from which "people can pick" (HO46). Part of the aim is to create mystery and humour in a "Banksy-style" with organisers remaining anonymous to both contribute to this mystery and because no permission has been sought. One organiser waters the sites by carrying water on his motorbike, leaving his helmet on, watering the plants and leaving. Produce grown so far includes tomatoes, strawberries, courgettes, aubergine, patty pan squash, sorrel, Swiss chard, kale and spinach.

Independent Groups Independent group project development of UA projects in both locations can be briefly summarised as exhibiting the most diversification of project type (farms and orchards) and challenging of conventional space (mobile and rooftop). In Hull and Copenhagen independent groups are responsible for projects focused on specific growing principles, with a focus on community gardens which implement the permaculture principles. Guerrilla gardening, the practice of growing on a site or many sites without landowner permission was evident in both locations (see 2.4.1 *Defining UA and Understanding Activities*, iii.). In Hull guerrilla gardening took place on multiple sites with organisers claiming space for growing across the city (see Cameo 9). However, in Copenhagen guerrilla community gardens have emerged on specific sites.

Cameo 9

In 2013 a life-long local resident of Hull watched large planters built by the local authority in the 1980s "slowly fall into disrepair". The resident had a role in a regeneration programme for the local area but the funding was stopped. The resident decided to transform some of the planters herself. The planters occupy a walkway that is between homes and a field with cemetery. The project has many aims including, making the "walkway to the school aspirational" for young people, "to create a healthy active community, a nice place to live and help people develop skills for entering the workplace" (HO21). At the core of the Children's Planters is bringing the community back together to enable it to develop its pride again. The majority of produce is hidden so it is not stolen. The organiser runs gardening sessions with children and some adults and runs excursions to other sites to help them start a project. There are plans to explore and incorporate more history of the area. The organiser would also like to develop a local level competition for projects to be rewarded for their efforts.

Hull and Copenhagen have both experienced an emergence of urban farms created by independent groups. On the ground evidence was of different types. One of these involves organic growing on a rooftop, another is a 'pop-up' farm; one example which is temporary, two are fixed site farms and one occupies space which an organiser termed "*in meanwhile use*". The latter means the farm seeks sites which have been unoccupied for long periods of time, to develop a farm until the site is redeveloped, at which point the farm will move to another unoccupied site. Organisers in Hull and

Chapter 5: The Emergence of Urban Agriculture Projects

Copenhagen explained that perceptions held by the local authority affected the emergence of urban farms. Local authorities were reticent to fund urban farms. This is discussed in more detail in 7.2.2 *Risk Perception and Risk Management*.

5.2 How UA Projects Emerged in Hull and Copenhagen.

This section considers the theme of emergence in a different but complementary way. It moves from when projects emerged to how and where projects emerge. The section looks at the processes and factors at play through which projects can occupy 'space'. To understand emergence, the history and geography of projects must be a central focus. This includes describing the conditions which facilitated the project's emergence, how the project emerged and what happens over the life of a project, which may or may not lead to the expansion of projects or the creation of new projects.

The section utilises and adds to debates on the conditions that have led to UA's remergence and the role of UA as an intervention for city and localised provisions. The work of Firth et al on "community in community gardens" is drawn upon (2011: 555). To summarise, they categorised and sampled case studies in Nottingham, UK in two ways. They identified community gardens as representative of either *place-based* or *interest-based* initiatives. They also categorised the management structure of each case study as indicative of either *top-down* or *bottom-up*. This section will deploy these categorisations and terms. Accordingly, these types are applied to UA projects more broadly (similarly to Firth et al encompassing community gardens). As before, this section includes emerging projects alongside a retrospective of how the established case studies emerged.

5.2.1 Emergence Forms

This section discusses how projects emerge in the foodscape of a city. How a project emerges is shaped by three processes and influenced by different decision-making factors. Each process and set of factors is discussed in turn. These are occurring at the same time. Figure 23 visually shows these processes and corresponding factors. The first is the **decision maker**: who made the decision to start a project. This is either *top-down* or *bottom-up*. The second is the **decision rationale** relating to why the decision was made to start a project. This can be categorised by being either a *place or interest based* decision. The third is the **decision influences**, what was happening more broadly to influence the decision to start a project. This influence could either be a plan for *intervention* or the result of *conducive conditions*.

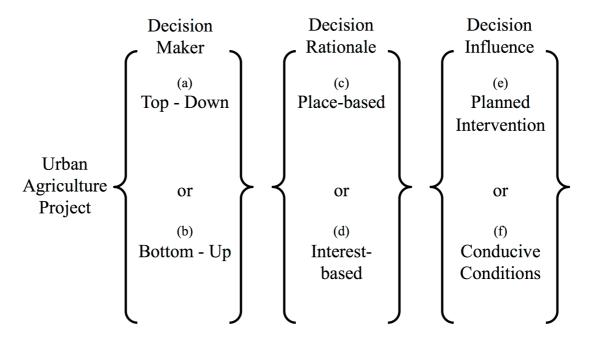


Figure 23 Matrix of processes and factors in UA project emergence.

5.2.1.1 Top-Down or Bottom-Up Initiated Projects

The terms 'top-down' and 'bottom-up' refer to the origin of the decision to start a project. The terms reflect who made the decision to start a project. Understanding the hierarchical structures in projects is not new within UA research. Firth et al (2011; 559) adopted a top-down, bottom-up approach in their understanding of community gardens to categorise the "nature of the management structure". In the study, the authors used top-down to describe a project managed by external professionals, and bottom-up for projects managed by community representatives (Firth et al 2011). Crane et al (2012) also adopted this categorisation in a study of guerrilla gardens. A challenge in the direct implementation of these definitions in this study is that the terms were applied to understand established projects. To understand how a project emerges a definition for both top-down and bottom-up is needed which encompasses the nature of the management structure (whether this involves external professionals or community representatives). It must also acknowledge that a decision occurs within a specific time because the decision to a start a project forms from a management structure but a project's ownership can change over the course of a project's existence. It is necessary to distinguish these decisions because a project can have been started by a governmental organisation in a top-down approach, but can continue to operate as an independent project, with more bottom-up governance. In both cities there were examples of projects initiated through a top-down and bottom-up decision maker.

An interesting example of this was found in Hull that culminated in the start of a residential allotment. The emergence decision was in the conventional top-down flow initially, with the project started by the local authority. The rationale for the

development of a new form of allotment was twofold, the threat of compulsory purchase of common land alongside undeveloped privately-owned land and to reduce the council responsibility for the maintenance cost of the land. Critical to the project implementation was to change ownership of the land from the local authority to the residents who expressed a willingness to take on an allotment plot. This demonstrates how researchers must acknowledge that the trajectory of a project can change particularly in the emergence phase. These changes can be planned into the decision to start a project or occur more naturally over time.

The term (a) 'top-down' refers to institutions and external professionals who make the decision to start an UA project. Professionals working within an organisation collectively make the decision. Categorisation of project emergence as top-down and bottom-up shares similarities to the structural grouping typology in this study. The emergence experience of NGOs and GOs are the most representative of the top-down approach in project initiation. On the ground projects initiated from a top-down approach were started as part of wider national or local strategies. Examples from projects include National Health Service priorities, corporate social responsibility milestones and to meet the needs of the wider organisation such as food for a lunch club. Similarly, the decision to start a project as part of an organisation's wider food strategy, such as the creation of a community shop and community garden to provide produce for the shop. Further initiatives included promotion of 'Green at Children's Eye Height' (translated from Danish) and city plans for secure accessible green space.

The term (b) bottom-up refers to the self-organisation of community representatives who make the decision to start an UA project. An individual representative or group of community representatives make the decision. From the typology, the experience of bottom-up emergence was observed to be most similar between local grassroot networks and independent projects which emerge without an association to the aforementioned organisations. Cameo 10 describes an independent project emerging without support.

Cameo 10

In 2010 a local resident in Hull had the idea to develop a Permaculture Community Allotment Garden. In 2014 *she* planted apple trees and wildflowers in the main park. The organisers had to plant shrubs around the trees to prevent plant theft. Alongside this park there was another piece of gated land. The resident got together with a group of locals to discuss this underutilised space. The organisers have a keen interest in permaculture, have diplomas and were keen to develop the site following the principles. Of critical importance is "to create a clean and safe environment for local people and wildlife to enjoy". One organiser felt that the area had been subjected to a lot of regeneration programmes but they lacked public consultation. As a result, in developing the project a long consultation period followed and residents were asked about what they wanted on the land (Figure 24). In these meetings, they were provided with potential plans for the site. In 2015 the local authority gave the group the site and it was theirs once they added a padlock (this took place during the research interview). The project has incorporated

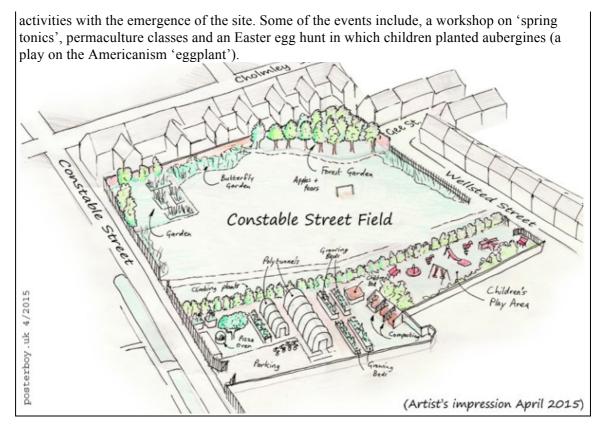


Figure 24 Plans for a Permaculture Community Allotment Garden used for resident consultation (provided with permission from an organiser).

As shown in Cameo 10, for independent project organisers there was a sense of agitation, the belief that the organiser themselves and/ or the 'community' had been let down by how NGO and GO organisations approached community development work. This introduces the notion that how and where projects emerge is complex.

Across the UA projects in this study some emergence forms combined top-down and bottom-up forms. National networks mostly exhibited this. There were two cases of this, one when an organiser had been invited to start a project by councillors under the banner of a national network and another when a national network had been contracted by a GO organisation to initiate a project in a certain area.

5.2.1.2 Place-based or Interest-based Projects

When an individual or group makes the decision to initiate an UA project they have a reason for doing so. Two themes emerged from exploring how organisers articulated why they started their project. Each organiser described either the characteristic of a particular piece of urban space or a certain interest as their reason for initiating a project. To clarify 'interest' in this sense refers to both enthusiasm and concern.

Interestingly these two reasons share a similarity to how organisers defined UA. Organisers considered UA to require two elements 'people' and 'place'. This is the

topic of discussion in Chapter 6, 6.1.2 'Urban Agriculture' As Described By Organisers.

The term (c) 'place-based' refers to projects started by an individual or group to change the characteristics of a particular space. Most often this related to the appropriation of the land by bringing a space back into the public realm. Examples included perceptions that the current use of land is conflicted, undesirable or wasted. For evidence of projects initiated for place-based reasons see Table 16.

Place-based Rationale For Initiating Project	Project Started on The Space
An individual or groups of individuals have observed that specific pieces of land already used for food growing are unpopular unused because they are considered "exposed". By exposed organisers mean that they are most susceptible to anti-social behaviour. For example, the plots closest to the entrance on an allotment site.	 Global Environment Network (Hull). Health Centre Therapeutic Community Garden (Hull). Allotment Association Community Garden (Hull).
An individual working for a sports club cleared outside space which had been storing waste and subjected to fly tipping. After clearing the space, the organiser then had to make a decision about what to do with it to make it more useful to deter continued accumulation of rubbish.	 Sports Club Community Garden (Hull).
An individual in a senior position at an adult community centre looked to reduce the centre's running costs. The individual identified how much it was costing to maintain the grass surrounding the centre and decided that this was not a necessary cost and wanted to change the space to be more efficient.	Adult Centre Community Garden (Hull).
Groups identified spaces across the city that they perceived to be "wasted", empty and unused spaces. They saw opportunities to make the sites "productive" instead through food production.	 Guerrilla Gardeners Network (Hull). Growers Network (Hull). Mobile Container Farm (Hull). Productive Street 'Bed' Network (Copenhagen).
A group of individuals lived near a park. The corner of the park had become a "bad spot" a space to avoid because of anti-social behaviour. They developed a plan to change the site use and users from anti-social to social.	 Permaculture Community Garden (Copenhagen).

Table 16 Place-based rationales that led individuals and groups to initiate UA projects.

The term (d) interest-based refers to projects started because of a feeling or experience by an individual or group. The term relates to the collective arrangement of an individual or group with a shared enthusiasm or concern. Examples include personal

values, possible opportunities and a desire. Table 17 provides examples of this feeling or experience that led organisers to develop a project in response.

Interest-based Rationale For Initiating Project	Project Started In Response
A group of individuals came together feeling annoyed that an old music venue was going to be re-developed for a supermarket. The group felt that there were already too many food outlets and developing a supermarket would not reflect the social and cultural value of the sites previous use.	 Guerrilla Community Garden (Copenhagen)
An individual heard about a project established by a GO organisation that had been "abandoned". The initial infrastructure money had run out and the initiators left. The individual wanted to try and make the project a success.	Children's Centre Community Garden (Hull).
A group of likeminded individuals came together with an interest to help save a local food business.	 Local Food Network (Hull).
An individual became interested in the principles of permaculture and wanted to establish many social enterprise forest gardens across the city.	 Permaculture Community Garden (Hull).
An individual working in a housing organisation was frustrated that people approached unable to access allotment plots within a reasonable time period	 Therapeutic Community Garden (Hull).
A group working for a GO had visited some European cities and saw green spaces with community garden and wanted to replicate them in their own green spaces.	• 'World' Playground Community Garden (Copenhagen).
An individual observed a lack of skills, pride and confidence and became committed to developing solutions at a community-level.	 Community Change Network (Hull).
A group of three individuals developed an interest in how the countryside and city could be more closely connected.	 Organic Rooftop Farm (Copenhagen).

Table 17 Interest-based rationales that led individuals and groups to initiate UA projects.

The next section considers wider decision influences which affect where different structural groups initiate a UA project.

5.3 Geographies of Project Emergence: Decision Influences

Before considering the complex influences on decision rationales it is necessary to briefly restate a developing UA debate. Studies have revealed that UA projects exist unevenly across the city (McClintock 2014, Taylor & Lovell 2012, Smith et al 2013, Nelson et al 2013). However the resources available for UA are evenly distributed (Smith et al 2013). Currently the research does not account for the different structural groups starting projects and work has focussed on the experience of independent groups. To reflect this developing debate this section moves from how projects emerge to how and where projects have emerged. This section considers two decision influences as outlined in Figure 23 and the factors which are shaping the location of projects. Whether a project emerges as part of a plan for intervention or as a result conducive conditions are not mutually exclusive but shape each other. For this reason I will discuss them together.

In both Hull and Copenhagen UA projects were initiated to intervene and change the condition of what was happening in the city. Planned interventions were the result of an observation by an individual or group of individuals of 'something' occurring in a specific area of a city or the city as a whole. Examples of observations by organisers were predominantly social and cultural but also featured economic and environmental conditions. Examples included a lack of investment in certain urban areas, the closure of community resources, a lack of community cohesion, poor community health, high levels of anti-social behaviour and low food education levels. A plan for intervention was evident by organisers in independent and network groups not only by GOs and NGOs whose organisational remit was to work on addressing these challenges. The idea of intervention has been identified in the literature but typically only refers to the practice of guerrilla gardening which has been described as 'interventionist agriculture' (Crane et al 2012). By looking at the different structural groups together there was evidence of many UA projects influenced by ideas of intervention regardless of 'type'. What organisers initiate their projects to intervene in provides insight for why projects emerge where they do. Conducive conditions refer to broader 'situations' that influence the initiation of a project. These include historic, social, cultural and economic conditions that are used to inform an organiser's decision.

Potential UA organisers carefully consider what else is happening in the city before they seek to start their UA project. All organisers were influenced by what other structural groups were doing in the city. For example if an NGO was running a number of initiatives in a specific part of the city a GO organiser would not seek to initiate a project there. Independent project organisers were influenced by the work of NGOs and GOs in the city. The reason potential organisers looked at this was that they thought that if large-scale interventions by the local authority or third sector had been planned and

funded for specific areas of in the city, UA projects were less likely to be successful in applying for funding. Independent project organisers wanted to reduce the likelihood of future conflict. In both Hull and Copenhagen it was observed that this occurred at different scales. It occurred at both a city-level with organisers looking at what was happening across the whole city as well as on a micro-level by observing activities within specific communities in certain areas of the city. Conflict occurred when different groups started UA projects in close proximity to one another as shown in Cameo 11.

Cameo 11

In 2012 an independent Permaculture Community Garden was established in Hull. An individual wanted to improve her local area. The organiser identified a need for improved food education of local residents. The garden is on small piece of land along a walkway at the back of a primary school and community play park leading to a cemetery. The land is leased from the local authority and the initial one-year lease was extended to seven years. There are a number of raised beds with produce grown according to permaculture principles. For activities the project makes use of the grass playground next to it. The site has been used for growing, cooking, education, music, art and play. These sessions are focused mainly around gardening and creative outdoor activities. The project develops age appropriate activities, such as planting seeds in trays for children landscaping and chopping by adult participants. The overarching aim of the project is social justice, to reconsider community assets and resources and to promote empowerment to enable people to reap the rewards of their labour.

The organiser recounted the conflict which occurred when the school in proximity also wanted to establish an UA project, "this is a public space. It would just be really weird to put a big gate round it and there's already loads of gates, there's a cemetery with a gate, there is the gate of the school, they've gated the recreational land and its not actually theirs. They get to use it in the daytime, they lock one of the gates, which would create a lot more flow...they [the school] wanted a chunk of the cemetery. When I started doing forest school activities rather than get me to go in they decided to train their own forest school person. I'd inspired them but they thought we'll have a chunk of the cemetery and do forest school stuff but that is public land. The land that I took was full of needles and we've improved it, what they're going to do is just take a big chunk, put a gate around it and it's theirs... they wanted to put in bids for community stuff and they were going to use us as an example of working with the community. They did a press release and they asked the school to say a few words, the head presented [this garden] as if it was their garden. It makes me think we need some clear signs up of that the community has done it" (HO23)

It was evident in both Hull and Copenhagen that a project's location was influenced by what an organiser had observed or personally experienced happening in a certain community. These observations and experiences were both remnants of the communities past experiences and residing feelings, as well as premonitions of future experiences.

For example in Hull, there was a huge decline in the fishing industries during the 1960s and this affected a specific area known as 'Hessle Road' or 'St. Andrews Ward'. The area was once a thriving fishing community. However with the decline of industry, businesses closed, people moved out of the area in search of employment opportunities and others moved into 'new' purpose built social housing estates on the edges of the

city. This led to urban decay with many people entering poverty and the area had increased homelessness, substance abuse and the area became known for prostitution. One UA project organiser who lives in the area described what has happened since, "we've [the community] been left, had decades and decades of no investment, just plans, they [council] could see it happening but nobody stopped it [breakdown of communities]" (HO21). The organiser went further in her description of the area to describe the impact, "I could just imagine a kid looking outside, all these buildings just boarded, what future does that give them? I'm a big believer in, once you've got fly tipping, people getting drunk, you're getting more porn shops, betting shops, all of that is just a sign of it going downhill and it has. We've just about got a community but where has the pride gone? Where has the pride gone in this area? It's just dispersed with the industry. I watched that as a child" (HO21 Children's Planters Community Garden).

The organiser went on to explain what had been done in response to this, "everyone's tried to solve the problems". The organiser was referring to NGOs and GOs who had developed programmes of regeneration for the area. The organiser acknowledged that there had been some success by organisations but on the whole felt that the programmes failed to live up to her hopes. She described that the area was in "a cycle of expectation and disappointment". This echoed feelings of other UA organisers working in the area. Another organiser felt that the local authority constantly asked her for her opinions because they viewed her as "a community person". The organiser felt that she went to many consultations and gave her ideas for improvement but those ideas were never implemented. The organiser became fed up; being repeatedly told they live in a "problematic" part of the city, "you are all labelled. There is always something wrong with you". The idea that the organiser could reclaim the areas reputation through UA influenced her decision to intervene in a number of planters that had fallen into disrepair, "get up and do your community. It is your community. Why are we complaining? We've got no money there is nothing we can do about it but let's get it done and it's that, they want to have pride and you have got pockets that are trying to help and get along, there is lots of little really active pockets on St. Andrews Ward all doing different things, churches, schools, they are all pretty active" (HO21).

In Hull the growing popularity of UA and the number of projects initiated influenced the need for potential organisers to consider where they should establish the project. In Hull the influence of a large-scale third sector intervention programme was very evident in the decision by organisers about where to start UA. At the time of the research a charity ran a three-year funded programme in the East of the city from January 2013 to 2016. The River Hull separates the East and West of Hull. The programme aimed to encourage local people to develop their entrepreneurial skills to support sustainable

living. There was four main strands to the work, food, energy, nature and growing. This had a significant impact on where other organisers started projects. Organisers in Hull actively avoided initiating anything in the areas covered by the charity.

During the research process, organisers were asked to produce hand drawn maps, which showed the spaces and groups the organiser and/or project engaged with across the city. Organisers used these drawings to visually illustrate connections or influences as they spoke about them. A selection of the maps drawn by organisers who are part of different structural groups are presented in Figure 25 (A. Community Change Network (HO43) **B.** Wildlife Trust Community Garden (HO13) **C.** Development Trust Community Garden (HO14) D. Local Food Network (HO42) E. Permaculture Community Allotment Garden (HO27)). On the face of it the maps clearly show a dominance of activity by UA project organisers to the West of Hull. However this was not representative of UA activity across Hull. When discussing the maps organisers often cited the large-scale charity operating in the East of the city as influencing their decision to practice UA in the West. One organiser described the division of practices in the city "they [the charity] have an initiative over there [East] so we work on this side [West]" (HO43). Additionally the maps showed that UA is considered by organisers to be an 'urban' practice with the connections and 'reach' of the project constrained by the geographical boundary where the urban meets the rural.

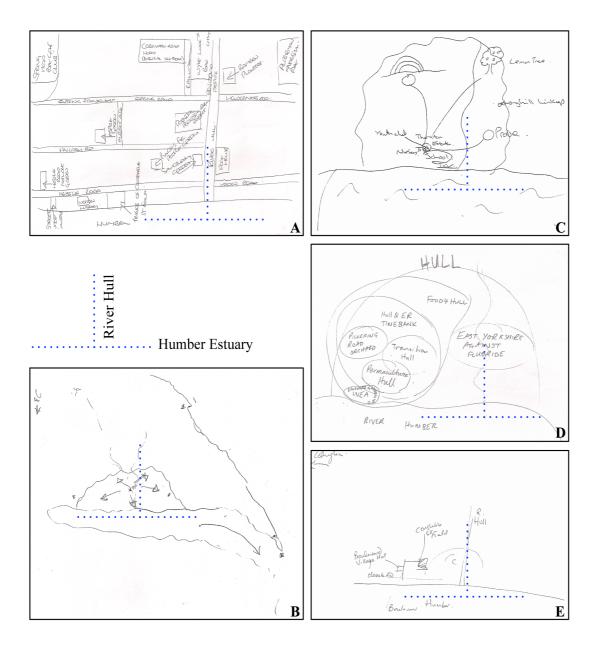


Figure 25 A sample of maps drawn by Hull project organisers during semi-structured interviews. They show the spaces the organisers engage in geographically in Hull and project 'reach'

This produced an interesting contrast to what was happening in Copenhagen. The aforementioned large-scale programme running in Hull was established specifically for two areas in the East of the city and for a certain period of time. However, in Copenhagen one large programme operating in a similar way was the on-going 'Moving Climate Quarter'. Each area of the city was ranked in terms of its climatic effect and prioritised in terms of its need for intervention. Accordingly a small team and a set of funds moved into the first area to support projects for a year. This meant independent project organisers who wanted to start a UA project would actively go to the Climate Quarter organisers to apply for funds to initiate the project in the area which had been prioritised for intervention. In this we see a very different attitude to the influence of

planned interventions. However as there were far fewer UA projects in Copenhagen, it will be interesting to see whether this affect continues when there are numerous projects seeking those funds. An organiser in Copenhagen who had benefited from this initiative thought that it was fair because it meant if someone wanted to initiate a project they would have an equal opportunity to although they acknowledged it may be some time before that opportunity can be acted upon.

In addition, not only where UA projects were operating in the city had influence but how the different structural groups were seen to be managing their established projects had influence. How UA projects were being started and run by different groups in the city influenced the decision of others to become involved in UA. This could be considered intervention in UA itself. Individuals in the city, members of independent projects and local networks were observing how other groups were practicing UA. They perceived that projects initiated by NGOs, GOs and national networks had been set up to fail and were often "abandoned" by these groups. As a result, in numerous cases individuals from independent and local network groups sought to intervene where this had occurred. They wanted to start their own project or take over the "abandoned" project to show that "UA can be done in a competitive and sustainably" (HO18). This was observed to occur more strongly in Hull than in Copenhagen. As before, the reason for this was that UA is in its infancy in Copenhagen which has reduced this element of competition.

UA also emerges in serendipitous ways. Organisers described becoming involved in UA as a result of "just a conversation", "I fell into it", "it was a natural choice", and "it just sort of grew on me". Milbourne also described his research participants explaining the influence of "chance encounters" in their initiation of UA. (2012: 951). A community garden organiser described her chance encounter, "through a conversation somebody said there was nothing going on here, we have got it all set up but there is nobody to do anything would you like to get involved and it was a great opportunity and was a bit weary because I thought I haven't done anything like this for anybody else before" (HO9 Children's Centre Community Garden). This challenges academic ideas on the inherently planned nature normatively associated with the development of UA.

CHAPTER CONCLUSION

This chapter explored when, how and where UA projects emerged in the city foodscape. The rationale for exploring this was that current literature describes that UA is experiencing a resurgence in many cities (McClintock 2016 & Tornaghi 2014). The chapter has addressed a literature imbalance by focusing on the process of emergence for both emerging and established projects. This was in preference to only studying established projects retrospectively. This was central in fulfilling Aim 2, the inclusion

of established and emerging projects. Table 18 summarises research findings and addresses the implications of the finding.

The chapter was in three parts. The first Section, 5.1 explored temporal patterns in when projects emerged and observable trends in how UA has emerged in each city. This provided a basis for understanding the nature of and complexities exhibited in the process of emergence in the following sections of the chapter. The section observed methodological challenges evident in the literature and how by considering UA data in new ways, such as through the use of a typology researchers can gain new insights. The new insights gained included further understanding of Objective (i), who participates in UA and why. However, this insight looked beyond the individual organiser as outlined in Chapter 4 to understand patterns of when independent groups, organisations and networks (as facilitated by the typology), have established UA projects. Through the careful retention of rich data on the projects this study has identified specific trends in how projects have become established over longer periods of time and how 'new' projects have emerged. This showed a shift from projects which have emerged around themes such as wildlife, health, and therapy to projects emerging out of pre-existing city 'services' such as churches, libraries and playgrounds. Findings included identification of site hybridity with multiple 'types' of UA occupying the space alongside one another in both locations. This also confirmed the influence that pre-existing allotments in both Hull and Copenhagen have had on how UA emerges. Projects also emerged around specific themes, for example organic growing principles, and projects increasingly exist in a 'mobile' state with planned impermanence so a project can move between sites. This opened debate on the value of questioning what happens in one location in comparison to another. The chapter has moved emergence understanding beyond proliferation of particular projects based on a perceived nuance or originality of a project. Approaching emergence in this way should increase accessibility in UA research, enabling scholars to identify whether other cities are experiencing similar patterns. In addition, this approach has enabled me to highlight the individual nature of UA projects whilst retaining context. Understanding when UA projects emerge is important for the next section which explores how these projects have emerged.

Section 5.2 considered spatial patterns of emergence moving from when projects emerged to how. The section complimented the first by addressing calls for time and space studies of UA (Kingsley & Townsend 2006). The chapter drew upon the separation of organiser motivation, project aims and emergence introduced in Chapter 4. When exploring the ways in which projects emerge, a useful but currently limited area of UA literature was drawn upon to make comparisons and some of the transferability issues were described. The section used the lens of 'emergence form' to develop a matrix to improve understanding on the multiple decision-making processes which

occur in the emergence of a project. Two factors were discussed in this section, the decision-maker and the decision rationale. The decision-maker related to hierarchy, who made the choice to initiate a project and the decision rationale explored why a project was started whether decision was made based on an interest or to change a specific 'place'. The matrix was considered in relation to the typology, which provided specific insights such as how a top-down decision was exhibited most frequently by NGOs, GOs and national networks when compared to independent projects and local networks. Section 5.3 continued on this theme to identify factors which influenced where a project has emerged. The section outlined the active debates on whether UA emerges evenly or unevenly across cities. To contribute to this debate on where UA projects emerge, this section considered how UA is used for a 'planned intervention' but also emerges because of 'conducive conditions'.

Together, the sections of this chapter have been instrumental in fulfilling research Objective (iii.) by investigating how UA projects emerged in Hull and Copenhagen. This addressed Aim 2 by including establishing and emerging projects. The end of this chapter marks a shift in how the analytical themes are explored. The last two chapters have described who was involved in UA, where UA is, what it does, patterns in when it has occurred and the processes through which projects come into existence. The following two chapters relate directly to each other. They explore qualities of projects which are enabling (Chapter 6) and hindering (Chapter 7) the development of both established and emerging projects in each city. The chapters use the conceptualisation of 'persistence' and 'ephemerality' to understand how these qualities are manifest and experienced by organisers.

CHAPTER 5 The Emergence	e Of UA Projects	IMPLICATION
5.1 When UA Projects Emerged in Hull and Copenhagen.	 5.1.1 Approach 1: Project cases in start date order presented in the normative field categorisation by UA project 'type'. Site hybridity with multiple 'types' of UA occupying the space alongside one another in both locations. Confirmed the influence that pre-existing allotments in both Hull and Copenhagen have had on how UA emerges. 	Relevant Stakeholders: UA Researchers Future Research: The structural group who initiated a project influenced which UA project 'type' they established. Independent projects showed the most diversity in UA type (Reynolds 2015: 241). A suggested study is to explore the place-making capabilities of these 'new' hybrid project sites.
	 5.1.2 Approach 2: The addition of contextual data to each project case. A shift from projects which have emerged around themes such as wildlife, health, and therapy to projects emerging out of preexisting city 'services' such as churches, libraries and playgrounds. Projects have also emerged around specific themes, for example organic growing principles, and projects increasingly exist in a 'mobile' state with planned impermanence so a project can move between sites. 	Relevant Stakeholders: UA Researchers Recommendation: I have not only identified a shift in project focus over time but I have identified that projects are emerging out of pre-existing city 'services'. This has implications for UA researchers seeking to identify UA practices. Researchers should widen their spatial imagination to explore 'new' social spaces from which UA projects have emerged. Future Research: The identification of projects that has planned impermanence is particularly interesting. I suggest guerrilla gardening researchers specifically explore whether community gardens and urban farms are increasingly drawing upon and adopting behaviours from guerilla gardening practices. Relevant Stakeholders: Funding Bodies Recommendation: Explore an evaluation format which
	 5.1.3 Approach 3: Identification and layering based on typology. Community gardens are the most common UA project type established by NGOs in Hull. Allotments are diversifying. Examples of 	would allow organisers to identify the resources that they already have access to through being established from an existing service which could be used to assist in their application. Relevant Stakeholders: UA Researchers, GOs and NGOs. Future Research: New allotment types were identified in Hull. Research which explores the extent to which new forms of allotments are being established in other cities, including those which have a long pre-established history of allotments alongside those which do not.
	 new type of residential allotments. In Copenhagen GOs are responsible for the projects that exhibited the most site hybridity. Lack of national networks evident in Copenhagen. 	Reccommendation: NGOs and GOs should further consider the provision of residential allotments as an alternative to traditional allotments on existing urban green space and in potential housing development.
	 Independent group project development of UA projects in both locations can be briefly summarised as exhibiting the most diversification of project type (farms and orchards) and challenging of conventional space (mobile and rooftop). Hull and Copenhagen have both experienced an emergence of urban farms created by independent groups. 	Future Research: Research should question why urban farms are more likely to be developed by independent projects. Further studies on stakeholder risk perception of UA farm projects would assist in answering this. Relevant Stakeholders: GOs and NGOs in Copenhagen. Recommendation:
For the following states of th	5.2.1 Emergence Forms Three processes at play; Decision-maker - who made the choice to initiate a project (top down or bottom-up). Decision rationale - why a project was started whether decision was made based on an interest or to change a specific 'place' (place-based or interest-based).	Relevant Stakeholders: UA Researchers Literature Relevance: I have built on the existing work of Firth et al's (2011: 555) on "community in community gardens" to develop a structure to identify how a UA project has emerged. Future Studies: UA Researchers should take emergence structure forward by using it as a basis to explain how the UA project of study has been established. I further
	 A top-down decision was exhibited most frequently by NGOs, GOs and national networks when compared to independent projects and local networks. 	suggest research is needed which explores the power dyanmics in decision rationales and influences where power is more covert.

5.3

Geographies of Project Emergence: Decision Influences

- Decision influences the wider context from which project emerged (planned intervention or conducive conditions).
- Planned intervention Examples included a lack of investment in certain urban areas, the closure of community resources, a lack of community cohesion, poor community health, high levels of anti-social behaviour and low food education levels.
- Conducive conditions refer to broader 'situations' that influence the initiation of a project. These include historic, social, cultural and economic conditions that are used to inform an organiser's decision.
- The activities of other UA groups and GOs and NGOs more broadly impacted what projects an independent organiser started.
- There is a degree of serendipity in how a UA project emerges.

Relevant Stakeholders: UA Researchers Literature Relevance: UA literature describes an uneven distribution of UA projects within many cities. Smith et al identified three reasons for uneven distribution. Reasons included complex factors related to community prioritisation, spatial decision-making, 'interests' of different parties in where projects are situated and whether social capital has been formed by relationships with connections that have an influence (Smith et al 2013). My study has contributions for this debate in terms of who initiates UA and where they do so. The scope and remit of NGO, GO and network organisations influenced where independent project organisers established. This included all of the work of these organisations, not only their UA activities. When an NGO, GO, or network organisation runs a large-scale community development initiative in one specific area, independent project organisers will not establish there to avoid competing for funding and participants. However if independent project organisers consider certain areas to be failed by 'community prioritisation' and resulting "disinvestment" they will intervene and establish an UA project in that area "to ameliorate conditions" (Pudup 2008: 1232). In addition if an independent project organiser perceives that an NGO, GO or network has established an UA project that does not meet the demands of the community, independent organisers might establish a project in close proximity to show them how the project should have been established. On the other hand, in some cases NGOs, GOs and networks observe the success of an independent UA project in an area and seek to replicate it. Independent organisers view their projects as working in the gaps leftover and created by the work of NGO, GO and network organisations generally as well as their UA projects. Therefore it could be said that work in these gaps' contributes to an evening of project emergence. However this was much more evident in Hull than in Copenhagen because of how many projects were

emerging and established in Hull. This opens questions about whether an even emergence of projects is preferential to an uneven emergence and what an even emergence should look like. I suggest future work should consider mapping UA geographies of emergence alongside food deserts.

Table 18 Summary of research findings from the chapter and implications of findings. Implications identify the relevant stakeholder of the finding and makes recommendations. Established and Emerging Projects in Hull and Copenhagen.

6 MANIFESTATIONS OF PERSISTENCE IN URBAN AGRICULTURE PROJECTS

Introduction

This chapter is informed by the insights gained into the people, practices and emergence of UA. This chapter and following chapter, *Manifestations of Ephemerality In Urban Agriculture Projects*, relate directly to one another. Together, the chapters address how UA projects and organisers behave by discussing qualities found to be present within the projects. Although seemingly dualistic, *persistence* and *ephemerality* are dialectal themes with aspects of both being experienced by a project at the same time. Discussing these themes attempts to conceptualise that which is constantly changing and shaping UA. By drawing upon the communal experience of projects, the chapters seek to make sense of what is happening in practice utilising project narratives that are grounded in the organiser perspective (Aim 3).

'Persisting' qualities are those which 'stabilise' a project and facilitate it to remain active in the foodscape. The chapter explores the manifestation of these qualities and forms an understanding of the complex flux experienced by projects. Here, the term 'manifestation' is used to conceptualise abstract themes and processes to understand how organisers experience them. Exploration of that which is 'manifest' can only be observed by taking a longitudinal approach (Objective v.). It provides a tangible lens through which to read and make sense of project practice. The way in which certain qualities manifest themselves in a project allows us to see which practices ensure the longevity of a project. The research intended to maximise the opportunity for data collection on the UA over the three-year research period (Glover et al 2005: 89). This is important given the finding that food projects take three years to establish (McGlone et al 1999). This assists in fulfilling Objective (iii.). Drawing upon the organiser perspective to identify these qualities is significant given the existing evidence that a "dedicated leader" is critical to project success (Corrigan 2011: 1232).

In a project where the qualities of persistence are not manifest, we see the symptoms of change within a project that can affect the project's stability leading to ephemerality.

There are four themes or qualities of persistence explored in this chapter. Each section will explore how and why the theme is a persisting and stabilising project quality rather

than a driver of ephemerality in UA projects. The section addresses Objective (iv.). Similarities and differences between the organiser experience in Hull and Copenhagen are considered in each section.

The first section 6.1 *Identity; Project Aims and Discourse*, looks at the scope and negotiation of project aims, what projects seek to accomplish. It draws on the separation of aims, emergence and motivation as introduced in Chapter 4, Section 4.1.2.1 but goes further to explore how aims are used by organisers to stabilise an UA project. It also examines how organisers identify with the term 'urban agriculture', how far they align what they do on the ground with the term and other broader discourses.

The second section, 6.2 Commitment to Action and Recognition looks at how 'action' has become a persisting strategy for organisers to rationalise their engagement in UA and describes how organisers seek validation through recognition in the absence of mechanisms to record what they achieve, 'action'. It explores the complex relationship between 'action' and recognition.

The third section 6.3 *Managing Involvement and Feelings of Duty* explores a personal theme to emerge over the research period. It details the struggles of organisers in managing their commitment to a project or projects.

Finally, the fourth section is titled 6.4 Seeking Economic Security. The ways in which projects receive or generate funding has previously been identified as a critical challenge facing UA projects (Reynolds 2015). This section explores the financial status of the forty projects, organiser experience and attitudes towards accessing funding, strategies adopted to make the project economically secure as well as a discussion on the impact that funder criteria has in shaping UA organiser experience of insecurity.

6.1 Project Identity; Aims and Discourses

How projects construct and use their identities is critical for understanding their stability. The identity of a project is considered highly important to organisers. In many ways, a project's ability to view and leverage their identity as a strategy is an indicator of project resilience. Identities are created by projects for many reasons. Manifestations of 'identity' encompass written aims and manifestos expressing the purpose of a project, as well as informal declarations of project remit and purpose. Chapter 4 *The People and Practices of UA Projects*, section 4.1.2.1 Uncoupling Motivation, Emergence and Aims differentiated between the aims of projects, the motivation of organisers and the process of project emergence. It is our role as researchers to acknowledge this difference and understand the implications this has on the UA foodscape. Individual organiser motivations are fixed and project aims are static. The lens of project aims facilitates a broader understanding of what the purpose of UA is beyond the production of edible food. This produces rich suggestions for academic definitions of what UA is.

The first section explores the scope of the aims of projects. Aims are central to a project's public expression of identity. Project aims are the tangible lens through which organisers can rationalise and realise their individual motivations and hopes for a project. The aims of projects are important for academic understandings of the potential and role UA projects seek. This has implications for exploring how far projects seek to address food security issues and improve the urban environment.

This second part of the section addresses a seemingly obvious topic. Currently insufficient literature exists which investigates the term 'urban agriculture' beyond academic appropriation of it for narrowing the study area. Accordingly, the term's meanings for and usages by organisers are explored. This considers whether projects associate or disassociate with the term and why.

6.1.1 The Scope and Negotiation of Urban Agriculture Project Aims

That which a project aims to do is central to understanding what the role of an UA project is. It is of relevance to projects in both city locations. Chapter 4 demonstrated the variation of activities that projects currently engage in. Furthermore, it showed that the boundaries of activities they are engaged in extends beyond food production and the sites of projects themselves. Project identities are shaped by their aims and these activities form part of an understanding of how their aims directly shape what the project chooses to do. Project aims are explored in two ways, first, through understanding the scope of aims and secondly how they are negotiated and fulfilled.

6.1.1.1 Scope of Project Aims

Aims are presented in varying degrees of formality; from a written manifesto to informal proclamations of "this is what we are trying to do". The scope of aims are considered in three ways: the aims of each structural grouping, a comparison of project aims in Hull and Copenhagen, and some specific observations related to UA project type. The following shows how food growing is important to a project in different ways based on where ownership of the project lies, project location, and UA type.

For GOs, there were three very clear features in the project aims: the provision of space, the growing of food, and a prescription for what a participant can gain from attendance to the project. GO projects aim to the provide space and the aims specifically describe qualities of the space the projects seek. This includes being "secure", "safe", "attractive" and "utilised". This is further evidenced in Cameo 12. Food growing was a dominant feature of project aims, manifested to show food growing, to grow together, to show the cycle of growing, to conserve seeds and to grow organically. Beyond space provision and food growing, lengthier descriptions of project aims often included a quality or benefit someone can expect as a result of being part of the project. Terms included "enjoyment", "learning", increased "ownership", "wellbeing" and "reflection". For example, the Adult Centre aimed "to grow organic food together on a council estate with people from the estate" (Adult Centre Community Garden HO5).

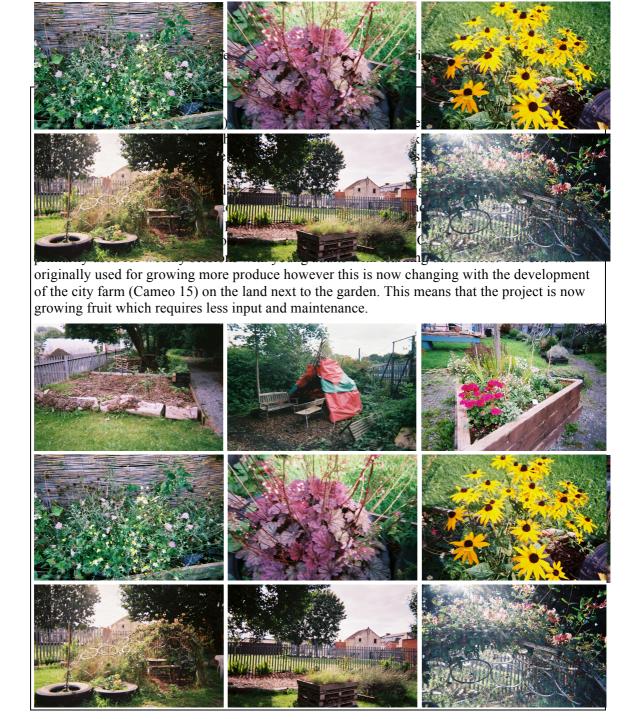


Figure 26 Images of the Youth Centre Community Garden taken by project participants.

For NGOs, the most featured theme in project aims was the focus on low income areas



healthy meals...for people on low incomes and show growing, cooking and eating in the same space" (HO16 Church Community Garden).

The aims of independent projects were generally more descriptive than that of GOs and NGOs. The most common theme in the independent project aims was the provision of a service. This service provision focused around four themes, *i*. the provision of space to grow food, *ii*. to increase sociability, *iii*. to provide opportunity and *iv*. to provide choice. These themes will be discussed in turn however many independent project aims had elements of each of these four themes.

i. The provision of space to grow food.

The aim to provide space to grow food was expressed in different ways with different projects focussing on specific aspects of facilitating food growing. This related to learning including, how to grow, how to grow with specific growing principles, the health impact of food and the benefits of seasonal local food. In addition, the provision of resources for people to take this learnt knowledge home and put it into practice by giving resources such as seeds. Some independent project aims had a spatial quality, relating to how to grow innovatively in small spaces. Others wanted to increase the relationship between the countryside and city through 'reconnection'. This was the result of organisers having identified that the relationship between rural agriculture and the city had widened over time and organisers were unsatisfied with how disparate the connection between the two had become.

ii. To increase sociability.

An increase in sociability was presented in project aims in two ways. The first was to provide a space which facilitated increased communication, a space in which people could discuss 'everyday' issues with some organisers specifically stating these everyday issues as the "food system", "food poverty" and "politics". Interestingly very few projects explained whom they were trying to facilitate discussions of these issues between.

Increased sociability through communication as a feature in aims was most evident in projects which aimed to target a specific demographic group. One example was the Black and Minority Ethnic Community Garden project. The aim of this project was threefold: to develop environmental awareness among the black and minority ethnic community with a focus on issues impacting day-to-day lives, to raise awareness of food growing opportunities, the impact of diet on health and facilitate communication across communities.

This project's aims introduce the second way sociability was presented through the use of the term 'community'. This was a common feature in many projects aims, with community as something projects sought to "bring together", "build" and "strengthen".

When community development was mentioned, this was coupled with more abstract goals such as "for people to learn empowerment", "encourage pride", "create aspiration", and "provoke ownership". There was a sense in articulations of project aims of this type that 'community' was fragmented and required intervention to be put back together. For example, a Permaculture Community Garden project aimed to "...achieve social justice by creating a space for people to communicate and discuss issues, food poverty...people need to learn empowerment by experiencing food growing and receiving reward for their work" (HO23). This project's aim demonstrates how both types of sociability were conflated by organisers.

iii. To provide opportunity.

The third provision in independent project aims was a sense of opportunity. These opportunities related to volunteering, undeveloped space, local people, idea sharing, reduced physical/mental health stigma, training and being outside. For example, one of the organisers of an urban orchard explained that the project aims as to provide "opportunity for healthy eating and exercise through outdoor activity, local produce, strengthen community and get more wildlife" (Urban Orchard with Wildlife Community Garden). Urban farms (mostly formed independently) had more project aims than other types of UA. These aims were generally more positive in their goals. To clarify, they did not identify deficiencies that a project sought to remediate in their aims. In Copenhagen terms included "curiosity and wonder" and others describe "promotion" of that which already exists including "biological and human diversity". In Hull urban farm organisers spoke about the need to celebrate what is happening in the city as part of their aims. This celebration was often related to skills and knowledge gained.

iv. To provide choice.

The forth and least frequently mentioned theme was the creation of 'choice'. Organisers aimed for their project to create an alternative way to produce food. This also included projects aiming to create models of UA that were an alternative to that of GOs and NGOs, such as communal growing rather than the allotment model. In addition, the creation of alternative spaces were cited, the 'alterity' of these being in how the spaces were to be managed. For example, seeking "freedom" with site use determined by the space users without leaders or hierarchies.

The final group of projects are the networks. The aims of national and local networks in this study were found to be similar. All the organisers of networks studied exclaimed that they "don't do political" because having aims which are politically grounded created barriers "to improve community resilience and improve their life chances" (HO43 Community Change Network). The aims of these projects are more outward looking and focused on 'connections' than that of other UA groups. This included direct

connections between national and local networks, as well as the transference of national issues to a local level. The aims of networks were presented in two ways: a broad overall aim that was 'connection-based' such as "bringing together local communities, businesses, policy makers and public health advocates", or more specific aims such as "to form a land army" (HO44 Local Food Network). What they do is not necessarily self-determined but is shaped by how external groups use the network. For the organiser of a Global Environmental Network, "what we do sometimes depends on how we get used by stakeholders" (HO42). This is further illustrated in Cameo 13.

Cameo 13

An organiser from a Local Food Network in Hull explained how an external organisation uses the network, "the council uses it as sort of not so much a source of information but as something they can put in their reports, so they can put people in touch with the local food network" (HO44). The project was started in 2013 by a small group of people with common interests who came together to try and help a small local organic vegetable delivery business.

The project is now part of the Sustainable Food Cities national network. The network has organised public events to bring together the food community in Hull, have created a resource website, kept themselves informed about the food industry, built up a small library of resources for loan, started and supported many food related projects across the city and hosted monthly meet ups of people interested in all things local food. Having been established for a number of years one of the organisers described the idea as being "to get everyone together so that they could meet and talk and at least know about each other, it doesn't matter what else happens" and now the project aims to "get people together to talk to each other and not repeat the same stuff, the same mistakes someone has made" (HO41).

Generally projects in Hull and Copenhagen had similar aims. However, there were some interesting differences between them. Network project aims were much more concentrated on 'greening' the city in a measurable way. Independent project aims in Hull and Copenhagen were both more descriptive than the other structural groupings and had more project aims. In Copenhagen, independent projects were particularly focused on the creation of green space and to demonstrate different models of growing and more likely to describe the financial aim of the project. The organiser of an Organic Rooftop Farm stated, the project aimed "to show a farm that is economically sustainable that does not rely on volunteers...to grow but also communicate how to grow organically and the benefits of locally produced food" (CO29, CO30). GO projects in Copenhagen featured a sustainability agenda much more strongly than the Hull projects. Furthermore, the aims were more specific in differentiating the relationship between the site and how it should be used, such as "to be a visual demonstration of sustainability in action" (Elderly Centre City Farm with allotment plots). There was also a greater trend towards health as a focus if sustainability was not featured as an aim.

This section has demonstrated patterns between the locations, across the typology and the individualistic nature of project aims. It is clear from the terminology and concepts

used by organisers that project aims have been carefully considered. The next section discusses how organisers develop aims.

6.1.1.2 Negotiation of Project Aims

Having explored the scope of the aims of UA projects this section seeks to understand how those aims were negotiated and decided by organisers. This section seeks to answer questions on project aim formation including *i*. why do projects develop aims, *ii*. what phase of project development are aims developed, *iii*. who participates in deciding aims, *iv*. how are they formed and what happens over time?

i. Why do projects develop aims?

This study has found that projects have aims for many reasons. Fundamentally aims are the goals the project seeks to fulfil, the reason for a project's existence. They offer a guide for organisers to make decisions about what falls within the project remit and a benchmark to make decisions about which activities they engage in. Aims are a tool to communicate what the project is about, which is considered particularly important for attracting participants to the project. Aim use as a tool for communication extends beyond this: aims create a communal language for organisers, participants and wider organisations to talk about a project. For organisers who felt the development of aims was extremely significant, having a set of aims created a "sense of value" for the project.

ii. What phase of project development are aims developed?

For nearly all the projects studied the development of a set of aims was one of the very first steps an organiser or organisers did to start a project. Aim formation often marked the beginning of a project's emergence in the foodscape. Some projects created a project name and then a set of aims and others created their aims first. Aims were developed before a project had a site or began to plant anything. A project name and a set of aims were the two components used to begin to develop a brand for the project. Organisers branded a project through the creation of a logo and a sheet outlining the aims as a tangible element of a projects identity, marking their role.

There were two reasons aims were developed so early on in a project's emergence. The first, (as identified in Chapter 4) is that organisers engage in a lot of other organisations and activities, from this involvement they have seen manifestos, mission statements and 'about' pages. This has been transferred to the creation of their project. The second is the expectation that a project should have a social media presence, many websites require a name, an image and a written line describing what the 'page' is about. Organisers have reacted to this and created a project name (name), a logo (an image) and an aim (a line describing what it is).

Aims enable all organisers in a city to identify how the project is similar to and different from what they are trying to do. Aims have two faces, and are presented differently depending on circumstance, privately (between organisers and organisers with participants) and publicly (in print materials and to funders).

iii. Who participates in deciding aims?

In terms of where aims come from, the aims of GOs and NGOs projects were generally developed because of a specific directive or agenda (as identified in 5.2.1 *Emergence Forms*). For example, the NHS 'five a day', an 'affordable food' intervention for a specific part of the city or "cultural integration in a diverse part of the city". Independent project aims were developed by the initiator-organisers. Organisers expressed a "gradual encompassing of ideas" as the basis for the aims. The ideas of each organiser were rooted in the motivations they had to engage in the UA in the first place These motivations included to be involved in food and growing, to engage specific, hidden and minority groups within the city, to be philanthropic, to the change the 'identity' of a location, as a result of a life stage or event or to create change through 'difference' for the future.

Many factors affected how organisers decided their aims. This included the knowledge and experience of the organisers, with projects of multiple organisers having more considered aims than a project run by one organiser. Furthermore, individuality in project aims was important because organisers were cautious not to directly replicate the aims of another project in the city. Organisers used aims to differentiate themselves from the work of other projects. A further factor was how the organiser planned to fund the project. For example, the organiser of an organic rooftop farm recounted how the local authority had "plans in drawings and they were so much bigger and cost so much more and would take a long time to be realised" However in the meantime the farm "was the first project that people could come and visit. It wasn't just talking about it but it was actually there, so it was really beneficial for them [the local authority]". As a result, when the organisers met with the local authority they said, "okay we have this money you can apply for and we are really interested in supporting this farm instead" (CO30).

iv. How are they formed and what happens over time?

Up until this point the aims discussed have related to the very first set of goals created by an organiser. It has been found that aims start as 'fixed' but then undergo a process of change. This is supported by existing work by Holland who showed that the longer a project had been established the more "changes in direction were recorded" pointing to "the dynamic nature of the movement" (Holland 2011: 299). After emerging, very quickly organisers have to adjust or change these aims. As a project emerges, aims

undergo a process of deliberation and refinement. Aims shift and change to include newfound project knowledge, because of funding specifications, or to align with broader agendas or specific discourses.

Through this longitudinal study it is clear that UA project aims are changeable, which contributes to unique project identity assembly. The reason for this change is that as more projects emerge, each project seeks to clarify their niche and individuality. In turn this ensures their project is relevant and competitive. One way in which they do this is to learn the language of UA and leverage popular discourses into their aims such as 'sustainability'. This relevance and competitiveness is explored further below. For projects, the process of aim diversification enables projects to persist, preserving place by identifying themselves as embedded and specific to the people and location in which they are situated. All of which are attempts to manifest their identity, the role they have and the resource they seek to become or service they want to provide.

Funding was a considerable contributory factor in aim change. When a project has broad aims, but seeks funding from external sources, funding bodies seek clear and realistic aims which an organiser can be held accountable to. This allows funding bodies to show demonstrable value and impact through their investment. This is discussed further in 6.4.4 Funder Preferences and Criteria.

Having changed the original carefully crafted aims, many projects over time exhibited "aim drain". This refers to the slow distancing of organisers from the new aims which have been influenced by multiple funding bodies and organiser ideas. They become increasingly distant to the original organiser motivations. Opposing views between organisers on the aim of the project becomes evident. Some organisers can overcome this distance for the betterment and persistence of the project. However other organisers leave to pursue a project that has aims which are similar to what they initially wanted the remit of their project to be.

However, when some organisers have left, other organisers are able to overcome difference for the betterment of the project. This was the case regardless of structural group. One organiser described how this process occurred, "I think the original people interested did have competing ideas but inevitably some people have stepped away. So, it was left to a small nucleus of people who think the same and whether that's a good thing or not...I don't know" (HO27 Global Environment Network). The organiser alluded to the usefulness of this process in shaping the identity of the project, "work out what we are, who we are and what we were going to do".

6.1.2 'Urban Agriculture' As Described By Organisers

This section explores what organisers consider the term 'urban agriculture' to mean. The section also considers whether organisers identified their project to be UA and what characteristics are contributory to their association or disassociation with the term. Meanings and alignment with the term are drawn from organisers of both established and emerging projects. The theme of discourse is considered a persisting project quality because organisers demonstrated more than awareness of the term, they have given thought to what the practice is whilst knowing they are instrumental is shaping what UA is, its identity and role.

The responses were varied and this variation is useful for future field definition. Organiser rationale for *not* identifying their work as UA provides particularly thought-provoking insight into the identity of projects. Most organisers considered their project to embody features of an 'urban' location and of 'agricultural' practices. However, association of their project with the term was less common with organisers citing the limited role of food production, or 'agriculture', in the overall aim of a project. Food production only forms part of what many projects aim to do as identified in the previous section. This confirms the findings of Chapter 4 that food production has a limited role in UA.

The most common articulation presented by organisers was coupling the meaning of 'urban' with 'city', and 'agriculture' with 'growing'. These articulations led organisers to describe 'urban agriculture' as representative of the practice by which you grow fruit and vegetables in the city.

The meaning of UA was compartmentalised by some organisers into its two parts with organisers considering first what they thought was 'urban' and then what they considered to be 'agriculture'. 'Urban' was variously used to describe villages and towns, "built up space" or the location of a community. An organiser of an Adult Centre Community Garden located at the edge of Hull identified their project as urban because it was on a housing estate, which also has retail outlets and infrastructure such as a main road (HO5 Adult Centre Community Garden).

'Agriculture' was referred to as food production with most organisers citing the growing of fruit and vegetables. Organisers of urban farms found it difficult to distinguish between 'urban agriculture' and 'urban farming'. The consensus of organisers from other project types was that 'who' grows is different. Urban farming required an "expert grower" whose specific role was to grow the food, whereas UA can be anyone (non-expert). Urban farm organisers allowed participants to be involved in the food growing. Even though many of the projects had beehives producing honey as part of their project this was never drawn upon in their articulations of what UA is. This may be explained by the relative lack of success in producing enough honey to move beyond tastings for project participants.

Other organisers looked beyond defining the 'urban' and 'agriculture' to classify the term more conceptually. Organisers related the practice of UA to changing the physicality of available space. For example, the organiser of a community garden stated, "re-imagining food closer to home in a built space" and another related it to "growing food utilising the space you have, and growing appropriate to the space". Of interest were expressions that signalled to UA requiring two components, people and land. For example, the idea that UA is the process of creating accessible green space and specific attribution to the achievement of accessibility for "local people", people living near the site. Frequently cited in defining the term was the utilisation of perceived 'waste' in a city with UA being a way to remember "how to grow" and "that we [the region] used to grow". This confirms the finding in Chapter 4 that organisers fear a loss of knowledge related to food production. Others considered UA as being a practice that should occur specifically on "wasted land".

Furthermore, UA was commonly described as a vehicle to encourage "people to grow themselves" on "wasted land". The organiser of a BME community garden described this process as, "bringing people together, finding a space, a space where they can grow any type of food, weather permitting in its specific place". It doesn't necessarily mean that we got to have an allotment to do gardening, any space that you have, you should be able to as long as you are very creative you should be able to grow something" (HO24). Interestingly this organiser associated with 'urban' but did not consider their project to be UA because of the limited amount of food the group produced.

Thus far I have explored what organisers understand by the term 'urban agriculture'. This becomes more interesting and complex when organisers were asked whether they considered (associated) their project to be an example of UA or of a UA type such as allotment, community garden, farm or orchard. For organisers deciding whether their project was UA provoked an initial response of either strongly identifying with UA or not. However, expressing a rationale for their response proved much more challenging.

On the whole projects identified as being UA but to varying extents. When the researcher asked this on tours of project sites, there were proclamations of "this is it". The organiser of an allotment, the most long-standing form of UA evident in Hull identified as being UA. She considered UA as a mechanism towards self-sufficiency in fresh produce but acknowledged it could not be an alternative to rural food production because "it's not viable for the whole city" (HO11 Allotment Association Community Garden). For her UA was a supplementary system to rural agriculture. Cameo 14 shows how the organisers of a Mobile Container City Farm also considered the existence of UA as supplementary to rural agriculture.

Cameo 14

Two organisers are establishing an independent Mobile Container City Farm. The idea was developed in 2013 and the organisers have begun developing their first site. The project planned is based on the 'farm in a box' concept. The plan is to create a unique micro farming enterprise in the centre of Hull, which will be structurally mobile and self-sufficient. Structurally mobile meaning that the site infrastructure is transportable and can be used to occupy empty development sites in the city centre as an 'in the meantime' site use. The purpose is to reconnect residents with food, improve knowledge and understanding of where food comes from and how to prepare it. A key element of the project is to make it "sustainable, accountable and profitable". The site plans to be an "inspirational" and "innovative feature" in the city centre, similar to the current museum offerings. The main structures for the project will be based on container architecture to reflect the maritime history of Hull, housing a project office, café, shop and multipurpose room. Growing areas constructed using mobile raised beds. For power, they aim to have solar panels and use other renewable energy technologies.

The organisers both thought the project will be UA when it is established. One organiser defined the term as "agriculture in the urban environment". They consider the project to be a "fusion" project where they will both grow food but also provide a visitor attraction which they attributed to their city centre site location (HO31). The other organiser described UA to be "growing food in an urban setting for human consumption" adding that being in an 'urban' environment means that projects can have an education element with potential benefits for the sustainability agenda (HO32).

The greatest sense of *dissociation* from the term arose from the role organisers viewed food production as having within a project. Some organisers viewed their project as creating "community" as well as "food". For example, a community garden organiser expressed being "a community project, bringing people together to show what they can do. The vehicle of growing things, it's just a mechanism to get involved and get people to do things in their neighbourhood. To see what we are doing and think I could do that" (HO5; Adult Centre Community Garden).

Considering literature discussions on the potential of UA to be 'upscaled' (2.4.6 Multi-Scalar and Multi-Faceted Claims for UA), further exploration was needed into the way 'scale' was implicated by organisers to voice association or disassociation with the term. For example, an organiser of a network project decided their project was not yet at a stage to be considered UA. UA was considered a goal and the project was moving towards it but was currently in a "food growing initiative" state (HO43 Community Change Network). The organiser of a city farm who associated with UA supported this. The organiser expressed that UA was a "sliding scale" with projects sitting at different points on the scale, "it's anything, whether it's a box on a windowsill or a city farm. Any food growing that you can do rather than buy. The joining up of projects with what people are growing at home" (HO33 City Farm). The organiser of a Commercial-Run Rooftop Community Garden considered UA to be city centre farms however associated their project with being similar to an allotment and "a lower level version of a farm" (HO40). This demonstrates similarities between projects across all UA types.

For some organisers associating with the term was problematic because they felt their practice needed be explicitly focused on food production but they only had a limited

yield. Additionally, to be UA there needed to be a market for the urban harvest to be bought and sold. This was driven by the idea that project viability and persistence in the foodscape was dictated by the ability of the projects to be able to sell the produce. Tied into this idea of 'scale' were ideas about appropriation of the term. Interestingly many independent project organisers felt, even when they associated their project as being UA, that appropriation of the term by "wider sectors and industry" would dictate whether they were UA or not. A local food network organiser claimed UA to be "more than individual projects in their spaces" describing how to be UA the projects needed to be a collective with "overarching guidance by somebody at an urban city level, maybe the council" (HO42 Local Food Network).

6.1.3 'Sustainability' As Described By Organisers.

This section explores how organisers described sustainability. Existing literature suggests that the people involved in UA are often motivated by 'sustainability' in terms of sustainable development. However, this research has found that by asking organisers what they mean by sustainability organisers equate the term with the persistence of the project, the ability of the project to "keep going".

The overriding theme was that sustainability meant the project remained active into the future without having to be supplied with "extras" (HO18 Therapeutic Community Garden). Some felt that their project would always need a maintained level of input to keep the project active. This could be internal or external support, finance or new organisers, as examples. The 'extras' or persistent interventions required to give a project security were variables that organisers felt needed to be controlled. Safeguarding of land leases, external funding and the provision of organiser time were considered important.

Other organisers considered their project to have 'sustainability' if the project merely still exists in its current state. Responses on this pointed to the establishment of certain elements of the project that can continue to happen, for example annual celebrations. An organiser described this solution-focused approach as "go with good ideas and stop the bad ones" (HO23 Permaculture Community Garden).

Organisers viewed the sustainability of the project as part of their responsibilities. Ideas of sustainability also manifested as uncertainty, with organisers using the term 'sustainability' to question the ability of the project to persist in its current form. This included the coordination of how that could be achieved, what the legacy of the project would be, and whether the community could take ownership of the project to develop and improve it. The idea that organisers expect "the community" to take control of UA projects was more often expressed by organisers of NGO, GO and national network

projects (HO43 Community Change Network). This is discussed further in 7.3.1 Rationale For Seeking Participants.

After organisers conflated sustainability and persistence in their answers, they began to consider what this meant to project practice. Interestingly to do this, organisers drew upon one pillar of theoretical sustainability including, economic, social or environmental and ecological sustainability. How organisers adopted these pillars are discussed in order of their prevalence.

Economic Sustainability

Unsurprisingly when asked what sustainability was most organisers in Hull and Copenhagen quickly related it to the project's economic sustainability. Organisers across the structural groups described an awareness of economic sustainability. Economic sustainability meant that organisers had money for a paid project worker, they could afford continued access to water, project insurance and organisers could have DBS checks (criminal checks from the Disclosure and Barring Service).

The organiser of the commercial-run Rooftop Community Garden described sustainability as being "something that has longevity that is not just a flash in the pan", he went on to explain how this worked for the project, "we take proceeds from this year and use them going forward and that will be sustainability" (HO40). Re-investing income generated by the project, without having to look for external funding was considered the ideal way for a project to achieve economic sustainability.

Whereas other projects claimed they had economic sustainability because they are in receipt of external funding. Others felt that if they have reliable projects funds through income generation or external funding that would remove the "constant unknown". Removal of the unknown would mean organisers felt they had economic security. Economic security is the subject of the next section, 6.4.

Interestingly organisers of both established and emerging projects accepted that their projects were economically unsustainable because of how they had and continued to be set up. Cameo 15 describes how this acceptance manifested for a city farm.

Cameo 15

In 2014 the local authority offered funding and a potential location for groups to bid to start a City Farm project. Three groups wrote and won the bid together. The groups included a charity supporting people feeling social exclusion because of mental ill health, a charity providing a voice for black, minority ethnic communities across the Humber region and the regional branch of a national mental health charity. The project aims to be a teaching site for training and to use the space to get rid of the stigma attached to mental health issues.

The lead organiser described being given the opportunity but then having to develop a strategy for how they were going to deliver what they said they would. The organiser explained that "we [the project] will never reach viability because there is insufficient recouping of costs to make that viable. The project initiator described that the project could never be viable because the

produce value could never cover the cost of an organiser salary, "it's going to cost us fifty grand [£50,000] a year for instructors and it is impossible to get fifty grand out of vegetables. No matter how many fruit trees you grow. We will never become profitable". The initiator went on to add how the project has been possible, "the only reason this is viable is because we accept that it's got to be helped by grants so that's how we are funding it unfortunately" (HO14).

Social Sustainability

Overall, the social manifestation of sustainability was viewed as an unsustainable aspect of UA projects at the moment of study. In practice, social sustainability to organisers meant maintaining the number of both organisers and participants who contributed on a voluntary basis. To reach social sustainability in the future projects required engagement of people considered to be on the periphery of the project by organisers. A current organiser of an independent Permaculture Community Garden in Copenhagen described the need for a continuous flow of participants. Additionally, the project required participation by those who partake long enough to know the 'system' of the project, "sustainability for the garden would mean all the people who come to the garden keep coming, that's the key part right now because the starters are gone and it's still running which is good. I think part of the sustainability is that there is a good flow of people coming and staying for enough time to know the system and then being able to tell someone who comes next. I mean it would be awesome if some people just stay here forever and really get to know the place" (CO22 Permaculture Community Garden). Another community garden organiser considered social sustainability to be participants moving from an interest to active involvement, "making sure that we have people who have an interest, have it embedded in everything we do. Got to keep it going with active involvement" (HO26 Sports Club Community Garden).

There was a lot of variation in how organisers considered social sustainability, with the organiser of a therapeutic community garden considering the pillar more holistically, "sustainability for me is about people and people being able to sustain their mental health, physical wellbeing and get on with life, and it is not just about something that happens, it continues, it's a process... I think seeing something that grows does a have a huge impact on the people who are there, who can see it and see that things are possible when they haven't been able to see things happen in their lives. To see something grow and flourish its time, practice, learning, it can be frustration, all those things and for our clients it's about sustaining feelings, thoughts and emotions" (HO1 Health Centre Therapeutic Community Garden). Given the importance of these articulations this is discussed in more detail in Chapter 7.3 Fragmentary Participation.

Environmental and Ecological Sustainability

Environmental and ecological sustainability was the least frequently cited definition of sustainability by organisers. However, in the few cases this pillar was raised, organisers

described how they were growing as an inherent environmental process. This was the case for organisers who grew produce in their project according to organic or permaculture growing principles. In all instances where the environmental aspect of the project was considered the sustainability aspect of the project, the social was also mentioned. For the Copenhagen case studies, sustainability of the project was viewed more inherently and vocalisations focused on personal practice of the organiser in terms of lifestyle, with the project part of a wider lifestyle practice.

In practice only one project, an urban farm conceptualised sustainability in terms of the three-pillar approach. Both organisers in separate interviews described how the strategy and implementation had been extensively considered prior to the development of the project. The elements would require continual adaptation as the site developed and into the running of the site. The critical nature of transparency was considered the most important part of the implementation of the three pillars.

6.2 Organiser Commitment to Action and Recognition

This section describes the commitment organisers have to 'action'. Organisers seek progress within the realm of their UA projects through 'doing', being in a constant state of activity. Organisers use commitment to what they do as the lens through which to rationalise their persisting involvement in UA. It also provides a mechanism through which organisers channel their energy and passion for being involved in UA. Organisers demonstrated perseverance when establishing their project and in continuing to ensure it remains 'active'. There was a sense from organisers that a project gathers momentum and this embeds their continued commitment to action. The following quote from an organiser in Hull describes this process, "I guess it started out as something that was interesting and the more obstacles that came up, the more I became determined to make it happen and to make it succeed and for it to be something that was ongoing and sustainable and it wasn't something that was just started, I was a group and had a team and then it folded so it has been a constant battle, and the earlier years were a lot harder but that made determination and I guess I became more passionate about it. It is the best thing I have ever done" (HO1 Health Centre Therapeutic Community Garden).

6.2.1 Action

A theme to emerge over the research period was the commitment organisers have to being 'active' and achieving within the realm of a project. The theme was evident in discussions with organisers and when research interactions took place on UA project sites. An organiser's commitment to action was particularly evident in project emergence. During tours of establishing projects, even when large pieces of land were either completely overgrown or empty, organisers always began growing in whichever way they could. They planted a tree or started growing in a planter or 'grow-bag'. In many examples of emerging projects this was completed before an organiser had planned what the site would look like. This act took place regardless of previous site usage. Organisers considered this important for their feelings towards the project with a plant growing on site symbolic of a new direction and use for the site. Organisers used this to symbolise what the project could be like even if it was going to take a long time for the project to become 'established'. The organiser of the therapeutic community garden discussed in Cameo 16 described feeling that it took 14 years for the project to be 'established'. Action on site acted as a tool for communication between the organiser and people living and working near the site. The organisers could communicate that the site was changing as well as using 'growing' as a prompt for communication with people in proximity to the site.

Continued action was also important for organisers of established projects. On project site tours this importance was evident. Organisers and participants sought to mark their

identity within the space. They did this by personalising aspects of the physical project. For example, at the Therapeutic Community Garden described in the cameo below, participants had painted their names on the back of the shed. At the Youth Centre Community Garden a walkway through the site was named after one of the participants who had spent a considerable amount of time clearing and maintaining the walkway access.

Cameo 16

In 1997 an independent Therapeutic Community Garden was established, at the time people called the organiser "a radical". People consider her a pioneer of UA in Hull. The organiser previously worked for a housing organisation and people expressed a desire for more allotments. This gave the organiser an idea to develop a community garden and she received funding initially to set it up to grow salad and vegetables to educate children. There are many raised beds, a greenhouse, herb and vegetable plots, wild flower section, sculptures, bug hotels, composting facilities, a compost toilet, sensory garden and planters at wheelchair height (Figure 27). There is also a small pond and seating near a shed for lunch and tea breaks. With such a range of aspects to the garden, the main aim emphasis is "for people to use the garden how they want" (HO19). The organiser demonstrated her commitment to action, "it took us quite a few years to get the lease. We got the lease which is a 99-year lease which is brilliant so when I'm dead people can carry on using it...because I was in my 50s then and we was offered a 25-year lease and I thought really... 25 years I could be dead by then and other people are going to have to fight to carry on the lease so I did fight for it" (HO19). As the organiser continued to express the achievements of the project, she explained that when the project received external recognition from a funder the group were able to feel the project had established, "the biggest we were established was the year [a funder] visited us, so you are looking at 14 years to get to that point and although we were ticking over it was that and the green flag award that all of a sudden people took notice" (HO19).





Figure 27 Images of the Therapeutic Community Garden including planters growing vegetables.

Cameo 16 introduces the theme of recognition. In the quest by organisers to achieve 'action', few organisers recorded what they had done and found it difficult to articulate what they have achieved beyond a UA sites existence itself. Generally, the most common way organisers had evidenced the project was through formalised funding evaluation forms. This was a requirement of the funding bodies and not the result of

organiser choice. In cases where informal records were made organisers collated images of the development of the site, stored written minutes of meetings, posted on social media and created project newsletters.

6.2.2 Recognition

On the face of it, it does not seem unreasonable to have anticipated that organisers sought recognition as a validation for their actions in UA. This study has uncovered an interesting relationship between action and recognition. For organisers, recognition has become an unappealing but necessary coping strategy for rationalising their continued engagement in UA. Organisers struggled to account for what has and is being achieved by their project. There was a sense that recognition had become an unsatisfactory way for organisers to receive affirmation that what they were doing was beneficial or that the project was "being done in the right way" (HO42 Commercial Rooftop Community Garden). On the whole organisers were unsatisfied using recognition as a mechanism for project validation because they felt it was both at odds with the aims of their project and that their involvement was not to receive recognition.

However, a key finding is the difference in attitude towards recognition between organisers in Hull and Copenhagen. Organisers in Copenhagen did not seek recognition to validate their actions in UA although they experienced similar difficult to Hull organisers in evidencing what the project had achieved. These reasons are discussed in the following list.

- Organisers found it difficult to identify and measure project success particularly when aims were continually shifting over the project's existence.
- Organisers had limited expertise in how to evaluate an UA project. Some organisers in independent projects also had low literacy levels, as discussed in Chapter 4.
- Organisers cited a lack of time to evaluate other than for funding. This meant they equated monitoring the project exclusively with funding. This was contentious for organisers. The reason for this was the inability of independent and network organisers to create a paid position a result of the UA project. Even when paid they described that the money did not account for *all* the time involved in running the project. This was also the case for organisers in NGO and GO projects who often had to fundraise their salary for continued employment in the role. The uncertainty created by insecure funding streams was also at odds with implementing regular evaluation. Organisers described being 'recognised' through receipt of funding for the project but it was an "*inadequate measure of its* [the project] *value*" and instead they sought recognition but "without strings attached" to validate their engagement.
- A further reason was the length of time it took for a project to emerge and for an organiser to feel that the project was 'established' and 'achieving'. For example, the

organiser of a community garden tentatively described this time period, "I think last year was the first time we could turn around in three years and be like it's taken shape. Before that, it was hit and miss" (HO15 Academy School Community Garden). The organiser of the independent community garden cameo (21) describes the process of 'establishing' as having taken fourteen years. Despite this, organisers remain committed to action and the persistence of the project as shown by their continued involvement.

- Organisers faced challenges when asked to evaluate their projects and suggested the challenge was systemic of the third sector culture. To explain this, in a year one evaluation submission by a Local Food Network to Sustainable Food Cities, an organiser described, "as you will all know, it's difficult in a voluntary capacity to feel you are doing any good at all to anyone but the fact we exist, in itself, is good. There is a huge amount of interest and goodwill in the city and pockets of excellence and activity. We hoped initially to bring together all these initiatives to talk to one another - that was the idea and it is still something we do. It would be sensible to write a strategy and/or an action plan but saying that does mean we then have to apply for funding to "do" something as I'm not sure we all want to do that? There is much indecisiveness in the group and a great deal of 'wooliness'. But perhaps that is the best we can do at the moment". This was in response to the question, "anything you would like to add?" on the form. The form was completed by one organiser (HO44) and submitted with the approval of other organisers (HO9, HO42 Local Food Network). Additionally, when asked on the same form for a scaled summary of the projects impact on the community, the organiser replied that they thought the impact was both "small scale" and "hard to tell" (HO44).
- Many organisers described a lack of external and internal support from wider organisations (for projects operating within NGO or GO organisation) as a reason for seeking recognition from outside of the project. The organiser of the Wildlife Trust Community Garden described how different types of relationships played out in UA, "in organisations you are the manager, you might also have a long-distance manager but they lack understanding of what you do and don't check up on how you are doing". The organiser expressed a desire to be "occasionally, told, well done" (HO13).
- In projects with multiple organisers, organisers described receiving minimal recognition from other organisers. One organiser of a Local Food Network explained how *she* felt about another organiser, "I always try to tell her she's brilliant because she is. I have never met anybody like her before". The same organiser recognised "we probably don't tell each other enough" (HO44).

Chapter 6: Manifestations of Persistence in Urban Agriculture Projects

However, one project organiser had a different experience. The organiser of a Rooftop Community Garden on top of a shopping centre described receiving recognition for the project through external audits. Illustrated in Cameo 17.

Cameo 17

In 2015 a Rooftop Community Garden was developed on a shopping centre in Hull. The garden has many raised pallet planters that are all made from recycled materials (Figure 28). The planters hold six tonnes of soil, the maximum the roof could facilitate. There are small greenhouses for propagation and seating areas. The project aims to bring the community together to think about food from the field to fork journey perspective. Additionally, the project aims to provide "fresh and tasty seasonable food" to be distributed by the many food outlets in the centre. The space also seeks to help reduce waste and environmental impact created by the shopping centre.

The project emerged as part of the environmental scheme being implemented across the shopping centre and broader retail group. It forms part of their commitment to corporate social responsibility. The project is in a phase of establishing the link between the shopping centre and the garden. The organiser explained the role of the community garden in broader 'greening' of the business, "an accreditation for sustainability and environment… how [the shopping centre] impacts the environment. What we are actually doing to the environment is important because we are part of the Green Achiever Scheme. We are audited every year so we always have to keep moving forward with our achievements and our sustainability really so quite different driven on that" (HO40).



Figure 28 Rooftop Community Garden on top of the Shopping Centre.

As described above there were multiple reasons that organisers found it difficult to evidence what their projects had achieved. As a result of these difficulties organisers considered recognition from multiple sources important for two reasons. One reason was that organisers used recognition to self-validate. To clarify, the receipt of recognition validated that their actions were having a beneficial impact. Organisers persevered in their pursuit for recognition to have the actions of their participants acknowledged. Organisers received recognition from different places. These included, [1] seeing a change of attitude in their project participants, [2] from expressions of positive opinions by people living and working near the site, [3] from the project receiving media coverage, [4] when the organiser is invited to attend meetings and [5] when organisers of other projects expressed an interest in their project.

Chapter 6: Manifestations of Persistence in Urban Agriculture Projects

Organisers enter into citywide recognition mechanisms such as awards ceremonies to enable participants to engage in the city in unexpected ways. A community garden organiser described the excitement created by these mechanisms, "it is an opportunity for people to dress up at an evening event. People go to the city hall and they've never been there before, had no reason to go. They sit at the big table, all the anxiety leading up to that, getting to go up on stage and collect the award, have a picture taken, feel proud" (HO1 Health Centre Therapeutic Community Garden).

6.3 Managing Involvement and Feelings of Duty

In this section, the personal conflicts experienced by organisers are explored. The section specifically discusses the struggle for organisers to manage personal involvement in a project whilst feeling a sense of duty to be present and active on a project's practice. This sense of duty was expressed through organiser descriptions of feeling obligated to a project as well as feeling attachment in ways that are both beneficial and detrimental to their wider wellbeing. This section explains the allencompassing and often complex feelings of attachment organisers have to their projects.

During the interviews this was one of the more challenging topics to emerge. The reason for this was that the topic moved from project-based barriers experienced by organisers to the reflective personal realm of that which is changing their commitment. In this realm, what influenced, in some cases, their decision to leave (and return to) an UA project is discussed. In light of the personal nature of the narratives this section has been anonymised. This section includes the experience of organisers across all types of project including those whose role in the project was as paid project staff and those who work on a voluntary basis.

To provide context to this theme, organisers, when asked about their involvement in other projects, said that they were often involved in at least one other activity on a voluntary basis. These activities were both food growing and non-food growing projects. As described in Chapter 4 in some instances organisers cited involvement in ten projects. There was a general consensus that vocalising the work they actually do, elicited feelings of anxiety. Throughout the interview process organisers often suddenly remembered their involvement in something else happening in the city. Organiser anxiety caused by UA involvement was expressed more strongly by the organisers in Hull than those in Copenhagen because organisers in Hull tended to be part of more activities.

Through studying UA longitudinally, cycles of commitment by organisers was experienced. This included a general stepping back of an organiser to a role of reduced responsibility, and other organisers leaving for various reasons, including the pursuit of paid employment or career advancement. A rare cycle observed included organisers both leaving and returning to their roles during the research period. Organisers often left because they were unhappy with decisions being made by other organisers and felt poor decisions were negatively impacting the project. This was compounded by a fear that this would alter the legacy the project. The catalyst, which led one organiser to return was that, they observed the project in such a state of flux that it was at risk of closure.

In terms of managing personal involvement many organisers cited difficulties in their ability to control their time commitment to the projects. As one organiser expressed this

"it's taking over my life". Others cited their involvement as negatively interfering with family commitments, causing relationship breakdowns and overall feelings of "neglecting things at home". Many organisers spoke of life events such as health problems, children and weddings as catalysts for re-evaluating their involvement and the need to "reclaim time" with projects requiring extra days, evenings and weekends. The realm of the project work was not isolated to the project site itself and organisers spoke of feeling overwhelmed by the nature of the tasks such as applying for funding when at home. Such tasks completed away from the project site were "hidden tasks". Organisers claimed that the time taken to complete such tasks was not adequately valued and through being "hidden" the work remains unappreciated. The term hidden was used by organisers to describe when what they had done had not been seen by other organisers, participants and/or managers in wider organisation. This feeling for some organisers extended to time spent on a project site, claiming to that they "spend all day, but others [organisers and participants] don't see any progress".

The ability to "retain your priorities" and "change your attitude so it doesn't become all encompassing" were deemed critical strategies to manage project time commitment. Managing time commitment required constant consideration, with organisers using their main interest to decide which project and project areas to be involved with. In some instances, this process caused them to leave other voluntary projects to pursue their UA project as the values most aligned with their own. Organisers compartmentalised their involvement in many projects, separating out activities, with the UA project being for themselves and supplementary voluntary work to benefit others. Organisers exhibited persistence in their ability to adopt strategies to manage involvement. Organisers employed by an organisation expressed difficulty in having an enjoyable job whilst pursuing hobbies around the job that are closely connected to its work. This generated increased stress with the line between work and hobbies being blurred. In one case an organiser reduced the number of activities they were involved in from six to three and moved job role.

The geographical closeness between where an organiser lives and the project location impacted how they felt about their involvement. This relationship had both benefits and drawbacks. Benefits included being able to access the project quickly, being known by the local people, understanding the conditions of the local community, and being able to quickly respond to any problems that arise on-site. However, this closeness also meant that there were difficulties in detaching from the project, with a person's identity being intertwined with the project that they manage. Furthermore, being in that close proximity was more likely to make the project all-encompassing in the eyes of organiser.

Furthermore changes to the organiser role were expressed as a personal conflict impacting involvement. Many organisers began as a participant and due to others leaving and their enjoyment of the project they took on more responsibility. In cases where they were not the initiator of a project this often happened subconsciously. One organiser described this as, "the sudden realisation of having all the responsibility and the pressure that brings". Duality was expressed in balancing the regret of taking on more responsibility with the reward it brings, "the need to remember you're doing it for yourself".

Having interviewed organisers separately, in some instances organisers were open about how other organisers adversely impacted their personal involvement. When other organisers did not fulfil the requirements of a prescribed task, this often caused an organiser's role to change. In practice, many tasks often fell to one person. When roles were unfulfilled by organisers, conflicting ideas about the role and prevalence of the project within the local area compounded the feelings of other organisers. This was termed "short-sightedness" by one organiser who struggled ascertain why an organiser was involved when they felt that nobody else would be interested in what they were doing anyway.

Discussions of this nature steered organisers to express feelings of obligation and attachment to the project. Organisers expressed "being compelled" to the project, enabling them to do 'something' that they feel strongly about. Managing these feelings alongside the conflict of not being able to say no when asked to do something, were one of the largest causes of organiser anxiety. One Hull organiser even experienced nightmares and panic attacks about their involvement in a project. This mostly occurred when a formal level of involvement was reached and organisers felt obligated to take on a committee role or responsibility for a specific aspect of the project, for instance, "dealing with people and not food". When interactions were required with relevant local authorities or funding bodies, this negatively impacted the strength of an organiser's commitment to a project.

Organisers voiced strongly that the inability to create a paid position and be employed by the project played a pivotal role in affecting their commitment to a project. This was further affected by the lack of capital to purchase resources such as material items for the site, which meant project activities were compromised. The site physically reflects an organiser's cycle of commitment, with some organisers describing a lack of garden maintenance such as watering and produce planting because of their feelings.

Analysis of the organiser experience drawing upon the typology and two locations produced interesting observations. To compare the experience in Hull and Copenhagen, feelings of obligation and attachment to a project were experienced similarly. However, the inability to manage their involvement in a project and the emotional response this

Chapter 6: Manifestations of Persistence in Urban Agriculture Projects

evoked was experienced more strongly in the Hull interviews. Generally, organisers in Hull were part of more projects and felt their role or position was less secure.

In terms of the typology, organisers of NGO and GO projects could manage their involvement more than the organisers of independent projects because they were more likely to be an employed organiser. However, organisers across the structural groups all felt obligated to their project because of the relationships formed between organisers. How organisers manage involvement and their feelings of duty becomes more complex when they describe limited mechanisms to have their work recognised (see previous section).

6.4 Seeking Economic Security

The pursuit and subsequent attainment of economic security in different forms is critical to the persistence of UA projects. This pursuit relates to the receipt of grant money or the ability to make a project self-sustaining through income generation. Each project has a unique experience with funding, which can be both persistent and ephemeral at different times. Despite the challenges experienced projects are still active and new projects are emerging in the foodscape. Organisers continue to establish UA projects despite articulating an awareness of funding-related challenges. For this reason, economic security is considered a persisting project quality. Explored in the section are the contrasting ways UA organisers in Hull and Copenhagen experience funding. Financial aspects of a project were a feature of almost every interaction with an organiser that occurred over the entire research period.

The theme of securing a project economically elicited feelings of frustration for organisers. Organisers felt resigned to these feelings. In the interview phase when the topic of project challenges was raised, funding was mentioned followed by challenges with participation. Responses by organisers typically included stating the word 'funding' followed by knowing laughter that suggested funding would take a central role in the interviews. For example, one organiser responded that their funding situation was "dire (laughter), dire" (HO43 Community Change Network).

To provide an overview, the most common experiences for an organiser included either receiving and maintaining funding grants from numerous external sources or struggling to receive any funding beyond the initial set up of a project. This is similar to Milbourne's research, who identified that projects draw on "different forms and scales of funding" (Milbourne 2012: 951). In this study there were projects that had attained self-sufficiency through income generation. For most of the organisers employed by a project, their employment was directly related to their own ability to receive funding or generate income. Attitudes towards the funding pursuit were articulated in three ways: the need for the project to have economic security, the feelings experienced whilst seeking it and the repercussions of not receiving it.

Organisers in this study also needed significant funding for "initial infrastructural costs associated with the establishment of their projects, such as the enclosing of spaces and hard landscaping" (Milbourne 2012: 951). In addition, organisers required continuous smaller amounts of funding for the cycles of repairing and replenishing equipment such as "tools that are fifteen years old", to pay for their role, for more planters, plants and polytunnels.

6.4.1 Funding Status and Experience

To explore the funding experience of UA projects this section considers the most common funding statuses experienced by organisers for their projects. These are (i) that the project is in receipt of full external funding; (ii) the project is in receipt of partial funding and (iii) projects without external funding.

Projects in receipt of full external funding.

Projects in receipt of funding grants, often received money from many different streams and types of funder. During interviews, in some instances organisers cited five or more different funders. Organisers who pursued external funding sources often received grants from "surprising" sources. The funding sources identified included: health trusts and specific initiatives run by a health trust, area trusts, supermarkets and supermarket grant schemes, lottery programmes, the local council (Kommune in Copenhagen), national government, probation services, as part of commercial business (corporate social responsibility), funds leftover from the closure of an NGO and landfill taxes. Landfill taxes are accrued when UK businesses pay taxes on waste they are sending to landfill. This scheme was introduced to encourage businesses to operate in a more environmentally friendly way. The money collected from this tax is used to fund community or environmental projects which seek to mitigate long term environmental damage, of which UA is considered to be an example of.

Milbourne's work on multiple cities in the UK identified that projects often relied on a "mix of funding sources". He found evidence of projects relying on a mixture of "fundraising activities" by the organiser themselves as well as "small grants from public sector organisations, charities and businesses" (Milbourne 2012: 951). This 'mix' described by Milbourne was evident in projects in both Hull and Copenhagen. However, organisers in Hull exhibited more caution in ensuring the values of the funder aligned with that of the projects as outlined in their aims. Hull organisers did not pursue funding from sources that they felt were at odds with the aims of the project. However, Copenhagen organisers had a more relaxed attitude to this and were content to have a project funded by a for-profit business as part of their social responsibility even if what the business did had a disconnect with aim of the project. The organiser of a permaculture community garden in Copenhagen explained how the project was funded, "we got a little bit of money from the Kommune and then we got the land and then we had a nice batch of money from a local brewery. A local company, from the neighbourhood and they decided to give us money because we rock and they were happy about it and we were happy about it" (CO22 Permaculture Community Garden).

Organisers reported a challenge in managing the funder-project relationship. Organisers had different activities to deliver as demanded by each funder. For example, as a project

emerged organisers have received funding to start a project which aims to use the permaculture principles. However, in trying to keep the project active an organiser may apply for and receive funding from a different type of funder. This 'new' funder could give money for the project to run a healthy eating programme of activities for young people from a specified area of the city. The organiser had to deliver that which was specified by each funder. In practice, this meant that organisers used the project to increase participant understanding of the permaculture principles in the hope of meeting targets which may enable them to qualify for more funding from this initial funder. At the same time the organiser has to run a series of activities for young people focused on an increased understanding of healthy eating as specified by the new funder. The result is that the organiser must manage the relationship with the 'new' and 'old' funder, deliver the activities and demonstrate how the money had been used. Often the project no longer qualified for funding from the initial funder because it did not meet their specifications anymore (see 6.4.3 Funder Preferences and Criteria). One organiser in Hull felt "challenged" having so much to manage with each new funder that the project is "pushed in different directions". The result being the project tries to appear "all things for everyone" (HO21 Children's Planters Community Garden).

External funding created additional expectations. Organisers felt tied to their funder obligations and tried to couple this with the original aims of the project. In existing research Dowler and Caraher found that a change of funding stream may dictate a focus shift for a project such as from the 'the elderly' to 'young mothers' (2003:10). Some projects in this study chose to shift focus, "when funding becomes available you start shoehorning what you do into getting some money for the next bit" (HO14 Community Development Trust – Community Garden). Others widened the remit of the project to encompass every shift as a result of receiving funding from multiple sources at the same time.

Projects in receipt of partial external funding.

Established projects were mostly commonly found to be in receipt of partial funding. Organisers were frustrated by this because it meant they had to compromise which had repercussions for the project later on. The organiser of an NGO community garden received funding to establish a project that was socially inclusive. To be inclusive the planters were designed to be an ergonomic height for wheelchair users. The organiser expected the project would get more funding as a result of being established. This was not the case and initial funding ran out quickly. The result was that the organiser used cheaper smaller-sized gravel for the site. This meant that wheelchair users could not access the planters that had been designed for wheelchair height.

Organisers in receipt of partial funding described access to water as the most expensive part of UA project infrastructure. Even when a site had been developed and began to run

activities, one organiser explained the reason that they needed more funding, "to allow us to actually 'do', then we can put more and more events in that garden we need to be able to pay to get access to water and then afford it" (HO21 Children's Planters Community Garden).

Organisers did not only feel frustrated but they felt stressed, one organiser anonymously explained that the project could not afford the cost of criminal record checks. This was needed for organisers who assisted in running events when children were in attendance.

Organisers, including those who are experiencing poverty themselves, often made up funding shortfalls by spending their own money, "when it comes to the work, I do it because I'm the only one with a car, a trailer, can I go here and there and it costs me an arm and a leg [a lot]. If I walk into a [plant] nursery and I see a plant and I like that, I'm having it... My own money, oh thousands but to me, it's been worth it" (HO15 Academy School – Community Garden). The organiser continued, he felt that spending his money in the project meant that he was giving his legacy to a "worthy cause".

Projects without external funding.

Projects without external funding were in two groups. One group of projects were operating without funding but were in need of funding. The other group were content, feeling that the project did not need external funding or were trying to make the project economically self-sufficient.

The language used by Hull organisers who needed funding was telling. They used idioms to explain how they felt. One organiser described the funding pursuit to be "selling your wares". This meant she continually had to expose project 'value' by offering project ideas to potential funders. Another organiser felt they were "going cap in hand" to funding bodies. By this they mean they were almost begging for funding to those with the power to award it. This introduces the theme of the next section in which organisers felt that they had to compete for funding.

Organisers in the second group who were content at not being in receipt of external funding feared that receipt of funding would foster systemic reliance on it. The implication being a project could not then move towards self-sufficiency. The organiser of a project that closed during the research period, explained this attitude, "sometimes you just have to make it work and then you have continued. It doesn't all fall apart. Access. It has kind of been a big principle of it, it has to be able to survive itself, whatever, whether there is anybody there or not and it doesn't require funding to keep it going" (HO9 Children's Centre Community Garden). A further reason that some organisers did not seek project funding was that they felt it produced too much expectation and that the project would have to be able to demonstrate "a result".

6.4.2 Funding Access and Perceived Competition

Organiser attitudes towards ease of access to funding varied widely. The widest observed contrast in attitude was between organisers of emerging and established projects. Organisers of emerging projects felt that it had been relatively easy to access funding whereas organisers of established projects struggled to access more funding to run the project once the initial infrastructure costs had been covered. Organisers of established projects felt that their project had to compete with other UA projects in the city for funding. More competition for funding was exhibited in Hull than in Copenhagen. The reason for this was the higher number of UA projects active in Hull.

Other factors also affected organiser attitude to funding access. As shown in Chapter 4, 4.2.1 *Project Organisers and Nature of Involvement* the majority of UA organisers engaged in several food and non-food related activities in the city and some organisers have roles in a number of UA projects. In a rare case, the organiser of a community garden at a sports club in Hull did not know that there were any other UA projects active. The organiser found it easy to access funding, *his* experience is explained in Cameo 18. How involved organisers were in food and non-food related activities influenced their attitudes towards funding access in an unexpected away. This is interesting because you might expect that organisers with more social capital and connections to know more about how funding works. In practice, some organisers were held back by their knowledge of the intricacies between organisations in a city because they had observed the "funding game" elsewhere and developed perceptions about access ease.

Cameo 18

In 2014 a community garden was established on space outside a Sports Club in Hull. Fly tipping prompted the idea for the garden, "before we started clearing up down there, it was just hellish, people slinging anything. I've literally had all kinds like couches, rubbish. People don't look after the area, so there will be rubbish everywhere and kids are just slinging stuff on the floor".

Over a weekend, volunteers from the sports club cleared the waste and then had to decide what to do with it. They wanted to provoke pride from the local community to deter it from being used for waste and decided on a community garden. There are now four large raised vegetable beds on a decking area (Figure 29). To fund the planters and plants, the organiser explained the process as "really easy" because he went back to the organisation funding the sports club told them what he wanted money for and they obliged.

The aim of the project is social, to facilitate attitude change in residents, to promote eating well, provide family support and create opportunity for young people. Sports club attendees and local people have been cooking and eating the produce. The organiser observed local children 'stealing' strawberries, which he thought was great. In the next growing season, they hope to plant more potatoes specifically for communal events. There are plans to build an extension to the building and include more raised beds. This would mean a bigger kitchen space to facilitate more activities with the local community including cooking classes.

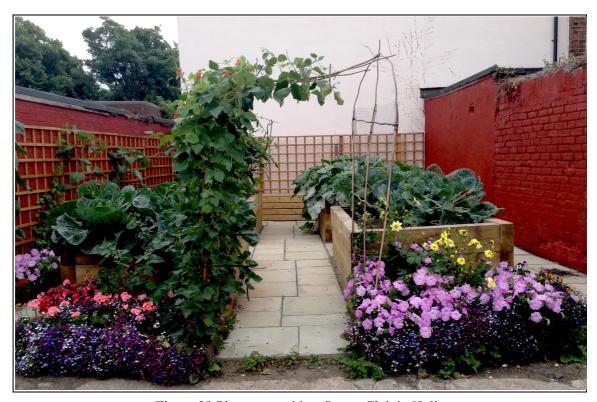


Figure 29 Planters outside a Sports Club in Hull.

Organisers of urban farms perceived that they could access funding easily because they were different to other forms for UA. The organiser of an emerging urban farm attributed this to the strength of the project idea. The plan to "be mobile" and move across city centre sites was conducive to their ease of funding experience, "it's not been that difficult because it's a bloody good idea, it's different you know. There's a lot of people out there applying for money just to keep their job, going back to this boom and bust cycle. We'll just reinvent what we're doing to fit the current funding theme and we tick a lot of boxes. We're doing something that is actually quite novel" (HO32 Mobile Container Urban Farm).

Contrary to these isolated experiences, the consensus between organisers was that they competed for the same funding pots. Organisers hold perceptions about who gets the money and what money they get. The wildlife community organiser identified, "small amounts of funding" going to "the people who need it and deserve it" and "bigger pots of money from national and international level" goes to "who can write the best funding bid" (HO13).

The repercussion of this division is that organisers become guarded to protect their project and their interests, "people are very guarded, in a funding sense about what they're doing because there's no benefit in telling everyone you're about to apply for a fund because they'd all apply for the fund, and why wouldn't they? They're in the same boat as you, they want to carry on doing what they do because they like doing what they do, and they believe in it" (HO14 Development Trust Community Garden). Independent

project organisers felt that NGO and GO project organisers received more support and funding. A permaculture community garden organiser passionately felt that larger organisations were benefiting from claiming to have worked with independent UA projects, "I have had no experience of being nurtured by any other organisations. What has happened is competition, backstabbing, horribleness, knocking ideas. It is disgusting. It is not about community empowerment and they'll [NGOs and GOs] work with us on the basis that we will become delivery partners, but they won't be sharing the money. I have just about had enough of the voluntary sector. It does not reflect a lot of the politics and values that I have anymore" (HO23).

Hull organisers considered themselves to be in a worse funding position than other cities because of the long history of NGOs working in the city, "it's got a big social third sector all after money. It's a reflection of low employment, high poverty and high levels of poor health. Inevitably when those things happen you get people trying to do stuff about it and that sort of stuff doesn't make money, it costs money. It's not surprising. You wouldn't see if in other cities quite so strongly I'm sure" (HO32 Mobile Container Farm).

Despite UA projects experiencing their own unique economic insecurity stories, during interviews organisers spoke about how they see other projects in the city operate with a lack of funding. They saw the detrimental impact that funding uncertainty produced, "you see what they're doing and again…limited budget, never quite knowing whether they're carrying on, finishing or stopping." (HO14 Community Development Trust – Community Garden)

In general organisers agreed that funding created barriers to partnership. They felt stressed competing against similar projects in the city. Competition hindered aspirations of partnerships between projects, "[on competition] it happens all the time. It is really horrible. It's really stressful because you want everybody to succeed but selfishly you don't, it's not selfish, it's your survival. I think there's a lot of unspoken competition and also there's this thing that the people who supply the funding say, 'work in partnership' but then if you do that you can't meet all your needs and resource things properly. So, there's that level of how much partnership can you do before you compromise on either objectives or how much money you will get" (HO13 Wildlife Community Garden).

6.4.3 Funder Preferences and Criteria

The preferences of funders and the criteria a project needed to meet to attain funding impacted which funding grants organisers sought. The amount of time a project had been active played a role in the likelihood of securing a funding grant. The general consensus is that to be successful in securing funding, a project must either be a new

project establishing itself or have been established for a long time. Funding for a new project is short term and usually only covers the initial development of a site. The organiser of a therapeutic community garden established in 1990 was successful in funding applications because of project longevity "the funders felt we weren't just a fly by project" (HO1 Health Centre Therapeutic Community Garden).

Projects that were emerging during the research period as new projects were the least likely to struggle to obtain funding. This was because they were emerging as a direct result of having secured funding. As more projects emerged, organisers have witnessed a reduction in the amounts of funding available. These pots of money have reduced so the same funding can be spread across more projects. The rationale for this is that funders are then able to say they fund a larger number of projects within a city. Middle ground projects were those that had received and spent grants to set the project up initially but had not been established for a similar amount of time to others in the foodscape. Economic security became crucial for a project to deliver activities. These striving middle ground projects had been established for between one and two years. This so-called 'one year syndrome' is experienced similarly in Hull and Copenhagen. This finding is similar to Dowler and Carahar who identified projects having "to reinvent themselves year-in, year-out, to take advantage of funding initiatives" (2003: 10).

One organiser summarised the situation for the middle-ground projects, "everyone is in the same boat in as much as their projects are supported by short term funding so they end up jumping and it affects the way in which [a] project runs. A couple of years they are working very strongly in one direction followed by a year working very strongly in another direction. But if we want to do this you [organisers] have to do that." (HO14 Community Development Trust – Community Garden)

Along the same the theme, funders prefer to provide money for the physical, visible aspects of a project; this provides rationale for the 'one-year syndrome'. During a project site tour, organisers would point to specific features of a project such as a shipping container or compost toilet and say who funded it. Other examples of this included plaques and signs with funder names on specific planters. This generates a conflict between what a funder prefers to give money for and the aims of the project. The result is that projects end up with funding earmarked for specific things which are not critical to fulfilling project aims.

Coupled with funding preferences are the criteria that projects must meet to qualify for funding grants. The challenge present was the perceived misalignment between the way in which a project operates and the extremes of the criteria expected to be met. For example, some projects required an income level of over £30,000 to access certain types of grants. Whilst others seek funding to run an activity after the initial set up did not

qualify for smaller grants because they had already received £1000 over the course of the project's existence. A further criteria barrier was the specification that a project had to be 'open' or have 'open access' to the public for a minimum number of days per year. The diversity of the location of UA projects made this particularly difficult with variation in access to the sites (See Cameo 19).

Cameo 19

In 2004 an Urban Community Orchard was established in Hull as part of the 'five a day' fruit and vegetable initiative by the National Health Service. After a few years the NHS withdrew support for the project and it is now independently run. The project occupies two acres with three hundred and fifty trees within an established allotment site. There are beehives and an accessible composting toilet. The site has several storage sheds and shipping containers. At the entrance to the orchard there is a wildlife community garden, both of which are accessed through an allotment entrance at the bottom of a residential street. The aim of the project according to an organiser is "to promote healthy eating, exercise and outdoor activity". As well as "promoting local food production and generate a stronger community identity" (HO38). The primary activities on the project are weekly participant sessions during the harvest period, between August and November. However, a group of project organisers and participants (who are mostly retired) visit the project every day. Activities have also included Pagan events, wassails, weddings and open days. The project produces twenty-six varieties of apple (Figure 30). The several tonnes of apples are prepared as whole, juice or pressed. The public can make a donation to buy produce. Some of the surplus is donated to schools, elderly residential homes, homeless hostels and elderly charities. The group plans to develop new connections for distribution of the apples. The project is also seeking to take ownership of a piece of council owned land that runs alongside the site. The reason for this is to make the site continually productive into the future by planting new trees whilst managing some of the original trees into senescence. Furthermore, to develop the brand and promote the project so that it becomes a normal part of people's lives.

The orchard has had a particularly challenging experience of funding, with an organiser describing how she "never knew how difficult that [funding] was going to be". Her experience included seeing "reams and reams and reams of charities online where you can apply" but there was so much funding available that it would "take me an absolute lifetime to go through these". The criteria of what the funders wanted held the project back, "they said the same thing, you've got to be open access and we're not". The organiser expressed shock "because I didn't know that there was going to be this criteria with everybody that said you must be open for at least 150 something days a year to qualify for funding". The project cannot be open access in the way specified by funders because of its location within an allotment site. This has had a profound effect on the project, "it really held us back because I thought it would be great to get a couple of thousand pounds". The organiser went on to describe what the funding would have enabled, "we could have a bird hide so we can watch the birds in comfort and in the dry, we could put a maze in for kids… and all the equipment that we need but we weren't entitled to a penny of it, so I thought this is getting difficult what are we going to do?"

The organiser learnt from this process and has adopted a new strategy to put them in a better position, when they donate boxes of apples "I say to them 'would you mind sending us a letter just to say thank you' because, just in case we can get some grant money we've got to demonstrate that we are making a difference to people's lives because it's always a criteria, social cohesion is a major criteria" (HO38).



Figure 30 Images taken at an Urban Community Orchard. *Left* Handwritten details documenting the different apple species on the wall of the shipping container. *Right* A project participant collects apples using a tennis ball gadget.

6.4.4 Strategies in Seeking Funding

In the face of substantial economic challenges, strategies were adopted by organisers to enable the project to persist, even if this meant it had to run at a reduced level. This reduced level could be manifested in running fewer sessions for participants, opening the project less frequently or allowing other projects with funding permission to use the site to run a programme of events. The organisers of UA projects were often proud of the strategies they had implemented to be able to keep the project 'active'.

Many strategies were centred around the ability to make the project generate income. However successful implementation of this was challenging for the projects when it had not been considered in project initiation. For example, many organisers felt they could not start charging participants when they had not charged for sessions from the beginning. Others felt that to implement charges would compromise project aims and organiser values by making a project only accessible for those who could afford to attend. For many projects this was a last resort scenario. One income generation model implemented by some of the NGO-run projects charged participants to attend however organisers were explicit in vocalising that this money does not benefit the project directly, with the income generated going into the organisation's central funding pot.

Some projects strategically only applied for funding when it had been insinuated by funders that if they applied they were likely to be awarded. A community change network organiser explained why this happened, "there are deals going on behind the scenes around funding and it is stupid. Collectively we can achieve a lot more but everyone is about their own jobs. They are about their own jobs and their own projects which I think is really good. I can understand why they are doing it. If you are building a project, you want it to sustain" (HO43 Community Change Network).

Leveraging topical discourses was a popular strategy adopted by organisers when writing funding applications, "It's a batting around of discourses but it's knowing that you're doing that and that is your strategy. You've been in it long enough to know the discourses that come and go. It was all about social cohesion, financial inclusion, social inclusion and exclusion, poverty that is very broad by definition. Now it is all about resiliency, innovation, enterprise. Most people know that it is a game and play it and actually the work hasn't substantially changed we're just calling it different things" (HO43 Community Change Network).

CHAPTER CONCLUSION

Chapter 6 has been instrumental in fulfilling part of Objective (iv.) by identifying factors which hinder UA project development. Table 19 summarises research findings and addresses the implications of the finding. The four main sections of this chapter can be summarised as follows.

Section 6.1 looked at the scope of project aims to identify themes within the typology. It was observed that GO projects are more likely to aim to be concerned with the provision of 'space' in the city, the growing of food and to prescribe within their aims what a participant can gain from attendance to the project. This differed from NGO projects which aimed to support low-income areas of the city specifically or more generally people living on low incomes. Independent projects aimed to do more than the NGO and GO projects and were considered in more detail in the chapter. To summarise, their aims were to provide space specifically to grow food, to increase sociability, to provide opportunity and to provide 'alterity' in the city. As to be expected networks were more outward looking in their aims focused on 'connections' and facilitating those connections. They frequently aimed to transfer national issues to a local level through connections developed. Aims were compared in Hull and Copenhagen. Many similarities were found in terms of what projects aimed to do with the exception that Copenhagen had more descriptive aims and a more prevalent financial and 'sustainability agenda'. Additionally, how projects negotiated their aims was discussed. Discussions on aim negotiation answered a number of questions, why projects have aims; when aims were formed; how they were formed and by whom; what forms they take; what role do they have in a project's identity; and what happens to the aims of projects over time.

Section 6.2 considered organisers' commitment to action and recognition. The section explored how organisers needed to feel that they had achieved 'action' within the realm of the project. This need for 'action' was a strategy adopted by organisers to be able to measure what they had achieved. It went on to explore how organisers sought validation

for what they have achieved through recognition to rationalise their continued 'action' and engagement in the UA project.

The third Section, 6.3, was an exploration of the personal conflicts experienced by organisers. Given the sensitive nature of the topic the section was anonymised and refrained from the use of specific project cameos. The section described the personal struggles articulated by organisers. These struggles related to their ability to control their role and involvement in the project. The longitudinal approach of this study meant it was possible to see the effect of an organiser's inability to manage involvement and feelings of duty. In practice, this often meant that an organiser significantly reduced the activity offering of a project or ended their engagement in a project. However, this is a persisting quality within projects because despite these feelings within the research period it was observed that organisers often returned to the project or became involved in another UA project. The section considered the all-consuming time commitment described by organisers and the strategies they adopted to manage their obligation and attachment.

The final Section, 6.4, explored the experiences organisers have in seeking economic security for themselves and their projects. It identified the range of organiser attitudes towards their current funding status and briefly considered what they wanted funding for. The experience of funding status was compared between established and emerging projects. This showed contrasts in attitude towards a project's ability to secure funding, with emerging organisers finding this much easier than established projects. The section specifically discussed how and why this difference in attitude occurred. It examined the criticality of time as a rationale for this attitude change in the process of moving from emerging to being established. To identify this a number of topics were explored. These included attitudes to funding access, competition for funding, strategies and tactics adopted by organisers to get funding and the impact of funder preferences and criteria to their ability to get funding.

CHAPTER 6 Manifestations Of Persistence In UA Projects IMPLICATION		
6.1	6.1.1 The Scope and Negotiation of	Relevant Stakeholders: UA Funding Bodies.
	Urban Agriculture Project Aims	Recommendation: I appeal to funding bodies to look
Project Identity; Aims and Discourses	GO projects are aim to provide 'space' in the city, to grow food and to prescribe within their aims what a participant can gain from attendance to the project.	at ways that they could foster a culture of cooperation between projects whose work is fundamentally the same. One way in which this could be done is through an event facilitated by the funders in which
Discourses	NGO projects aimed to support low-income areas of the city specifically or more generally people living on low incomes. Independent projects aimed to do more than the NGO and GO projects. They aimed to provide space specifically to grow food, to increase sociability, to provide opportunity and to provide 'alterity' in the city. Networks were more outward looking in their aims focused on 'connections' and facilitating those connections. They frequently aimed to transfer national issues to a local level through connections developed. The aims of projects in Hull and Copenhagen were similar. However Copenhagen UA projects had more descriptive aims and a more prevalent financial and 'sustainability' agenda. Organisers experience aim drain the longer a project is established.	projects share their projects aims. The reason for this is that I have found UA projects initiated by different groups broadly have the same aims even though organiser's do not think they are developing projects with the same goals but fundamentally they are. *Relevant Stakeholders:* UA Project Organisers Recommendation:* Organisers should be mindful that they are currently changing project aims multiple times. Organisers should could consider the impact this has on participation and ensuring the project still reflect that which they set out to achieve. Hull organisers should consider including financial and sustainability aims for their project.
	 6.1.2 'Urban Agriculture' As Described By Organisers Most organisers considered their project to embody features of an 'urban' location and of 'agricultural' practices. On the whole projects identified as being UA but to varying extents. Interestingly many independent project organisers felt, even when they associated their project as being UA, that appropriation of the term by "wider sectors and industry" would dictate whether they were UA or not. 	Relevant Stakeholders: UA Researchers Literature Relevance: Generally speaking organisers considered UA to be the practice whereby an individual or group of individuals changes the use of available urban space to grow edible and non-edible plants. In this 'space change' organisers wanted to create opportunities for 'wasted' land in the city and for the 'wasted' skills of people in the city. Pudup described that community gardens were developed to change people and places (2008: 1228). I have found this to be the case for UA projects more generally.
	 6.1.3 'Sustainability' As Described By Organisers Organisers equate the term 'sustainability' with the persistence of the project. 	Relevant Stakeholders: UA Researchers Literature Relevance: Organisers consider the persistence of the project to be wholly their responsibility. Organisers simply took project 'sustainability' to mean that the project continues to exist. Therefore researchers must be cautious in how they use theoretical ideas of sustainability in the study of UA, particularly given the limited frequency in which the concept of 'sustainable development' featured in organiser motivations and project aims
Organiser Commitment to Action and Recognition	 6.2.1 Action 'Action' was a strategy adopted by organisers to measure what they had achieved. Organisers sought validation for what they have achieved through recognition to rationalise their continued 'action' and engagement in the UA project. 	Relevant Stakeholders: UA Researchers Future Research: I suggest further research is needed on the commitment of project organisers. A new study utilises photo diaries of organisers could be used to explore organiser feelings about projects changes and how sites physically reflect it.
	 6.2.2 Recognition Organisers found it difficult to identify and measure project success particularly when aims were continually shifting over the project's existence. Organisers had limited expertise in how to evaluate an UA project. Organisers cited a lack of time to evaluate 	Relevant Stakeholders: Funding Bodies Recommendations: Funders should look to develop new ways for organisers to evaluate how they have spent funding. Evaluation development should include participation by UA project organisers in the process. Evaluation should be mindful of the low levels literacy of some organisers in developing evaluation formats.

	other than for funding. This meant they equated monitoring the project exclusively with funding. Organisers faced challenges when asked to evaluate their projects and suggested the challenge was systemic of the third sector culture. Many organisers described a lack of external and internal support from wider organisations (for projects operating within NGO or GO organisation) as a reason for seeking recognition from outside of the project. Organisers felt they gained recognition from [1] seeing a change of attitude in their project participants, [2] from expressions of positive opinions by people living and working near the site, [3] from the project receiving media coverage, [4] when the organiser is invited to attend meetings and [5] when organisers of other projects expressed an interest in their project.	Relevant Stakeholders: NGOs and GOs Recommendations: Greater discussion is needed between UA project organisers and the wider NGO or GO organisations for whom they work because organisers feel they are relatively unsupported. A format should be created for organisers to express concerns. Organisations should consider support that they could offer UA project organisers such as increased training opportunities. Relevant Stakeholders: UA Researchers Future Research: Researchers, working from an insider perspective should explore existing funder evaluation formats. The output of such research should make recommendations for implementation of a UA evaluation toolkit. This seems realistic and could be done in a way that is in the best interest of funders and organisers. Additionally, increased evaluation by UA project organisers will provide useful data for UA researchers to substantiate current 'claim' debates. Failure to recognise the work of UA projects is having a detrimental impact on the ability of organisers to scale their project.
6.3 Managing Involvement and Feelings of Duty	 Organisers experience personal struggles in their UA role. They struggle to control their role and involvement in the project. If unable to control their role or involvement organiser's significantly reduced the activity offering of a project or ended their engagement in a project. Despite these feelings organisers often returned to the project or became involved in another UA project. They adopt strategies they adopted to manage their obligation and attachment. 	Relevant Stakeholder. UA Project Organisers. Recommendation: An event should be self-organised and by UA project organisers in which they themselves are the focus of the event in which they share their experiences of being involved in UA. The reason for this is that organisers often felt they were the only organiser to struggle to manage their involvement and feelings of duty. Within such an event organisers could share the strategies that they have developed to manage their role and involvement.
6.4 Seeking Economic Security	 6.4.1 Funding Status and Experience Funding status was compared between established and emerging projects. This showed contrasts in attitude towards a project's ability to secure funding, with emerging organisers finding this much easier than established projects. Extremely varied experience of funding. Funding received from surprising sources. 	Relevant Stakeholders: UA Researchers Literature Relevance: I agree with Holland that community gardens in comparison to other types of UA project demonstrated "very little economic purpose" according to their aims (Holland 2011: 296). Relevant Stakeholders: UA Funding Bodies, NGOs, GOs and Networks. Recommendation: Organisers who work as part of an organisation have to raise "their own salaries and project budgets" (Ballamingie & Walker 2013: 553) through external funding sources. This creates huge stress for project organisers and affects their ability to run the project. Exploration is needed for ways to improve feelings of security for organisers funded in this way.
	 6.4.2 Funding Access and Perceived Competition Described funding applications as a game. Urban farms found access to funding easier. Organisers found it challenging to manage the funder-project relationship. External funding created additional expectations. Third sector in Hull created more competition for funding. Funding competition created barriers to UA project partnership. 	Relevant Stakeholders: UA Researchers Literature Relevance: External funds are crucial to the ability of a project to establish (Sonnino and Griggs-Trevarthen 2013, Reynolds 2015). In addition this study identified a 'one-year syndrome' whereby organisers struggled to qualify for funding after having secured initial infrastructure funds to emerge. Future Research: Often organisers presented aims differently in private (between organisers and participants) and publicly to funders. This should be acknowledged in future research because it is highlights a power imbalance. The field needs to know whether funders are aware that in some cases they are causing detrimental aim change.

6.4.3 Funder Preferences and Criteria Relevant Stakeholders: UA Researchers Future Research: My findings support that of Emerging projects are more likely to Holland's whose work surveyed community gardens receive funding than a newly established on project purpose. She identified that established project. projects had an "original intention" and "present Funders prefer to provide money for the purpose" (Holland 2011: 293-294). A suggested physical. study is to map aim changes in one specific UA Organisers identified problematic funder project over time from an insider perspective. criteria such as the project requiring 'open access'. Relevant Stakeholders: UA Funding Bodies Recommendation: In writing the specifications for funding eligibility, funding bodies should be more specific in defining their terms. This would make it easier for UA project organisers to assess whether they meet the requirements or not and improve their decision-making processes 6.4.4 Strategies in Seeking Funding Relevant Stakeholders: UA Funding Bodies Organisers apply for funds that they have Recommendation: I suggest funders create a mechanism for distinguishing between whether a been instructured to apply for. project organiser or participant is applying. The In some cases organisers allow other groups reason for this is that I saw examples of organisers with funding to use the site. supporting participants to gain literacy skills by Organisers leverage topical discources to applying to funding bodies even if it reduced the likelihood of securing funds. appeal to funders.

Table 19 Summary of research findings from the chapter and implications of findings. Implications identify the relevant stakeholder of the finding and makes recommendations.

7 MANIFESTATIONS OF EPHEMERALITY IN URBAN AGRICULTURE PROJECTS

Introduction

This chapter complements the previous chapter on persistence. The chapter adds to the narrative of projects as a performative practice by exploring projects' more transient qualities that can lead to ephemerality. In this chapter I deepen the understanding of project stability and instability in each city. The following sections question the presumption that persistence and stability is good whereas ephemerality and instability is bad. The presumption is that an 'unstable' project is more constrained than a comparatively 'stable' project. The chapter demonstrates that although certain project qualities can lead to project crisis, in this period of flux, to keep the project 'active' organisers adapt and implement strategies. The project qualities are discussed in terms of how they reproduce ephemerality whilst at the same time produce opportunities for continued project resilience.

There are three characteristics of ephemerality explored in this section. Each section will discuss how and why the characteristic is producing both instability and opportunity for projects. Similarities and differences between the organiser experience in Hull and Copenhagen are considered in relation to each section. The previous chapter dealt with enabling factors as outlined by Objective (iv.) and this chapter fulfils the remainder of that objective by exploring hindering factors.

The first section, 7.1, explores ownership. The section considers the complex ways ownership manifests for project organisers. It looks at how organisers use ownership as an outward expression of control in their project. The section demonstrates how manifestations of ownership can provoke project uncertainty but also create opportunities to increase a project's resilience.

The second section, 7.2, explores challenges experienced by organisers. The section focuses on the 'everyday' barriers for project organisers. It looks at challenges including the length of time it takes for a project to emerge, risk perception and anti-social behaviour.

The third section, 7.3, explores the fragmentary experience of participation expressed by organisers in this study. To do so this section considers why organisers seek participants, their attitudes towards participation numbers and how they seek to attract and engage participants. This is followed by a discussion on the challenges organisers have identified with having participants.

7.1 Organiser Sense of Ownership

The first section of this chapter explores an elusive but important theme to develop over the research period. The section looks at organisers' sense of ownership and how this manifested in their UA projects. An organiser's sense of ownership can be perceived in their awareness of their ability to control what the project is and does. This section draws upon Section 6.3, *Managing Involvement and Feelings of Duty* which considered the personal impact and commitment of an organiser's involvement in an UA project. The 'involvement' related to the emotional attachment organisers show towards their project within the wider context of their lives. This section explores this emotional attachment but goes further to explore an organiser's ownership as an outward expression of control within their project and in relation to other projects operating in the foodscape. On the whole ownership is considered an ephemeral project quality because the resulting organiser behaviours can produce flux.

The theme was elusive for two reasons. The first was because a sense of ownership is difficult to identify given its individual nature and complexity in how it was felt by organisers. The decision to use the term 'ownership' to encapsulate this elusive theme stems from organisers use of the term as a mechanism to describe challenges they have experienced. For example, one organiser described, "I have felt that it was only myself and one other person that were actually being here and taking care of the garden everyday". The organiser went further to attribute this challenge to the 'elusiveness' of feelings of ownership, "it's to do with ownership but I don't know in which sense, personally it is a feeling" (CO22).

The second reason ownership was elusive was that it can be exerted over both tangible and intangible aspects of a project. The tangible are the physical 'material' parts of a project such as the project site, equipment and plants. The intangible includes organiser ideas about the project, and their ideas about how to solve localised or citywide urban challenges. Also relevant was their stance on how the project should be run such as having democratic decision-making, as well as the appropriate relationship between organisers and participants. This sense of ownership manifested in the day-to-day decisions involved in running a project. For example, deciding which organiser signs the paperwork resulting in increased accountability of that organiser to the project. In

addition long term concerns regarding who will run the project in the future were evident.

An organiser's sense of ownership is shaped by both their 'closeness to' and 'interest in' the UA project. 'Closeness' is their attachment and role in the project whether they run the project's day-to-day activities or are the treasurer, as examples. 'Interest' is that which motivates them to be involved in an UA project (4.2.2 *Project Organiser Motivations*). Ownership is worthy of exploration in UA given the variety of roles organisers have within projects (4.2.1 *Project Organisers and Nature of Involvement*). Ideas about ownership were evident in how organisers controlled the project and their expressions on belonging to the project. How organisers regard ownership is useful for gaining insights into how individual organisers behave in these different roles.

Organisers considered having a sense of ownership as inherent to community work. They believed that it was a quality that required protection by organisers, can be subject to testing from within projects and by other UA organisers, and can provoke uncertainty about the project's future. Finally, it is a quality that created opportunity and had the potential to increase a project's resilience. These themes will be discussed in turn.

7.1.1 Ownership as inherent and complex

Organisers considered having a sense of ownership as an inherent feature of running an UA project primarily because of the many relationships they have to manage. This includes relations between an organiser and the other organisers, people who live and work within proximity to the site who may not be participants. They must also consider wider organisations and bodies such as those an organiser is employed by or works with (either by choice or necessity). For example, the local authority, landowners and the complex relationship between organisers and project participants. Section 4.2.2.1. Organiser Insight Into Participants demonstrated the unique insight organisers have as to the lives of participants on a project level (participation patterns) and a personal level (individual circumstances). This inevitably manifested as a need for a certain level of ownership to be exhibited by organisers for a project to be able to persist. Ownership was felt by organisers to require maintenance and balancing within a project. In practice, this meant that too little or too much ownership showed by organisers could have a destabilising effect on the project and could lead to ephemerality, and potentially the closure of the project. A project development phase impacted how organisers exhibited ownership over and within the project. As a project progressed from emerging to becoming established, feelings of ownership began to manifest themselves among organisers, which widened to encapsulate more tangible and intangible aspects of a project. Transitions of ownership encompassed individual organiser expressions of ownership, the transference of a project from one organiser to another and the broader

project to organisation ownership. The following Cameo 20 is from an organiser of a wildlife community garden. It begins to unpick the inherent and complex ways that a 'sense' of ownership presents itself for organisers in different aspects of a project.

Cameo 20

To provide context to the project in the early 1990's the local authority gave control of a space to a NGO Wildlife Trust who have since developed the space and established an office. There is a wildlife pond, woodland, mature herb garden and vegetable growing area. There is also a demonstration kitchen garden to show visitors what can be grown at home (Figure 32). The main aim of this project is to provide accessible green space for the community that promotes and conserves biodiversity in the urban environment. This is done through activities, which aim to increase understanding of food growing, gardening, wildlife and the environment. A number of different activities are run on site including children's educational activities (linked with the national curriculum), weekly participant sessions and as a venue for events such as plays.

The organiser described how the project site used to be an "unwelcoming space". They attributed this to two factors, the first was that the site was "really overgrown" and the second was that "there was a volunteer who didn't want other people on site". The organiser rationalised why this had occurred by generalising the relationship between participants and the project, "every person who walks through those gates sees it in a different way. It's a really hard thing to do, empathise when that person walks through the door and walks in your site and uses it. They are now seeing it as, this is my garden and my space and I do this in it". The organiser identified how participants have their own sense of ownership of the project. Through articulating how participants see the space as theirs, the organiser reflected on this ownership to conflate the participant experience with her own sense and experience of ownership. As follows, "any person that does this type of project the most difficult thing to do is take ownership but still share it. You [organisers] have to share it and you have to go right it might not be what I think is right for the place but if it's right for them [participants] then they need it". This was a common feature of interactions. Organisers found it easier to articulate their own sense of ownership when drawing upon and comparing it to the relationship they observe between participants and the project.

The organiser of this project is employed by a large NGO. Therefore, there has been a succession of organisers over the period of the project's establishment. The organiser observed, "people who have been involved in the site in the past haven't let go and accepted that it's changed and it eats them up". This organiser feeling of persistent ownership by other organisers was not confined to how it effects their own project but how it also manifests in other UA projects in Hull, "I see it on other projects where people are so embedded in it that they can't move forward or on from it because it's too consuming." The organiser equated an overbearing sense of ownership by organisers to "strangling their project" when an organiser remains in the city but has moved project or ceases to be involved in UA at all.

When considering the future of the project, the organiser described that "if I move on from that site I've got to expect that the next person who is there, a patron or carer or keeper of that garden will have a different idea of how it all works". The organiser went further to describe what this process looked like in practice, "you [the organiser] have to be able to step back and go actually that's fine if you do it that way because that's your interpretation. You can't be too precious about a place that you are involved in. I think that helps it be more sustainable if you don't. If you have balance between ownership and care, doing your job properly, your volunteer role properly or taking the duties correctly and also being able to let go and let people move it for the next stage because you need to hand it over" (HO13).

In this cameo we see the different ways ownership plays out in practice, its complexity, particularly in relationships and how it builds and changes over time. Ownership takes many shapes, has to be balanced and can cause conflict. A project having a history of different ownership itself had an impact on the experiences and actions of current organisers. In terms of



Figure 31 Demonstration kitchen garden at Wildlife Community Garden.

To summarise, we see how an organiser's sense of ownership is complex and interacts with many project aspects. Firstly, ownership has a role in the day-to-day running of the project in the ownership relationship between participants and the project as observed by the organisers themselves. Secondly the difficulty the organiser had in articulating their own sense of ownership within the project but also the ease with which the organiser could identify how another organiser's sense of ownership was negatively impacting a project. Thirdly, that ownership takes time to establish within in a project and it is critical for the long-term future of the project.

7.1.2 Ownership requires protection

As shown in Cameo 20, the organiser labelled their role as "a patron or carer or keeper" because the individual had not established the project herself. A strong theme to emerge within ownership was the attitudes of organisers of independent projects which had been started and continued to be run by the same organiser. Their sense of ownership was considered to require protection. This most commonly related to the 'ideas' organisers had for their project. They questioned what would happen as a result of sharing their ideas with other active or potential organisers in the city. One City Farmer described how organisers generally behave in UA projects when sharing ideas,

"you can imagine that everybody has their own little charity and they are very cellular and they don't like talking to other people and they don't like giving too much away" (HO33).

Another organiser articulated why this lack of communication occurred which led them to censor the information they shared with other organisers. The "positionality" of other organisers, who work as part of an organisation allows them to behave in a certain way, "their positionality allows them to engage in certain stuff. I have a reality to earn a living. I cannot mess around as some sort of hobby. And then when people go and steal the ideas, like why steal an idea from people working in a grassroots organisation when other organisations who have funding, who knows people working for them, what is it, why can't they think of their own ideas. It is cut-throat out there" (HO23 Permaculture Community Garden).

From this we see typical tensions between the organisers of different types of projects. Independent organisers felt that if they did not self-censor and protect their ideas, there was a perception that NGO and GO projects would "*steal*" and implement their ideas before the independent organiser was able to find the funding to implement ideas themselves. The reason this occurred was because independent and network organisers often perceived the NGOs and GOs to have more resources and therefore can implement ideas quickly.

The sense that ownership requires protection manifested for organisers in numerous ways. One way was that organisers felt they needed to protect the history and future legacy of the project. The reason for this related to the amount of time and often financial investment organisers have put in their projects. A further reason is that emergence organisers have faced many barriers, some of which they have been able to overcome (see 7.2 'Everyday' Barriers for UA projects). These struggles intensified their closeness to the project. Organisers find ways to protect the project from external forces that can change a project's narrative. They do this because their commitment and duty deepens through what they experience in the project.

A second way that this sense of ownership manifested as requiring protection was for the organiser to safeguard 'value' in the project. This 'value' related to the uniqueness of their project in relation to others in the foodscape. The reason for this (as seen in 6.4 Seeking Economic Security) was that often the criteria of funding bodies sees projects favoured for having innovation or being a 'new' project. For other projects the length of time they had been established impacted how organisers saw their project value. The organiser of a therapeutic community garden, which has been established for over twenty-five years, stated that "we've had so many visitors and they've come to get some ideas. I say if you're going to use some of our ideas and if you're writing about it, mention us won't you. Some do but the odd ones don't and you think, oh really, I gave

you that idea" (HO18). Furthermore, an organiser's ability to secure project funding directly related to their ability to be employed as a result of establishing the project. Therefore organisers see value in their ideas and seek to protect them as demonstrated in section 6.2 Action and Recognition.

To summarise I have distinguished how and why organisers seek to protect their sense of ownership over their project. Furthermore, the observed tensions in the relationships between structural groups regarding the protection of ideas invariably leads to group conflicts, which can have a detrimental impact on the persistence of the projects.

7.1.3 Ownership is subject to internal testing.

The previous section demonstrated how ownership required protection from the 'outside'. This section looks internally to show how an organiser's sense of ownership was tested within the realm of the project. There was a general consensus by organisers that other organisers within the same project tested their ownership. By this I mean in projects with multiple organisers, they measured each other according to their commitment and motivation. This related to the 'closeness' and motivation of the other organisers. Organisers described overbearing attitudes by other organisers towards ownership of the land. This would lead to a disagreement over what the aims of the project were and who the project was for. For example, when asked about challenges one organiser commented that "ownership, because [another organiser] thinks or thought that the orchard was his. He treated it as his own piece of private land and I could never get him to see that. For instance, when we first set the orchard up and when I was there it was only three years old. I said we've got to market this place and get it known through every which way we can. And he said we don't want many people knowing about this and I said why?" (HO38 Urban Community Orchard). The organiser who "treated [the land] as his own piece of private land" did not want people knowing about the project because the organisers had received funding from the local authority. The authority had specified that the project should attract and engage people from a specific postcode area. This presented a challenge because the organisers did not know how to attract people from that specific area whilst excluding people from the city more generally. The organisers' uncertainty over whether this participant criterion was for the funding period only or the project's persistence compounded this. The result is that the organisers failed to agree on who the project is for, with some organisers exhibiting more control over the project than others. This has led to project instability through inertia and organiser stasis. The project is now at risk of closure because they do not have enough participants.

An organiser from a different project witnessed this happening in other projects in Hull. In part, this had led her to keep the number of people in an organiser role to a minimum.

The organiser described "A lot of them break down because of in-house fighting between themselves. They fight between themselves because they want their accolade or they want their ideas to be put forward before anybody else's whether you've got money for the project or not" (HO21 Children's Planters Community Garden).

There was also a sense that in testing each other's ownership organisers could calculate which of them was going to take accountability for the project, particularly if they took the risk present in attempting new ideas. One organiser felt "people test my authority and people blame me if there is an issue" and she felt that she adopted a position to be able to deal with situations in which this occurred unlike other organisers, "I am willing to say I've made a mistake or I could have done that differently and I know that" (HO13 Wildlife Trust Wildlife Community Garden). It is important to note that such positioning was not prevalent in many projects.

To summarise, organisers test each other's ownership within the project for a variety of reasons. In project fighting and attempts by some organisers to secure their sense of ownership inevitably can cause problems. For other organisers opportunities arise organisers strengthen their own identity and project identity.

7.1.4 Ownership; a producer of 'uncertainty' and 'opportunity'

As a result of the longitudinal approach of this study it was possible to observe how an organiser's sense of ownership produced uncertainty and opportunities. This was the result of observing what periods of uncertainty looked like for projects and at the same time how other projects used the 'uncertainty' to create 'opportunity'. The adage that a crisis is another form of opportunity rings true, as during the uncertainty period, which could last for even a year or more, one's position could change massively. Time criticality is inherent to the process of uncertainty and organisers' responses to it.

7.1.4.1 Uncertainty

Uncertainty in ownership was observed to occur in two main aspects of a project in the role of organisers and in a project's future. In terms of the role of the organiser, an organiser's own sense of ownership had 'planned' ephemerality. In many projects, organisers, conscious of the project's ephemerality, assumed that over time there would be a change of ownership from the current organisers to participants. Interestingly this assumption that participants would gain their own sense of ownership within projects was most evident in projects which were in receipt of the most financial support (NGOs and GOs). Typical responses from organisers alluded to probability that "community people" would want to run the project. However, in practice once participants observed the volume of work carried out by organisers appeared to become increasingly content in their participant role. Somewhat contrarily to the idea of the organiser-participant insight, many organisers are unable to perceive that participants usually do not want the

responsibility of an organiser role for themselves. This created a challenge for organisers in how they balanced exerting ownership over the project and yet facilitating the future sharing of ownership with participants.

Furthermore, in my limited examples of when a transfer of ownership from an organiser to a participant occurred, organisers did not know the remit of what they can and cannot do within the project. For example, a new organiser of a permaculture community garden in Copenhagen did not know how long the land lease was for and his tentativeness in engaging in some aspects of a project, "I think it's this year or the next year that we have to renew the contract. I mean it's those things I don't know because I have been involved in the garden but the people who know all of the details are [names omitted] because they started it and that makes sense but I wouldn't dare to dive into the legal things going on" (CO22). The organiser directly attributed this to a failure to "transfer power", or what we would perceive as ownership, from organiser to participant, "I think that's one thing we have missed it's the transfer of the power with them saying this is how you do it" (CO22).

Uncertainty in ownership was evident in organiser articulations of project future. There was evidence of this predominantly occurring at two main points of a project's existence. Uncertainty was experienced particularly after the initial emergence of a project. This correlated with the end of funding with projects experiencing the 'one year syndrome' as discussed in 6.4.3 *Funding Preferences and Criteria*. This also occurred once the project had been established for a long time, typically more than five years. Organisers could feel powerless in their ability to control the project's future and many were concerned about who would take over control of the project. There also existed some organiser awareness of their own age in relation to the projects' ability to continue without them. The outcome of this uncertainty is that organisers are unable to plan for the project and lose momentum for fulfilling project aims.

7.1.4.2 Opportunity

The section above identified how an organiser's sense of ownership can produce uncertainty for them in terms of their organiser role and in a project's future. When some organisers felt their sense of ownership was uncertain, they were also able to find ways to use this to their advantage. It was seen how in periods of uncertainty and flux there were opportunities in organiser roles and for the emergence of new projects.

Cameo 21 demonstrates how new projects can emerge in the fallout of feelings of ownership uncertainty. The cameo shows how an organiser became aware that there were too many initiator-organisers in the emergence of a community garden and as result it was unlikely all organisers would be able to have an equal role and be

Established and Emerging Projects in Hull and Copenhagen.

employed in the project. In light of this some organisers left to establish a different type of UA in another part of Copenhagen.

Cameo 21

A community garden was started by a group of eight organisers in Vesterbro, Copenhagen. One organiser described the impact of having so many organisers for the project, "there was so many of us. I was sure that we could find a way to make it work better and to do it in a way to make some jobs. I was sceptical. If everyone wanted to be a part of it in the long run, how was that going to be possible because it was hard enough just to make one job within it and it needed that at the beginning at least. So, we [three of the group] just decided to leave the garden and do something else and make it so there was just a handful doing that project. It's survived as a project and I would be really sad if it didn't so us leaving the project wasn't because it was just gonna die out... if it continued being on just a voluntary basis for everyone involved then it would be nice for it to be a lot of people involved but I wouldn't be in a project like that for the long term so the way I was thinking was what's the future. It should be run by fewer people in a more sustainable way" (CO29).

At the same time of these members leaving, in another area of the city (Østerbro), an owner of a building approached the local kommune to offer space for a growing project. The site was previously used for car auctions and was a rooftop capable of bearing the weight of the soil, water and garden infrastructure, accessible by way of a large car lift. The result of the uncertainty for these three organisers was the development of a 600 m² Organic Rooftop Farm in 2013 (Figure 32). The project is run as an association with members visiting weekly to help prepare and collect a box of organic produce. Activities on site also include, tours, lectures, education, workshops, dinners, weddings and exhibitions. The main idea of the project is to create local and sustainable food production in the city by serving as a link between Copenhagen and organic agriculture, to inspire local organic markets and disseminate knowledge about food.



Figure 32 Growing beds at an Organic Rooftop Farm in Copenhagen.

Opportunities were also observed to have been created when an organiser perceived ownership 'crisis'. In one case an organiser identified that the control of the project was at 'risk'. The risk was of project ownership being transferred from an independent back to the GO who initially established it. For example, it was possible to see an organiser leave a project fully and then return during the research period, because they did not want the transfer of ownership to occur. This tended to be because of the work they had done to increase and preserve its independence in the past.

Opportunities were also created in uncertainty which led organisers to be more open in their attitude towards control in the project, agreeing that it was necessary to have more organiser roles. This meant new people entered a project and as a result new ideas, motivations, cultures and enthusiasm were brought to the organiser group.

In some instances, a strong sense of organiser ownership and identity of control within an established project enabled organisers to create paid jobs because they had become synonymous with the project and its successes. Older project organisers, who identified their own temporality as an organiser, could identify that they needed new organisers because at some point they would not be able to continue their role in the project. One example of how this occurred in practice was that when a project applied for funding for an employed organiser, that older initiator-organiser decided to continue working on a voluntary basis but gave a younger organiser the opportunity to be employed in their role.

The theme of an organiser's sense of ownership was particularly evident in the contrasting attitudes between organisers in Hull and Copenhagen. In Copenhagen, organisers had a greater understanding of a necessary level of transience in ownership. They were more aware of how the flow of people to and from the organiser role affects a project's persistence. There was a greater sense of pro-activity in leaving to start a new project when they saw that they could not attain a job from the project. Organisers in Copenhagen were also able to understand the increased likelihood of securing project funding for a new project by targeting areas with state-run regeneration programmes. The parameters of ownership for organisers in Hull were more fixed and there was less movement of organisers from a project which they had themselves initiated. The cameos used in this section highlight contrasting experiences of how this happened in practice in both locations.

7.2 'Everyday' Barriers For Urban Agriculture Projects

This section explores the many barriers experienced by project organisers. The barriers explored affect the ability of organisers to establish and run their project. Barriers are complex and evolve over the existence of a project. This section adopts a similar format

to the previous section in identifying a barrier but also describing how in some cases, organisers have formed strategies to mitigate the effect of these barriers.

Project participation and financial economic security are the two biggest challenges to running UA projects according to project organisers. How and why an organiser seeks economic security was discussed in Chapter 6. The reason that it was a considered a 'persisting' quality in that Chapter is that despite the acceptance that it is a barrier to UA, organisers continue to initiate new UA projects. The following section of this chapter explores the fragmentary experience of participation by many project organisers. This is considered an 'ephemeral' project quality because a lack of participation is nearly always the root cause of a project's financial insecurity.

In light of this, this section will explore barriers beyond the two most dominant challenges for projects. It focuses on the 'everyday' barriers which are experienced frequently by organisers. This is important because these 'everyday' barriers are being experienced at the same time as the bigger challenges of participation and funding. When asked about barriers organisers often listed many features they deemed problematic. As example an organiser of an established project listed, "the obstacles have been funding, tools, equipment, managing the site, knowledge, skills" (HO1 Therapeutic Community Garden) and the organiser of an emerging project which had since ceased listed "people, red tape, occasionally time" (HO9 Children's Centre Community Garden).

There was a general feeling by organisers that established projects had learnt a significant amount about how to overcome barriers because of the process of emergence. For example, an organiser of the urban orchard described this retrospectively, "if I had to this again, I would do everything completely different because I have learnt such a lot, a massive amount. There was lots of short-sightedness, myopia gone mad because nobody actually knew what they were doing" (HO38 Urban Community Orchard with Wildlife Community Garden).

The barriers discussed in this section are the length of time it takes for a project to emerge and become an established project. This is followed by the challenges related to 'risk' how it is perceived and managed within projects and anti-social behaviour.

7.2.1 Time Period of Emergence.

The period of project emergence was longer than many organisers had anticipated. In cases of projects establishing during the research period, organisers typically described the project as being two years behind their expected opening date. The organiser of an independent urban mobile container farm described how the length of time had become "frustrating" and felt that it had become "a fight" to get the project established, "a lot of people have good ideas but this is too good an idea not to keep fighting for it. It's

coming through, we haven't hit a brick wall everywhere and we've got some support from significant businesses in Hull. It's just frustrating because it takes so bloody long" (HO32). The urban farm has two organisers. The other organiser also identified "length of time" as a barrier to the project's emergence. However, he also identified how time had created opportunities for the project in terms of applying for more funding and developing more partnerships, "we were hoping to get going this summer and we were going to be pushed to do that but that really is a blessing in disguise because it's given us the opportunity to look for more funding and get more people on board" (HO31).

This echoed the experience of the organiser of the rooftop community garden who had initially sought to establish the project the previous year. The time had allowed for better planning of the project with the organiser "able to start again". He described how "we just ran out of time. We weren't giving it justice, quite how much work it would take putting into it. So, time was just running away. We just scrapped it because I was ultimately thinking we are doing it wrong, so let's start again" (HO40). Within this description it is interesting how the organiser perceived that there was a 'right' and 'just' way to practice UA.

Not all organisers were able to feel so accepting of the time period. Some organisers with external funding felt pressured by their funders to establish the project within a specific time limit. The reason for this was that funding bodies wanted to physically see what they had invested in. One organiser felt this pressure, which was compounded by vulnerabilities of 'open' access to the site, "the funders were like 'come on are you going to do it?' But what I needed to do was to be able to coordinate the time to get all the deliveries together because I didn't want to just have wood and pavers turn up because I think they might have gone walkies [stolen]. So, I had to make sure everything came on the same day but we got there" (HO26 Sports Club Community Garden).

In Cameo 22 we see how other obstacles and unpredictable site incidents experienced by the organiser also impacted the period of emergence. The result of this was project ephemerality with the organiser ceasing to continue re-establishing an existing project during the research period.

Cameo 22

In 2013, an organiser wanted to re-develop a community garden at a government organisation-run Children's Centre in Hull. There was a project previously established on the site but it was not being utilised by the children's centre nor were activities being run on the site. The independent organiser sought to re-establish a project on the site with the aim to "teach kids about where food comes from, what healthy food is, what you can eat and what you can grow, all that kind of stuff". However, in the process of re-establishing the project the organiser faced many obstacles.

The first obstacle related to the "technical" and "legal" permissions to run a project on the GO-owned land and the time it took for the land to be secured by the organiser, "there is a contract. The council had to have their legal team look over, which took about a year. That is why it was

so complex. It just sort of says 'token rent, next to nothing, you can deal with it [the site] for a while, as long as you want to'. It took so long because of council processes". This supports findings in existing research which has identified bureaucratic resistance (Wakefield et al 2007) and land security (Knapp et al 2016, Saldivar-Tanaka & Krasny 2004: 399) as UA project barriers.

A second obstacle occurred during this year long period of waiting for the legal team to create a contract. An incident happened on the site as described by the organiser which had long-term repercussions for the emergence of the project, "I was in the garden one-day and guys turned up to spray pesticides on the area and I kind of reacted quite strongly to that shall we say. I went to talk to the people and said 'you can't do this we are growing food for children. You can't just spray in there' [land surrounding electrical substation next to the community garden] and I went through all the EU pesticide regulations to say it will be declared as something serious soon. The guy went away to talk to his boss, he came back and he said, 'my manager says that I have to do it. I have to spray'. He did say 'one thing we can do is we can set aside an area' and I thought well that is a little bit of a result but then I did start to think that is not good enough really".

In response to this the organiser used social media to try and stop this happening "I got on twitter and I tweeted [the electricity company] and said 'help! They are going to spray an area next to a children's food growing area. We have to stop this. Can we use the land for something else?' I got a message back kind of pretty soon saying 'ring me' (laughs) and that got things happening. The company didn't want people to see that".

Whilst this was happening the organiser described how, "the guy said 'I'm not going to spray, don't tell anybody but I haven't got the heart to do it'. We got success on the day, we got a contact [at the electricity company]".

The organiser went on to explain the response of the electricity company and another time-related obstacle, "they were amazed. They didn't quite know what to make of it at first. I think it was their first time, there was an extra issue involved which kind of made things worse because we were struggling. The person who was our local representative [of the electricity company] has such a large area that they are only going to come to this area if there are lots of other things to do. So I mean there were 6 to 8 months before we heard anything anyway although the initial response was excellent" (HO9). The organiser explained that six to eight months later the company began to support the emergence of the project and "put drainage on their sheds for water butts" to be used by the organiser.

The length of time that these processes took slowed down the emergence of the project and had a detrimental effect on its future. The initial enthusiasm of the organiser had diminished through waiting and workers at the children's centre had observed what had occurred and began to think that the project idea was too risky. The organiser described having "lost heart in the project" and realising the project according to the initial plan became an overwhelming prospect for the singular organiser. As a result the organiser went and removed everything they had begun to reestablish on the site and distributed it to other active UA projects.

7.2.2 Risk Perception and Risk Management

Risk manifested in projects as a barrier in two ways. The first way was in risk perception, how dangerous UA was perceived to be by the local authority. The second was how project organisers had 'risks' to be identified and managed within their projects.

Through using a longitudinal approach to the study of UA it was possible to observe how local authority attitudes towards UA changed. As shown in Chapter 5 *The Emergence of UA Projects*, the local authority in Hull has a longstanding role in the

emergence and management of allotments across the city. Additionally, in the 1990's, the local authority gave permission for two pioneer therapeutic community gardens, one run by a governmental organisation and another that was independent. The organiser of the GO run community garden described how risk was managed in the formation of that project, "the Trust [wider organisation] was worried about risk and how would we manage risk. Off the back of that everything we did and everything that we do is risk assessed. Every tool and every action has been risk assessed, it goes through that process, so although that seemed really long winded. It was important to do" (HO1 Health Centre Therapeutic Community Garden on Allotment Site). Permission was given for these projects because it was perceived that the organisers had the "organisational capacity" and associated skills and resources to be able to manage risk. Permission for the independent therapeutic community garden was granted for two reasons. The organisers had funding and the proposed land for the site had been historically problematic for the local authority with high rates of criminal activity.

As UA has re-emerged and diversified to encompass different types of project the local authority has changed their attitude towards the formation of UA projects on stateowned land. Originally, they deemed there to be too much risk in allowing independent groups to run and manage land. The local authority considered urban farms to be more of a risk than community gardens because of the addition of livestock. The organisers of an urban mobile container farm described how the local authority perceived their idea, "they won't accept new technology and new ideas and they would rather go with something that is safe and boring and just traditional. So, I think that has been one of our biggest problems and I think it still could be, we seem to be caught up in a political type idea that what we are doing is too new and unique and Hull isn't the place for it... we feel in one way totally let down. Just totally disappointed and sad with them" (HO31). The organiser simply had to "cope" with the local authority's attitude and hope that the "council doesn't push their noses into what we're trying to do". The other described the project as "dynamic" and that "the council should have bought it" (HO32). When asked as to why they thought the local authority had these attitudes, the organiser felt that the local authority, "all go for safety, somebody high up somewhere has said no we cannot take these two [organisers] on because they have not been on the go long enough. This idea is totally out of our remit" (HO31 Mobile Container Urban Farm).

However, over the course of the research period it has been observed that the local authority has changed their attitude towards urban farms. They have since allowed and funded a group of established NGOs to develop a farm on their land. That which is really interesting in how the attitude has changed, is that the local authority specified the land on which a potential farm would have to be sited. They identified 'high risk' with

land, which is directly next to a youth centre which also already has its own UA project. The organiser of the NGO city farm described the connection between the two projects in close proximity, "we have no connection, no official link whatsoever. It is a piece of land that belongs to the council. So as you see, we have put a sort of barrier, a frame there". When asked about why the project needed a barrier between the two, the organiser described that it was "to let those people in (youth centre) ...create a barrier for people at this project". The reason the organisers wanted to prevent their participants crossing over the barrier to the youth centre was "we have all sorts of people coming in here. So, one of our challenges, we have people who may be exoffenders and we are aware of the management of risks that we are going near a youth centre so that has to be managed and will be, it's not a problem" (HO33 City Farm).

Organisers also had to manage risk for participants. When projects were unable to secure funding for site facilities organisers had to find other ways to access facilities for themselves and their participants. The organiser of the longest established community garden in Hull described that it had taken over a decade to secure toilet facilities on site. The organiser recalled what happened before installation of the compost toilet on site, "it was a bucket behind a bush.. and then it was the kids they'd come for a workshop and we used to take turns in groups walking them over to another organisation for them to use the toilets (HO19 Therapeutic Community Garden). The provision of practical on-site facilities meant all organisers were able to stay on site. Additionally this has improved participant numbers to the site because it has enabled people to feel more comfortable spending time on site.

7.2.3 Anti-social Behaviour

A recurring barrier experienced by emerging and established projects was anti-social behaviour. This played out in a number of ways. Organisers faced vandalism and burglaries, "we have had loads of vandalism they set fire to benches, they broke into stuff, adults have broken into the portakabins on two or three occasions, it's been pretty terrible" (HO38 Urban Community Orchard with Wildlife Community Garden). Another organiser of a community garden on a public walkway called vandalism as "mindless acts", "someone just smashed it up and we'd done a lot of work and someone broke all the trees, smashed every corner of the picnic table and you think why". The same organiser explained how plants had been stolen and identified adults as responsible for the theft because of the way in which they have been stolen, "they are clearly adults as well because kids will pull it up or just trash it but you get adults stealing plants". When this has occurred the organiser "just replants them" (HO21 Children's Planters Community Garden). Many organisers had found drug paraphernalia on the site they sought to develop a project on, "it was used by drug users

as well. I have picked up a lot of needles, hundreds" (HO17 Housing Trust Community Garden).

One organiser in Hull experienced all the types of anti-social behaviour on-site as described above. She recalled coming in to the community garden "and finding piles of needles", she has also had to "move people out but every now and then there are occasions where I have had to ring the police or an ambulance and it's the usual drug and alcohol-related issues" (HO13). With such frequent occurrences of this on-site, the organiser had "toughened up" because "it is uncomfortable for volunteers if people are doing that". Frequently fruit and vegetables get "stolen" from the garden and the organiser recounted the initial impact this had, "when it first happened to me I was like, oh God. I was bereft but then you do say in your head perhaps that person hasn't got anything to eat" (HO13 Wildlife Trust Wildlife Community Garden). The organiser then has to explain that this may be the case to participants who are upset at the produce having been stolen. These participants may also be experiencing food poverty.

This was also the case in Copenhagen, an organiser described that a local resident "doesn't understand the idea of the garden". The organiser recalled seeing the resident entering the garden, cutting all the chives and stripping the broad beans. At first the organiser was reluctant to say anything but due to the frequency of the occurrence, the organiser intervened to say, "you came last week as well and this garden is for everyone and there should be some for next week, so you can't just come every week and take whatever you want" (CO6 'World' Children's Centre Playground Community Garden).

As a result of the continued experiences of anti-social behaviour, organisers have adopted strategies to cope. However, the strategies do not minimise the effect that the incidences have on organisers and participants. The strongest deterrent to anti-social behaviour was for organisers to be physically present on the site. This was either due to the openness of the project or the nature of the area. Organisers have installed security measures such as cameras on the site. The school community garden organiser described how the cameras combined with increased investment in the local area has "turned around that area" and reduced antisocial behaviour. The organiser explained how the local area "used to be known as a war zone, it used to be terrible, fights every night, stolen cars driven around every night, absolute nightmare, you didn't dare put anything down, you parked your car in the street and later there would be no tyres on it, it's been turned around" (Academy School Community Garden). The effect of antisocial behaviour on a project was "soul-destroying".

The church community garden organiser had aimed to increase access to the project and gave some community members keys to the locks. However shortly after there were reports of anti-social behaviour with participants entering the project at night time and playing loud music. The organiser has since changed the lock and reduced access to the

site, describing how "we've [the organisers] got to be here to be able to do that because of the area which is a shame" (HO16 Church Community Garden). The organiser felt that "trust" between organisers and participants had been affected. Other projects have been targeted by their own participants, a therapeutic community garden organiser recollected, "we had a couple of lads, they call it disaffected, don't they? When they don't go to school and they started to be great but then they were seen on the roof and they'd gone around and smashed all the pots up and that". The impact of this incident on the organiser was highly emotional, "I've cried, I've sat at home and I've cried about stuff like that but you always get more back. There's been more marvellous things than there has been bad things" (HO19 Therapeutic Community Garden). The site was vandalised again, when participants arrived and saw what had occurred they "walked out, they'd had enough".

The organiser of children's planters on a public walkway explained that drinkers congregate on the bench next to the planters. However, there are no rubbish bins in the immediate area and instead people use the planters. To tackle the problem the organiser described, "fighting [the local authority] at the moment for bins". The fight she describes is the length of time it takes for the community to ask for something and the council to deliver it. She described the process as "ridiculous". In the meantime, the organiser has developed her own strategy, where she has been tying plastic bags to benches, which has been successful, "people use them, it stops [in reference to waste being thrown into planters]" (HO21 Children's Planters Community Garden).

In experiences of anti-social behaviour organisers see unexpected involvement in the project and "*care*" by residents. Cameo 23 tells the story of how local residents became mobilised having witnessed anti-social behaviour on a project's planters.

Cameo 23

To provide context to the planters in 2013 a local outpost of a National Community Change Network was established. The wider network works on global issues which have local impacts, facilitating communities to develop solutions to challenges through positive green changes. Aims which specifically focus on food remit of work, include deliverance of support to families and individuals to aid in the development of a healthy lifestyle. Aspects include growing, cooking and eating together within a budget, healthy literacy sessions and the creation of volunteering opportunities which have a number of aims. The local network project organiser supports a number of services in Hull, including a homelessness charity, a women-orientated charity which helps in moving away from damaging lifestyles, a supported living project for homeless families (which also has an allotment plot), a charity aiding people with disadvantages into community work and an organisation promoting the welfare of the disabled and vulnerable (which has a centre and cafe).

For one project, the organiser "took over a number of planters last year to grow food in". The planters were then targeted by anti-social behaviour, "some young people vandalised the planters the other night". The organiser explained the response of residents to the planters, "what happened is a little old couple who have never been involved in the project, came out in the dark, with a torch and an extension cable and spades and put all the plants back in. That's a

Established and Emerging Projects in Hull and Copenhagen.

massive step. They might not have been able to stop vandalism, people will be people but the fact that someone came out in their own time to replant it, who would have never been part of the project. It is a massive step and that's what it is about, we've started to create a community who actually cares" (HO43).

7.3 Fragmentary Participation

Managing the consistent involvement of participants was considered by organisers to present the greatest challenge in running an UA project. The organiser of an urban orchard in Hull expressed the gravity of the challenge, "my biggest fear is that we lose too many volunteers and we have got to close and I really don't want that to happen. That's got to be my main concern this year, it has to be" (HO38 Urban Community Orchard). Section 4.2 Demographies of Actors in UA differentiated organisers and participants. This section explores how participation is enacted within UA projects. Organisers hold mixed attitudes towards and have differing experiences of seeking and having participants. The section focuses on the often complementary and contrasting ways participants present both an opportunity and a challenge for organisers. Exploring participation furthers understanding of the negative consequences for projects which are unable to move beyond a fragmentary experience of having participants. 'Fragmentary' in this section describes the changeable nature of participation with unpredictable increases and decreases in participant numbers. Participants are considered by organisers to be a critical project asset, which directly affects the ability of a project to remain active in the foodscape. Organisers of projects, which do not have consistent participation numbers, can become at risk of closure (ephemerality). The core reason for this is the relationship between participation and funding, low participant numbers reduces the likelihood of an organiser being successful when applying for funding. The quantity and depth of data collected on this theme during the research period reflects how important issues of participation were to organisers. Generally attracting and engaging participants was considered more important to organisers than a projects ability to produce food.

Participation has been identified as problematic for community gardens in the literature; with Guitart et al identifying "managing volunteers or volunteer drop off" as a common challenge theme in their review (2012: 368). The section will explore, in turn, why organisers seek participants, how satisfied organisers are with current levels of participation, the methods used by organisers to attract and engage participants and the challenges with participation for both emerging and established projects.

7.3.1 Rationale For Seeking Participants

To begin to explore the important role participants have for projects, it is first necessary to understand why organisers seek participants to attend their project. Although this may be seemingly obvious, in practice the reasons are more complex. The reasons are complex because for organisers having participants attending their project is representative of more than just attendance. Organisers equated participation with the project being 'stable' and 'successful'. Organisers equated this project 'success' with

having been able to fulfil aims as a result of their interactions with participants. For example, organisers this meant having "inspired", "changed attitudes" or "convinced someone to try something new". The organiser of a wildlife community garden felt the project was successful when she observed, "seeing a difference" in participants. The organiser continued to explain seeing this difference when a participant has learnt about food, growing or wildlife and retained what they have learnt. For example, "when a kid comes up to you and says ahhh look at this or there is a little boy that came last year and I showed him the Nasturtiums and now he comes in and he was like where's the Nasturtiums and a three-year old saying Nasturtiums is just the best thing in the world" (HO13 Wildlife Community Garden). To equate 'success' through aim fulfilment was exhibited more strongly in NGO and GO projects. For example an organiser from an NGO had two main aims, "the Trust has really clear objectives as an organisation and the main one is to create living landscape which are areas which in wildlife...the other thing that is our key objective is to educate and inspire and you can't do that without showing people what you can do and giving people a place to enjoy it" (HO13).

This was also evident in the experience of the organiser of a GO therapeutic community garden who saw difference or changes within participants, "they [participants] can do things and they can focus on something and you can see people who haven't smiled, they haven't cracked jokes, they haven't been appreciated, you can see that they are becoming the person they can be, the person comes to the fore" (HO1). The same organiser went on to describe seeing the impact on participant lives outside of the confines of the project, explaining how a participant "can move on, they can get the train to London to go and see a show, spend time with other family members or get in touch with their daughter who they haven't seen in a long time, All of those things that are important to people's lives and getting those people who have disengaged, back" (HO1). Figure 33 shows data provided by this organiser. The figure displays a rare example of participant evaluation in which the organiser has specifically set out to learn what the effect of participation has been on individual attendees.

What are the benefits of attending the group?	What are your future plans/ hopes/fears? (Long and short term)	What have you learned/enjoyed?
 Increasing confidence. Being able to see a change. Awareness of food. Improved sleep pattern/routine. Social skills. Increased horticulture knowledge/skills. Fresh air. 	 Meet someone and settle down. Unpack stuff in new house. Attend allotment group. Fears of slipping back. Fear of confrontation. Fear of upsetting people. 	 Rhubarb is a vegetable not a fruit. I don't upset everyone. Watering. Managing a hanging basket. Managing the garden space. Able to walk from car to the front door of the building. Able to work in a group. Can get on with people. Staff attendance and engagement in the garden party. Mindfulness. Sharing creative ideas. Being creative. Social aspect, made friends. Group talks.

Figure 33 Evaluation by organiser on the impact that project participation has had on an individual.

Independent and network organisers also seek participants to fulfil their aims however participants also have a more contributory value to the project's ability to remain active. This occurs in two ways. The first was that demonstrable continual participant numbers were required to satisfy the criteria set by funders in the initial set up of the project and there was pressure to maintain these numbers to qualify for subsequent economic security in the next funding cycles.

The second way this occurs is that organisers need to engage participants to the extent that they can take ownership of the project so the organiser can reduce their role in the project or leave the project (as shown in 6.3 Managing Involvement and Feelings of Duty). A community garden organiser was concerned about who would take over the project, "I'm not getting any younger. I'm getting older and it's getting the parents involved. We've run four sessions this year now. We had about thirty people including children at each session but trying but trying to keep them involved and get them to take ownership of the garden. The idea is that now we take the names of people and contact them and say would you be prepared to do an hour a week of it. The biggest problem is that, it's a real worry. To get community people in is a real worry, the idea is to get the community engagement in mind because I turned around and said well I can't do this forever. Somebody eventually will have to take over" (HO15 Academy School Community Garden).

To summarise, organisers seek participants for reason three reasons, they are a mechanism through which organisers measure project success, for fulfilling the criteria as set by funders and so that participants can take over control and ownership of the project.

7.3.2 Variation in Satisfaction Levels with Participant Numbers.

The attitudes of organisers towards participation levels in their projects ranged from highly satisfied to highly dissatisfied. To explore this, the section outlines these experiences, provides potential rationales for each experience, looks at how this played out depending on how established the project was and compares participation in Hull and Copenhagen.

Organisers who were satisfied with project participant numbers never had to actively seek participants. They were able to maintain consistent numbers of participants attending their sessions. Generally, organisers of community gardens and urban farms were more satisfied. An organiser of a community garden which has individual 'allotment-style' plots described having, "a reasonable number in terms of people growing, a few plots that haven't taken but generally we are oversubscribed" (HO14 Development Trust Community Garden). The organiser of an organic rooftop farm stated that they had planned to gradually increase in participation in line with production "the first year we had 16 members. Members can be a family or a single person. We could grow for 20 but we didn't want to have a full membership the first year" (CO30). The organiser of a black and minority ethnic (BME) community garden identified the changing nature of participation each week "we had 20 registered at the start but it's more than that we've had 60 people, 50 people, 25 people, 35 people" (HO24). That which is most interesting about the experience of this organiser is that he distinguished between having participants who are "registered" and other participants who attend. This is explored further in Cameo 24. The cameo also shows the close relationship between networks and UA projects.

Cameo 24

A BME Community Garden was established in 2013 for the black and minority ethnic community in Hull. The project grew out of the establishment of a BME Environmental Network. The project emerged in response to the role of food in the environment and its transformative potential as part of a sustainable economy. The organiser described it as a natural progression of the other areas important to the network which includes "environmental education and awareness, food growing diversity, energy and waste reduction awareness, carbon literacy, public health awareness, training opportunities for BME's in the environment sector, volunteering opportunities, community engagement, community space improvement and built and natural environment access".

There are four large vegetable planters between houses on a residential street. The decision of what to grow focused on crops that are climatically appropriate to the UK. This has the added benefit as described by the organiser for new people in the Hull BME community to learn and discuss "typical British food". The produce is shared and surplus goes to a weekly open door refugee centre.

The organiser described the challenge of trying to attract and engage the BME community into UA and wider environmental issues. He described how "most BME's in this country might be students or refugees or asylum seekers or illegal here. So if you are illegal here the first thing you want to do is organise your immigration status which is a huge priority for you. Then you want to have a job, get a steady income and then you can start to think about a family. So these

are your priorities in ascending order. Then environmental issues tend to be very least on the ladder".

The organiser described disconnect between BME community priorities and environmental issues. He identified the need for understanding the perspective of potential participants in trying to engage the community in environmental issues. The organiser described "when someone is an asylum seeker and you try to engage them to talk about recycling, telling them what they can or can't put in a bin or tell them to do a bit of gardening. Some of them are too afraid to even go out". The organiser went on to describe how he had managed to engage some of these people in the community garden project and wanted to be able to show he had engaged them and show that "these people are taking part in this activity" but "they don't want to give their details because they think look, who are you giving my details to?" (HO24) The result has been that the organiser may have 20 people registered and 'officially' participants in the project but the actual number of attendees is much higher. This also highlights how UA projects often have 'hidden' participants with organiser's building significant levels of trust with minority communities in the city. However, this is often at the detriment to an organiser's ability to have the project considered 'successful' by funding bodies which effects their ability to adequately evaluate their project for securing future project funding.

When probed as to the rationale for consistent participant numbers, organisers often pointed to the potency of the idea, citing original characteristics of the project. This included being the first of a specific type of UA project within the country, city or within an area of the city. The organiser of a Mobile Container Urban Farm identified one way to ensure participation in a project "you get them if you've got an inspirational venue" (HO33). However, this project was in an emerging phase. Other aspects conducive to satisfaction in participation included being a unique hybrid of UA project types, for example the conflation of a community garden with a wildlife garden or an urban farm and restaurant. The ability to provide activities, which included growing, cooking and eating (or at least two of these elements) and gaining on-site provisions such as parking, toilets and bad weather cover were important to having consistent participation.

However, despite these positive attitudes, even those who recounted never having needed to seek more participants to the project still considered them the greatest challenge. Those who felt frustrated by the lack of people the project had attracted were in a state of "constant panic". In addition, they were annoyed at the amount of discussion around seeking participants but an absence of action, particularly when participants for the project were needed to secure funding. One community garden that has been established since 2013 has only had six participants involved.

A handful of organisers alluded to the improbability of engaging everyone with UA and that it simply would not be suitable for everyone but valued the participation of the singular visit participant. In terms of participant numbers, there was a need to secure a specific type of participant one who would attend a project activity, become engaged in the project and remain active for a prolonged period of time. For organisers, this is preferable to ephemeral participants who "dip in for a few weeks or months and then

disappear" (CO22). As clear in the following quote, organisers have accounted for participant numbers but were hesitant and unsure whether this was a reasonable number, "we have got about 13 people who come but we are only on site once a week. So, we come down on the Tuesday, we come down at 10:30am until 3pm and that is it now and we have actually had 150-160 people discharged through the project. We don't know if that is good? And one of our volunteers who has been with us for 11 years" (HO1 Health Centre Therapeutic Community Garden). The quote also highlights how the length of time a participant has been engaged in a project was a marker of participant success.

7.3.3 Factors Impacting The Organiser Experience of Participation

A number of factors have been identified which influence how satisfied organisers are with their participation numbers. The following list describes the factors which are impacting how organisers experience participation.

i. How demographic-specific initial project aims were.

Organisers who established projects with the aim to target a specific demographic group, expressed being more satisfied with their participant numbers. By narrowing 'who' the project was for organisers were forced to think more carefully about how to attract their specific participant group. The most satisfied were organisers of projects that were established for children. The organiser of the Children's Planters Community Garden had increased participation as a result of targeting children initially, "I originally started it for kids but what is happening is, it's becoming a family affair. So kids are doing it, the grandparents are doing it, uncles are doing it, mums and dads are doing it. We have got a membership now of about 60 or 70 and we don't see all the same people every week" (HO21). This was also the case in Copenhagen with a collaboration event between a community garden, playground, park and school, having "an expected turnout of between 500-1000 people but the actual number reached long over 2000" (CO2 'World' Children's Centre Playground Community Garden). However, UA projects within the grounds of a school had organisers who found it particularly difficult to sustain participation. The reason for this was the transient nature of education. This meant it was difficult to engage parents long term because their children would be moving on to continue their schooling elsewhere after a few years. School garden organisers increasingly relied on one person's keenness to ensure the project continued without which the project would stop running activities.

ii. Whether a project emerges from an existing service.

Projects that had emerged out of pre-existing people-centred services had organisers who expressed more positive attitude towards participation. The reason for this was that a greater number of potential participants were already interacting with the service on

site. For example, the church community garden have a congregation and a Tuesday 'pay as you feel' lunch club which the garden was set up to supply produce to.

- iii. The location of the project site.
 - The location of where the project had been established also influenced organiser satisfaction with participation. This impacted participation because of how accessible and visible the project site was from the street. Participation depended on the reason the public had to be in proximity to project site. For example the children's centre community garden had high footfall because there was a nursery on-site and a primary school next door and the library community garden had the public visiting to use the library services.
- iv. The development stage of a project, whether emerging or established.
 - The development stage of the project, whether emerging or established also had an impact on the participation experience. This greatly impacted the consideration organisers had given to participants. For established projects, organisers had experienced cycles of high and low participant numbers in which organisers expressed reaching an "adequate number" of participants and then struggling to have any. Organisers were often surprised when numbers unexpectedly increased and felt in some cases they had lost knowledge about how to 'have' participants. Emerging project organisers often lacked skills to be able to attract participants and were hindered by the project's lack of 'identity', "it's about promotion of the thing".
- v. The development stage that organisers sought participation.
 - The point in a project emergence at which organisers sought participants also played a role. Organisers who had used public consultation in the planning and initial infrastructure development of the project had more consistent participant numbers. The inclusion of participants at an early stage of a project's emergence was more evident in Copenhagen than in Hull. However, some of the projects, which had a long emergence process in Hull, were beginning to involve the participants at the very beginning. It is increasingly prevalent that organisers run sessions with participants to build a site together.
- vi. Type of UA project.
 - UA type also played a factor with the organisers of urban farms being more satisfied with participant numbers. The reason for this was that urban farms had generally received more media attention than other forms of UA. In these cases, media outlets had approached the organisers rather than the other way around. In some cases projects had participants earlier than the organisers had planned as result of the attention.

To summarise, factors impacting project participation included, who the project aims to be for, the UA project type, how the project emerges, where the project is, how developed the project is and at what stage organisers seek participants in the development of a project.

7.3.4 Attracting and Engaging Participants to a Project.

This section differentiates between 'attracting' and 'engaging' participants. They are separated because organisers themselves distinguished between these two participant-project relationships. 'Attracting' participants related to how organisers sought to promote the project to people who were unaware of its existence. 'Engaging' participants relates to forging a deeper relationship between the participant and project such as them attending an activity offered by the project and longer-term involvement.

7.3.4.1 Attracting Participants.

To attract participants organisers used two different methods, *internal* and *external*. Internal methods were ways in which organisers used the physicality of the site to attract potential participants. External methods are ways organisers attempted to engage participants beyond the project site. Before discussing these methods it is necessary to outline that some organisers considered the union of projects and participants to be a naturally occurring process and a path which will develop over time regardless of organiser intervention. Organisers who shared this view generally thought the best method of attracting and engaging was for the participants to do it themselves. By this they meant passing the project and becoming interested or searching for UA projects to become involved with online. Although the most common experience of organisers was to adopt strategies to attract and engage participants.

A number of *internal methods* were used by projects from across the structural groups. This included signs on the street, which had both a "subtle and direct impact". Signage was considered important to organisers in attracting participants. In a permaculture community garden in Copenhagen, the site had signage in both English and Danish, the organiser described why this decision had been made, "everybody thought that it was common sense to have it in English and Danish because we are in Denmark and because there are lots of international volunteers. It made sense. It's more socially inclusive" (CO22). Many organisers have been trying to draw on the increasing popularity of posting images on social media by encouraging people who pass the project to take images of what they find in the garden so that the project can reach new audiences. Organisers were continually striving to understand what an UA project should look like. They needed the site to be perceived as an "open and welcome space". To achieve this organisers often asked residents living in proximity to the site what they liked and how they thought the site could be improved. How long a project had been

established influenced the strategies used by organisers to attract participants with established projects relying on methods they have used which have proved successful. Organisers of established projects were more likely to highlight the importance of word of mouth for attracting new participants. Emerging project organisers were quick to articulate that they would "have participants" and they would be seeking to attract potential participants but had given less consideration to how they would do this.

Organisers also used *external methods* through which to advertise the project beyond the confines of the sites' physical space. There were many similarities across the structural groups in how organisers used external methods with a few key observed differences. In terms of similarities organisers considered having a social media presence as one way to attract participants, with one organiser describing that they "run eight twitter feeds". Organisers also discussed their projects on local radio but found it difficult to maintain personal connections at the radio stations due to high staff turnover. Organisers produced project business cards, leaflets detailing project aims or events and created websites and email newsletters (See Figure 34). Organisers attended 'city-wide' events such financial inclusion forums and ran stalls to advertise projects and put leaflets up in existing resources in close proximity to the project site including local shops, community centres and libraries.



Figure 34 *Left:* Leaflet produced by a Therapeutic Community Garden *Right:* A leaflet created by an Organic Rooftop Farm and distributed to attendees at the Conference on Urban Farming. The envelope contains kale seeds.

A considerable difference emerged in how projects attracted participants between 'NGOS and GOs' and independent and network projects. Projects which were part of wider organisations often had employed communication officers to advertise the project. Projects of this type also used dedicated volunteer organisations whose work specifically matches people with projects as befits the type of volunteering the individual wants to engage in.

Some interesting observations were made about organiser attitudes towards attracting participants. Firstly organisers struggled to maintain a project's online presence because

their motivation to establish or engage with a project initially was to be "hands on". There was a juxtaposition between advertising a project and the nature of growing. Furthermore, and ironically, organisers perceived a well 'marketed' project as being an unsuccessful project because if the organiser had the time to maintain an online presence then they were not dedicating adequate time to the project site itself or their participants. There was also a difference in how organisers of Hull and Copenhagen felt about attracting participants. Organisers in Copenhagen were more optimistic in their ability to attract participants through internal and external methods. However some Hull organisers attributed poor marketing of their projects to the area, "it's a Hull thing, we're bad at it generally". The rationale for this was because traditional methods were found to work best there such as through the local newspaper.

7.3.4.2 Engaging Participants.

Organisers differentiated between how they attract people to their project and how they engaged an individual into the project. They identified the relationship between the two as a process with one organiser describing there being a "tipping point". This 'tipping point' occurring when a participant went from knowing about the project to "becoming part of the garden" (or project) and engaged in the activities.

To engage participants, organisers used both informal and formal techniques on site. Informally organisers made an effort through actions that were "small and important", for example "having at least a conversation with every person". Organisers changed their own behaviour to facilitate participant engagement "by being someone people want to talk to". Organisers also adapted the activities of a project to enable participants to engage with aspects of the project that they were attracted to or tasks which were more suitable to their ability. The rationale being that a participant is unlikely to engage in the project regularly if they do not have the freedom to complete tasks they enjoy and are able to do.

If unable to engage participants directly into a project's activities, organisers used 'peripheral' aspects of the project. Peripheral aspects of a project are the non-food production activities they run. Organisers generally accepted that UA would not appeal to everybody "but we can get them [participants] here for something else". Examples included, letting people borrow books and tools, combining the site activities with arts and music and allowing students to use the project to complete requirements of their degrees or to gain work experience.

Informal techniques were more frequently used. However there were examples of more formal techniques from NGOs and GOs. One NGO project organiser explained how their training programme called "formal ladder of engagement" worked, "for us trainees are a step up from a day-to-day volunteer they will be volunteering for more

time per week and they get a training budget. The idea is you are taking somebody who wants to move their career forward. The organiser considered the success of the programme, "all of our trainees at our sites have come onto jobs in the sector or very similar sector or further education and they gain valuable experience". The individual also identified what she termed "unsustainability through the knowledge lost as a result of planned participant transience in this formal method, "there is a little bit of unsustainability there because they're only there for a year and then they go and get jobs and you've lost that amazing skill set and knowledge" (HO13). Formal engagement techniques were also used by a GO therapeutic community garden, which had developed a partnership with a local agricultural college to run NVQ (National Vocational Qualifications) for participants. Organisers of independent and network projects expressed a desire to adopt more formal methods. However a lack of support, money, time and resources prevented this.

7.3.5 Challenges with Participants.

This section explores the challenges experienced by organisers in establishing an UA project and 'opening' the project to have members of the urban community involved. The size of this section reflects the many challenges described by organisers in Hull and Copenhagen. The research interviews were instrumental in providing the space for organisers to describe the multitude of challenges they experienced at the same time. In addition, as evidenced in the following section, organisers began to rationalise these challenges and signal towards the cause of them, not only stating their experience of a challenge.

Before exploring the challenges in turn, it is necessary to explain a clear difference in how organisers experienced participation. This difference was dependent on whether a project was emerging or established. Organisers of emerging projects did *not* foresee any challenges to the project having participants. These organisers were optimistic about the prospect and confident in the realities of what they perceived this to mean in practice. This attitude contrasts drastically to that of established project organisers. These organisers, with first hand exposure to attracting, engaging and *having* participants, described many aspects of participation that are negatively affecting the ability of a project to fulfil their aims and remain active in the foodscape. Established project organisers had the benefit of hindsight resulting from the process of emergence.

In this section I have included the contrasting experiences of organisers depending on project development phase. As each challenge is explored I will present the optimism and anticipated positive expectations of organisers of emerging projects alongside the challenging on-the-ground practicalities for organisers of established projects. This approach has been difficult to write given how drastically different the experiences were

but I remain committed to this as an appropriate approach for two reasons. One reason is that it allows for a balance of views by presenting both the experience of emerging and established project organisers. This is important because the attitudes of emerging project organisers are valuable in themselves and should not be disregarded on the basis that they have yet to experience challenge themes in the same way as established project organisers. A further reason is the usefulness this combination of perspectives has for research impact. It is useful for UA organisers or potential organisers to understand how challenges may affect them by providing a 'cautionary tale'. Additionally, this approach highlights the need for UA researchers to acknowledge the processes through which a project has come to exist.

Two broad expectations of emerging project organisers exist. Firstly (i.) organisers anticipate that when the project becomes established it will attract and engage participants as outlined in aims. Secondly, (ii.) emerging project organisers anticipate that when the project becomes established they will have the necessary resources to manage participation. I will use these two expectations to explain the challenges expressed by organisers whose projects had established.

(i.) When the project becomes established it will attract and engage participants as outlined in aims.

However, in practice, this was not the experience for established project organisers for a number of reasons. The following list explores these reasons.

• Communicating project practice when aims are constantly shifting.

As identified in Chapter 6, 6.1.1 *The Scope and Negotiation of UA Project Aims*, the aims of projects change when they establish. The reason for this is that organisers change their aims to align with funding body preferences. The result of this aim change on participation is threefold. The first is that who the project is for may also have to change. For example a project may have initially been set up for participation from young adults but after applying for funding the organiser receives money to run a series of events for keeping the ageing demographic active. The second result of aim change is that project remit moves further away from the initial organiser motivation and organisers become disillusioned about the impact of the project on participants. The final result is that organisers have to compromise on who they seek participation from relying on transient participant groups to get tasks done, such as students.

Organisers realise that initial aims are unfeasible and cannot be realised by simply establishing their project. Examples of this type of aim included, "create identity", "give pride" and "form a community". These larger ideals were more evident in Hull aims than Copenhagen project aims.

When aims specified inclusion of specific or 'hidden' groups, organiser struggled to know how to advertise their project to attract these groups. It became apparent that it was difficult to communicate that organisers actively wanted participation by individuals experiencing homelessness, food insecurity or people experiencing mental ill health, as examples, without compounding possible feelings of exclusion. If organisers decided to try and attract everyone in their aims instead they knew they would struggle to be everything to everyone. Additionally for projects situated on sites where the main activity is not the UA project itself, it is challenging trying to engage different people to all the variety that the site does.

• Low levels of project interest.

Organisers of established projects often lost momentum in publicising the project having 'become' established because they had dedicated their efforts to advertising the project idea in the emerging process. The organisers felt thwarted by underestimating the starting point for engagement of people who the project had been established for. Organisers initially thought the project would be about producing food in the city, however, in practice they found higher levels of urban community apathy than they had expected. This manifested in the prevalence of increasing crime levels, anti-social behaviour around sites such as residents disposing of litter and a generationally engrained systemic lack of community pride. The organiser of a wildlife community garden working across multiple projects was reticent to verbalise what she thought, "sometimes and I really hate to say it, but I don't think its always true, but there is a little bit of apathy in the city. When you're having to get over that hump before you can even engaged someone and get them on board" (HO13). Organisers in Hull and Copenhagen explained the importance of context. UA involvement had to mean something for participants to get involved and this was lacking. Organisers attributed this to "pandemic" low levels of food, nature and environmental education (HO1 Health Centre Therapeutic Community Garden). Not only did organisers face apathy by potential participants, they experienced resistance by individuals who they were accountable to. The organiser of a sports club community garden recounted how "people were saying when we were making this place, 'don't be so stupid'. Even the guy who runs the place, the chairman was like that 'I hate allotments' (gruff voice). I was forced to do works on an allotment when I was a kid, I don't want to have anything to do with it" (HO26 Sports Club Community Garden).

• Organiser groups disagree about who the project is for.

In practice, as aims were revised by organisers differences in opinion became more problematic. For example multiple organisers of the urban orchard had conflicting attitudes about who the participants should be. Despite all organisers recognising they

needed to make participant numbers a priority. One organiser suggested that they could have participants who have "mental health issues like depression, anxiety" or are "exdrug offenders, ex-alcohol offenders, that kind of people and I put forward that we [organisers] might want to bring these people down, actually help in the orchard in order to help their mental health" (HO39). The organiser was reticent to express this because they were not sure what the committee would say. When she shared her ideas about widening participation, the response was "the first thing they said is, 'if they are ex-druggies aren't they going to burgle us?" This showed attitude difference between with the organiser who had the idea responding, "maybe they won't because they might fall in love with the place like we have and that's the idea and they are ex-drug users not current" (HO39).

Organisers of emerging projects also anticipated that when they 'have' participants, participants will feel the same way about the projects as the organisers do. However in practice organisers who have experienced fragmentary participation recognise they feel more strongly about a project than participants do (as shown in 6.3 *Managing Involvement and Feelings of Duty* and 7.1 *Organiser Sense of Ownership*). The result is organisers are unable to understand how participants can come and go from a project or attend multiple projects. In some cases the organisers take this personally as a reflection of how they are running the project.

(ii.) When the project becomes established organisers have the necessary resources to manage participation.

However, in practice, this was not the experience for established project organisers for a number of reasons. The following list explores these reasons.

Attitudes and behaviours of organisers.

In projects with multiple organisers, interviewees often cited the attitude and behaviour of other organisers as negatively impacting participant access. For example organisers deterred participants because they lacked understanding and experience of having someone who is volunteering their time and instead treat them as they would an employee. One organiser described how *she* just accepted this, "he is a volunteer, not a paid member of staff so you just have to take these foibles and quirkiness and just roll with it really" (HO38 Urban Community Orchard).

Organisers of emerging projects expected that there would be fair exchange between organisers and participants. By this I mean that organisers and participants would contribute equally to activities of the UA project. However organisers of established projects had to constantly re-adjust the expectations they have about what participants can achieve within sessions. This was compounded by the project requiring participation for different things at different times. For example a project might need

more participants to help with harvests or participants to help with running an event, not only attending an event as a visitor.

Organisers found it difficult to identify how participants should be treated within the realm of the project. A community garden organiser described not being a able to phone a volunteer and ask whether they were coming back because in this case participants were attending by choice. Another organiser explained, "you can't shout at them [participants] if they do something wrong and that's a really difficult relationship to manage" (HO39 Community Planters). The more established projects recognised that they needed to value their participants, "it's keeping them and it's making sure you don't over work some and making sure they know they are valued and appreciated because they all have different motivations. Make sure they are getting something positive out of it" (HO43 Community Change Network).

In Copenhagen this was also evident but in a different way. Many projects had a high proportion of participants who were international students which meant, "suddenly it was exam period and everyone disappeared" (CO22 Permaculture Community Garden). This presented a challenge because the organisers themselves were international students, "I'm going to disappear for a month to Spain" (CO22). He described this as an "issue", he was developing a strategy for "we [organisers] have to talk about this, stop growing physically and start growing socially. There's too many internationals" (CO22).

Additionally, deficient mixes of personality traits and organiser skillsets provided a further hindrance. For example, organisers described the tendencies of some organisers to be anti-social despite an organiser having self-appointed into the role to attract more people. The need for good communicators or the "skills of a teacher" within an organiser group were deemed important as without participant understanding of the project and tasks, they can become disengaged negating the organiser effort to get people to the site.

Managing participant needs.

Established project organisers experienced barriers negotiating and making provisions for the differing needs of their participants. These barriers were present regardless of who the target participants of the project were.

Organisers who identified their project participants as mostly adults described their participants as having more complex needs, particularly when addictions were evident. Most organisers, except for those who run a therapeutic UA project were not trained to deal with this and felt inadequately prepared. One organiser of a community change network described that to be able to overcome this they would need "medical, social work and psychological training" (HO43 Community Change Network).

A sensitive theme that arose was the vulnerability of some project participants and how organisers experienced this. One community garden organiser spoke openly about this, but requested it was anonymised. The organiser described having suicidal participants attending project activities. A participant told the organiser that attendance had saved their life. The conversations occurred in an informal review where the organiser would chat to a participant on site whilst working. The organiser asked questions such as, "how are you finding it? What are you enjoying? Is there something you want to learn more about?" (Anon.). The organiser learnt how the project has "changed their life, I know where they started, I know where they are now. I can see that change" (Anon.).

The project of discussion does not receive funding to run a mental health specific program. This elicited complex feelings as described by the organiser, frustration because of the difficulty in communicating to the wider organisation that these incidents occur, heightened by an inability to report and receive support as part of the day to day running of the project. It also generated motivation to maintain having regular volunteer days and meant the organiser felt more compelled to stay in the role. However having vulnerable participants caused anxiety with the organiser leaving at the end of the day but "continually worrying" about that person, especially if they come for a session and then disappear (Anon.).

The urban location of the project was cited as the rationale for attracting people with complex needs. The organiser described that vulnerable people were attracted to the city and UA projects because they can feel part of a team and this contributes to a process of "normalisation" (Anon.). The organiser described the project as acting as a bridge between an individual's life challenges and "feelings of ordinariness" (Anon.). The UA project was constructive for the participant because the vulnerable person no longer felt vulnerable having become part of the UA project community. For projects set up specifically for participation by children and young adults, there were additional challenges when the organiser group lacked a gender balance. However organisers could only observe the impact of gender balance on a project when a change had occurred and the affect could be observed (Cameo 25).

Cameo 25

A GO community garden in Copenhagen has been established on the site of a children's centre and playground. The project is part of the 'Moving Line' plan, an initiative hoping to connect all of the green spaces through Nørrebro. The organiser's colleagues (from other playgrounds and employees of the Kommune) visited community gardens in Berlin and were inspired to implement the same at playgrounds in Copenhagen. The centre provides a space for parents to sit and talk (Figure 35). The organisers often help people if Danish is a second language or if there are aspects of the society that they do not understand. Activity sessions specific to growing are also run, where they make food with produce from the garden. Children and young people often use it as a space after school to play games, sit and think or complete homework. The aim of the project is to create a safe, secure and welcoming space for 'social gathering' where people from different ethnic and cultural backgrounds can meet in the garden. The

growing space enables them to jointly cultivate vegetables, herbs and flowers. There are plans to develop an outdoor kitchen producing cheap ethnic food created by everyone. The reason for this is that many people are using the space until late in the summer and they want to stay but often have to go home to prepare dinner for the family. The organiser described how the organiser team were all female until one member of staff left for a sabbatical. As they sought to find a new member of staff for the project, the organiser described the unexpected impact that gender difference in the organisers group had on the project, "he's only 19 and I feel that it is bringing a lot of young people back here now. It makes a difference to who comes in. It impacts whether we get males or female and we get more males now so it is really good that he is here" (CO6).



Figure 35 The entrance to the 'World' Playground Community Garden.

CHAPTER CONCLUSION

Chapter 7 has explored project qualities that are hindering the ability of a project to emerge and remain established in the foodscape. This chapter has fulfilled Objective (iv) to investigate factors enabling and hindering development by exploring hindering project practices and organiser behaviours. It has only been possible to observe these practices and behaviours by taking a longitudinal approach to study of UA project emergence (Objective v). Table 20 summarises research findings and addresses the implications of the finding.

This chapter explored four key areas considered ephemeral project qualities. The first, Section 7.1 *Organiser Sense of Ownership* explored organiser awareness and feelings over their ability to control what a project is and does. The section explored how ownership for organisers was omnipresent and complex, it was a quality that required protection, was subjected to testing, provoked uncertainty but also provided an opportunity for organisers. Of particular significance was the finding that organisers often articulated a desire for organisers and participants to be equal and wanted participants to have the same feelings of ownership over the project as organisers. However in reality organisers had to protect a greater sense of ownership to ensure the

persistence of the project. The section considered the difference in how feelings of ownership depending on the structural grouping of the project. The section demonstrated a noticeable difference between how ownership was experienced by organisers in Hull and Copenhagen and the detrimental impact this can have on the existence of a project. Organisers in Copenhagen were more likely to leave a project to establish a new project to increase the opportunity for paid employment as a result of UA.

Participation and funding were considered the greatest barriers for UA projects. In light of their significance they were discussed in their own section. Funding was discussed in the previous chapter (see section 6.4 Seeking Economic Security) and participation in 7.3. These extensive challenge themes were not the only barriers facing project organisers and section 7.2 'Everyday' Barriers For Urban Agriculture Projects, focused on the smaller and more specific ways organisers experienced barriers. This included [1] the time period of emergence, [2] risk and how to manage risk and [3] anti-social behaviour. The section was grounded in highly specific examples of challenges which organisers considered to manifest in their 'everyday' experience of UA.

Section 7.3 was a substantial discussion on project participation. The section demonstrated how a fragmentary experience of participation for organisers was a driver of project instability. This differed to current literature. In general, academic literature considers funding to be the biggest barrier for UA projects and usually mentions participants as a minor challenge. However this section demonstrated how project economic security and participation are entwined to shape the experience of both. Participation was a considerable factor in how projects experience economic security.

The section considered why projects seek participants, how satisfied organisers are with participant numbers and how they seek to attract and engage participants. The latter was considered in turn finding that organisers 'attract' participants through both *internal* and *external* techniques and 'engage' using *formal* and *informal* techniques on-site. The most substantial part of this section focused on the challenges participants present for projects in practice. The attitude and experience of organisers was very different depending on whether the project was emerging or had been established. To draw upon projects in both phases of development, the section utilised some of the expectations and assumptions articulated by organisers of emerging projects. These related to how they predicted the course of having participants to occur once a project became 'active' and 'open'. These 'assumption themes' were paralleled with the challenges described in practice from the organisers of established organisers. This enabled the section to present both the *ideals* held about participation in UA alongside the *realities* of the challenges on the ground. Besides highlighting the dichotomy in whether an organiser described this as a challenge or not depending on project development phase, it also

Chapter 7: Manifestations of Ephemerality In Urban Agriculture Projects

enabled the voice of all organisers in this study to be drawn upon. The final part looked specifically at challenges in the organiser-participant relationship. This identified disagreements between organisers about the role of participants in their UA project.

HAPTER 7 anifestations Of Ebphemerality In UA Projects IMPLICATION			
1	7.1.1 Ownership as inherent and complex	Relevant Stakeholders: UA Researchers	
rganiser ense of	Ownership is elusive in projects. Difficult to identify given its individual nature and	Future Research: I have identified the importance of the theme of ownership to the work of UA	
wnership	 Difficult to identify given its individual nature and complexity in how it was felt by organisers. 	project organisers. In future UA studies,	
	Ownership was elusive because it can be exerted	researchers should acknowledge the complex	
	over both tangible and intangible aspects of a project.	ways in which organisers display ownership over both tangible and intangible aspects of projects.	
	 Organisers considered having a sense of ownership as inherent to community work. 	Relevant Stakeholders: UA Project Organisers	
	 Organisers often articulated a desire for organisers 	Recommendation: Organisers should consider the level of ownership they want participants to have	
	and participants to be equal and wanted participants	within the project and consider ways in which	
	to have the same feelings of ownership over the project as organisers.	they can develop participant feelings of belonging to the project.	
	7.1.2 Ownership requires protection	Relevant Stakeholders: UA Project Organisers	
	 Lack of communication between organisers is problematic. 	Recommendation: The creation of an event in which organisers discuss ways that	
	 Tensions exist between the organisers of different 	communication between organiser groups can be	
	types of projects.	improved. Additionally, organisers need to know that all of them feel responsible for protecting	
	Organisers seek to protect the history and future	their project and ideas to retain project value	
	legacy of the project. Additionally organisers seek to safeguard 'value' in the project. This 'value' related	which is why they are reticent to develop	
	to the uniqueness of their project in relation to others in the foodscape.	partnerships.	
	7.1.3 Ownership is subject to internal testing	Relevant Stakeholders: UA Researchers	
	Organisers measure each other according to their commitment and motivation.	Recommendation: UA researchers must seek to account for the underlying power relations	
	 commitment and motivation. In testing each other's ownership organisers could 	between different organisers of the same project.	
	calculate which of them was going to take	UA researchers can do this by considering the	
	accountability for the project,	research location and whether organisers should be researched as a group.	
	7.1.4 Ownership; a producer of 'uncertainty'	Relevant Stakeholders: UA Project Organisers	
	and 'opportunity'	Recommendation: Organisers should pool knowledge on how they have turned project	
	Uncertainty and opportunity in ownership was observed to occur in two main aspects of a project in	'crisis' to an advantage.	
	the role of organisers and in a project's future. A strong sense of organiser ownership and identity	Relevant Stakeholders: UA Researchers	
	of control within an established project enabled	Literature Relevance: Organisers demonstrate	
	organisers to create paid jobs because they had	greater feelings of "commitment" and "obligation" to their project than participants as	
	become synonymous with the project and its successes.	identified by Glover et al (2005: 86). A future	
	Organisers in Copenhagen were more likely to leave	study which explored the relationship between these themes and ownership warrants more study.	
	a project to establish a new project to increase the opportunity for paid employment as a result of UA.	these themes and ownership warrants more study.	
2	7.2.1 Time Period of Emergence	Relevant Stakeholders: UA Researchers	
erriers For	Project participation and financial economic security	Future Research: Studies should focus research on the two greatest project challenges which have	
arriers For rban	are the two biggest challenges to running UA projects according to project organisers.	been identified in this. These are participation and	
griculture	 Organisers typically described the project as being 	economic security.	
ojects	two years behind their expected opening date.	Relevant Stakeholders: UA Funding Bodies	
	Some organisers with external funding felt pressured by their funders to establish the project within a	Recommendation: Funders should enable UA	
	specific time limit.	organisers to be more realistic in how long they expect the project emergence phase to be set. One	
		way this could be done is by creating a	
		mechanism through which organisers can set measurable goals.	
	7.2.3 Anti-social Behaviour	Relevant Stakeholders: GOs and NGOs and local	
	Anti-social behaviour was a recurring barrier avancienced by amorping and actablished projects.	police. Recommendation: Nearly all projects studied had	
	 experienced by emerging and established projects. As a result of the continued experiences of anti- 	experienced anti-social behaviour. Anti-social	
	social behaviour, organisers have adopted strategies	behaviour is negatively affecting the experience	
	to cope. However, the strategies do not minimise the	of organisers and participants. I suggest a session in which different groups meet to discuss ways in	
	effect that the incidences have on organisers and participants.	which UA sites can protect themselves from anti-	
3	• •	social behaviour.	
agmentary	7.3.1 Rationale For Seeking Participants Participants are considered by organisers to be a	Relevant Stakeholders: UA Researchers Future Research: Having identified the	
articipation	critical project asset, which directly affects the	importance of project participants, I recommend	
	ability of a project to remain active in the foodscape.	that researchers develop ways in which organisers could easily record participation and ways in	
		which they have engaged an individual.	

7.3.2 Variation in Satisfaction Levels with Participant Numbers Organisers hold mixed attitudes towards and have differing experiences of seeking and having participants. Organisers of projects, which do not have consistent improvement in project numbers many projects

 Organisers of projects, which do not have consistent participation numbers, can become at risk of closure (ephemerality).

Relevant Stakeholders: UA Researchers

may cease to exist because they cannot be

7.3.3 Factors Impacting The Organiser Experience of Participation

- Organisers often pointed to the potency of the idea, citing original characteristics of the project as a rationale for consistent participant numbers.
 However, despite these positive attitudes, even those who recounted never having needed to seek more participants to the project still considered them the greatest challenge.
- Factors which affect participation experience include, i. how demographic-specific initial project aims were, ii. whether a project emerges from an existing service, iii. the location of the project site, iv. the development stage of a project, whether emerging or established, v. the development stage that organisers sought participation and vi. type of UA project.

Future Research: The closeness of the organiser participant relationship can create a barrier to addressing food access and availability issues. This specific relationship and affect on addressi food access warrants further investigation.

successful in funding bids without participation

Relevant Stakeholders: UA Project Organisers. Recommendations: Organisers should consider using the factors I have identified which affect t participation experience to develop strategies th could improve participation. For example, consider engaging participants in plans to develor change the project site.

7.3.4 Attracting and Engaging Participants to a Project

- Organisers use internal and external methods to attract participants and to engage participant's organisers used informal and formal techniques on site.
- Organisers struggled to maintain a project's online presence because their motivation to establish or engage with a project initially was to be "hands on".

Relevant Stakeholders: NGOs, GOs and Networks

Recommendation: Organisations should work with UA project organisers to support how endeavours to advertise the project for new participant engagement.

Relevant Stakeholders: UA Researchers Future Research: Future studies should consider how UA project organisers use social media and consider the role of social networks in UA proje participation.

7.3.5 Challenges with Participants

- Identified disagreements between organisers about the role of participants in their UA project.
- Expectation of emerging project organisers when the project becomes established it will attract and engage participants as outlined in aims. Challenges to this included, [1] communicating project practice when aims are constantly shifting, [2] low levels of project interest and [3] organiser groups disagree about who the project is for.
- Expectation of emerging project organisers when the project becomes established organisers have the necessary resources to manage participation.
 Challenges to this included, [1] attitudes and behaviours of organisers, [2] managing participant needs and [3] gender balance of organiser group.

Relevant Stakeholders: UA Project Organisers. Recommendation: If disagreements between project organisers exist in terms of who participants should be and why projects need participants, this must be discussed because it have identified that a lack of project participatio can cause ephemerality.

Relevant Stakeholders: UA Researchers Future Research: Having identified many challenges to participation I suggest researchers identify where solutions to these challenges hav been implemented by UA project organisers on the ground.

Table 20 Summary of research findings from the chapter and implications of findings. Implications identify the relevant stakeholder of the finding and makes recommendations.

The next chapter is the final concluding chapter of this thesis.

Established and Emerging Projects in Hull and Copenhagen.

8 CONCLUSION

To begin to synthesise the findings of this research I refer back to the very start of the thesis. The aim of this study has been to explore the emergence of UA projects. This concluding chapter will demonstrate how I have contributed to knowledge on the process of emergence for the different groups who initiate UA projects. In addition I will present the ways in which I have increased insight into initiator behaviour and project practice, including how both relate to the process of 'becoming' established. To answer the research question a number of aims have been addressed.

Aim 1 was to explore a range of different types of activities included under the UA label together. I have addressed this aim primarily within the methodology chapter by developing a structural grouping typology. This brought together community gardens, urban farms, allotments, community planters and guerrilla gardens. The typology reflected the groups who were initiating these different UA activities. As specified in the aim I have included activities which could be perceived to have more innovative features as well as those which represent the more numerous 'everyday' examples of how UA is experienced on the ground.

Aim 2 specified investigation of established and emerging UA projects. I have addressed this aim throughout the data chapters (4 – 7). In Chapter 4 I considered why organisers seek to establish an UA project in the first instance and presented the practices of established projects. In Chapter 5 I investigated how both established projects emerged retrospectively alongside projects in the process of emerging. By investigating projects at different stages of development I have increased understanding of where, how and why projects are emerging. In Chapters 6 and 7 I investigated projects' practices and initiator behaviours in relation to both established and emerging projects to identify similarities and differences between their experiences of seeking to 'become' and remain established.

Aim 3 required exploration of UA from the perspective of project organisers. I began to address this aim in the methodology conducting semi-structured interviews with organisers. In projects with multiple organisers, each organiser was interviewed separately. These in depth interviews were conducted initially on the sites of their project and in a location of their choosing away from the project site. Chapters 4-7 were grounded in the organiser perspective. The perspective is evident in the personal themes to have been revealed by organisers such as belonging, action, ownership and

insecurity. The significance of these themes to the process of emergence was instrumental in shaping the structure of the thesis data chapters. The inclusion of cameos throughout added to aim fulfilment with organisers describing the specifics of how a theme was experienced on the ground.

Aim 4 was to compare UA in two cities. In the methodology chapter I explained how the Hull and Copenhagen comparison was developed including the rationale for their appropriate selection. In Chapters 4 – 7 I have used cameos from projects in both cities to address calls for "nuance and uniformity" (Mount and Andrée 2013: 578). The process of comparative urbanism informed understanding of the nuanced similarities and difference in practices and behaviours that exist between Hull and Copenhagen projects. City-specific nuances were observable as my insight into each city grew.

Having identified how this thesis has addressed the research aims I will now consider my contributions to methodological development. Following this I will explain how each data chapter has contributed to current debates surrounding UA, and discuss the further implications of the findings.

8.1 Methodological Development

The comprehensive methodology presented was carefully developed in response to the research deficiencies and gaps identified in the *Literature Review*. These were discussed in 2.4.2 *Perspectives and Method in UA Research* and 2.4.6 *Caution and Directions in UA Research*. Method has been very important to this study given the relative infancy of UA as a field of study. Thus far the field has been approached enthusiastically but remains disjointed. UA method has been guilty of weak study design and must move from anecdotal to systematic (Poulsen et al 2015, Warren et al 2015, Zessa & Tasciotti 2010).

To contribute to the study of UA I will show how I have remedied three key methodological challenges. These relate to transferability issues, comparative urbanism and researcher perspective. This will enable me to make some recommendations for future UA research. To summarise, I found, identified and mapped forty UA projects in Hull and Copenhagen. I developed comparative case study projects in each location and interviewed forty-six project organisers. To analyse the data collected I developed a framework which included transcript codification, multi-level theme development, project name demarcation and created a typology.

8.1.1 Transferability Issues

In seeking to access and understand how existing studies on UA have been completed a number of issues arose. The issues are predominantly tied to how and why particular UA projects have been sampled for inclusion. It is important for researchers to accept

that this issue is present in UA research because it restricts how replicable studies are. Sampling remains subjective or unclear. Researchers have made decisions about what they consider to be an UA project without explanation of what the project or projects do in practice. Other examples of vague sampling identified in the literature review related to perceived UA operational diversity, context, appearance and public accessibility. These criteria are open to broad interpretation. A further issue is that many studies claim to be studying UA but when case studies are presented only one type of UA project has been used, typically community gardens. The risk is that claims for UAs potential becomes inflated. In addition in studies of community gardens, urban farms are often drawn upon. This has been done without explanation of why they have been considered together or whether other forms of UA existed in the study location or not.

To address this in the *Methodology* Chapter I explained the ways in which I sought to uncover UA activities operating in Hull and Copenhagen. The chapter was also presented in chronological order to assist in study replication. In addition not only did I present detailed sampling decision rationales but I also explained what was influencing the decisions made.

The development of typologies is unpopular and remains very limited. Researchers who have attempted to develop typologies accept that they are "rough" and hypothetical (McClintock 2014: 3, Firth et al 2011). At the same time there has been a general consensus that UA projects lend themselves to typologies because they "often blur the lines between governmental, public, non-profit, cooperative, multi-stakeholder and private" (Mount and Andrée 2013: 578). I think that it would be fair to say that these blurred lines between the people and organisations involved in UA have been acknowledged but not widely researched because they are complex, difficult to map and be explained neatly.

To address this I have developed a typology that attempts to work through and account for these complexities. The structural grouping typology represented the different groups who had a role in the initiation of UA projects in Hull and Copenhagen. The difference in these initiation groups had implications for how the emergence process was experienced, which I will discuss below. There were four distinct groups involved in UA project emergence. *Governmental organisations* refer to projects started and run by the local authority. *Non-governmental organisations* are non-profit groups who work independently of GOs. NGOs aim to provide services or deliver resources and work at different scales (national, regional and local ward areas in Hull and Copenhagen). This categorisation contributes to previous work which identified that "non-profit advocacy organisations" were involved in community garden emergence (Pudup 2008: 1232). *Independent groups* commonly referred to as "grassroot associations" initiate projects that are controlled from within and have no affiliation to a GO or NGO (Glover et al

2005: 89). *Networks* of interconnected groups of people also initiate UA projects. In some cases networks are instructed to start an UA project by an NGO or GO as well as existing more informally and initiating an independent project. Hull and Copenhagen had projects initiated by each of these groups. I hope this improves understanding between UA scholars as the field moves beyond ambiguous categorisation of UA initiators. This can be achieved by promotion of better methodological practice and prioritising UA study replication.

8.1.2 Research Perspectives

Insider perspectives and scholar-activism dominate how UA projects have been studied (Brannick & Coghlan 2007, Tornaghi & Van Dyck 2015, Angotti 2015). The claimed benefits that involvement in UA can have on people makes working within a project whilst researching highly appealing. I think this also explains the numerous studies which have been conducted by scholars with a hobby interest in UA. Of course, additions to the study of UA by scholars with expertise in other fields are welcomed and have beneficial implications for new insight, however such studies create challenges too. These being the repetition of study themes and qualitative research methods such as participatory action research (Charles 2011) and UA research idealism (McClintock 2014: 148).

To address calls for more "critical" perspectives in the study of UA (McClintock 2014: 148) I have been explicit in outlining my positionality and perspective. To the study I have a brought a much needed outsider perspective. As the research progressed, my perspective of UA in Hull moved from that of an outsider to one of having greater insight. I was then able to bring this unique changing perspective to inform my understanding of the UA experience in Copenhagen and vice versa. I was able to tease out the nuances of practices and behaviours on the ground through the process of comparison. In the time I have completed this study the trend for insider perspectives has continued and UA research would benefit from continued widening of perspectives. However, maintaining an outsider perspective whilst building rapport with organisers presents challenges when as a researcher you have the skills required to assist an organiser.

8.1.3 UA Projects and Comparative Urbanism

Comparative urbanism and the use of case studies from multiple cities is experiencing a revival and this study contributes to this field re-orientation. As demonstrated throughout the Data Chapters 4 - 7 the comparison of UA projects in Hull and Copenhagen has identified many similarities and differences that exist in project practices and organiser behaviours. This section explains why a comparative study was needed in the study of UA and explains what the comparison added to this study that

may have otherwise been lost. The final part considers what UA can tell us about conducting comparative urbanism studies.

Comparative urbanism was needed because where UA projects have been studied has become problematic. UA studies have tended to focus on particular locations with studies most prevalent for North America, Canada and Australia; with exceptions including UK studies by Milbourne (2012), Firth et al (2011), Holland (2011) and Tompkins (2014). Different terminologies and existing academic misinterpretations can make comparison difficult. For example, the term 'allotment' has been applied in a US context to describe community gardens whereas in the UK an allotment and a community garden are considered to be different. Additionally, Guitart et al (2012) in their systematic community garden study review identified a lack of European studies and 'whole' city studies of UA. The latter are needed to add to growing debates on the geographies of emergence (McClintock 2014, Taylor & Lovell 2012, Smith et al 2013, Nelson et al 2013) by moving from specific project studies to whole city project studies. In addition when UA studies are completed at a city level it is usually difficult to understand the implications of findings because of a lack of contextual city data to inform the accounts of the projects studied. Comparative urbanism forces the researcher to consider location context to inform research phenomenon accounts.

To address these issues I chose cities from two European countries that share many similarities. Most significantly both had a long-standing presence of allotments from which other types of UA have emerged. Scoping trips were conducted in other cities to confirm their suitability as comparative locations. Additionally in 3.8 the *Analytical Framework*, I developed a method to demarcate project names which accounted for and explained the different UA project types that existed. I used these names throughout the data chapters so that *in situ* quotes could be attributed to each location and a specific UA type.

To explore the complementary contributions of this study to UA and comparative urbanism I will explore two themes. The first is what the tool of comparative urbanism added to the study of UA and the second is what UA can tell us about conducting comparative urbanism studies.

8.1.3.1 What does comparative urbanism add to the study of UA?

Comparative urbanism allowed **nuanced differences** within UA to be identified. Nuanced differences related to the small divergences evident in UA organiser behaviours and project practices. These differences were observed in the smaller specific qualities of how something was experienced on the ground whether similarly or differently. For example project participation is broadly experienced similarly in Hull and Copenhagen. Similarly, organisers are close to their participants on a project and

personal level and hold varying attitudes towards how satisfied they are with participant numbers. Organisers seek to attract and engage participants to a project in similar ways. However Hull organisers were more pessimistic in terms of how easy it was to attract new participants to the project and in some cases projects had ceased to attract future participation. A further example of this was evident in how projects were funded. Projects in Hull and Copenhagen similarly received funding from multiple different sources. Both were hindered by funder preferences and have to adopt strategies to secure a project's future. Additionally organisers found it difficult to manage funding body relationships and expectations. However Copenhagen organisers hold different values to Hull organisers with regard to who they are willing to have fund the project. In Hull, organisers wanted the funders values to align with the project's aims however this was not the case in Copenhagen.

For this UA study comparative urbanism produced richer data about each location than could have been achieved by studying each location in isolation. Through comparison it was possible to identify historical, cultural and stakeholder influences. Fundamentally nuanced differences and their influence on the UA foodscape may have been overlooked as inconsequential without observing these differences. In identifying nuanced differences through comparison it was possible to identify the causality of an experience. I could ask how and why did x happen in such a way by questioning what happened in the other city. For example, the length of time it took for a project to emerge was a challenge in both Hull and Copenhagen. A lengthy emergence time period affected Hull projects more than Copenhagen projects. However this was likely due to the slower project emergence in rate in Copenhagen.

Comparative urbanism enabled **shared narratives** in the UA project landscapes of Hull and Copenhagen to be identified. For example organisers in Hull and Copenhagen are involved in multiple foodscape and non-foodscape activities beyond UA. Through comparison it was possible to observe how Copenhagen organisers were more likely to engage in other foodscape activities which were more food and environmental-related whereas Hull organisers were more active in political parties and/or campaigning. This shared narrative of project organisers in Hull and Copenhagen provides plurality of voice. By this I mean having multiple examples of the same experience. This was particularly evident when organisers were describing project challenges. A shared narrative gives more weight to the struggles experienced in establishing a project and shows that existing problems are not only city or project specific. For example both location organisers struggled to manage their involvement in the project and felt a strong sense of duty to remain involved. However Hull organisers described their involvement as being more precarious in the project and were more emotional in vocalising their feelings towards the project.

Comparing how UA projects in Hull and Copenhagen manifested examples of persistence and ephemerality enabled UA project **best practice** to be identified. Best practice cases are useful for understanding urban sustainability transitions because it allows transference of recommendations from one city to another. This benefits the rate of urban sustainable development because solutions can be found quicker to assist in developing project practices at a larger scale. For example Copenhagen organisers were more likely to include participants in the planning of a project and the process of physically establishing the project site. The impact of this was that organisers described participants as having a stronger sense of belonging to and identity in the project than if they joined once a project had been *established*. This example of best practice is useful for producing impactful research. I would recommend that organisers of emerging projects in Hull adopt a similar approach by engaging communities in the planning process. This is particularly important given the finding that organisers in Hull and Copenhagen overwhelmingly considered a project 'having' participants to be one of the greatest challenges to their work.

Academic misinterpretations could also be viewed by broadening the study of UA to include two cities. In comparing what the literature says about UA practices against the two cities it was possible to see where the academic community has misinterpreted aspects of practice. The benefit to the study of UA is a clarification of terminology. One key distinction, which must be acknowledged in future studies, is that the UA practice of guerrilla gardening was viewed differently and played out differently in each location. Guerrilla gardening in Hull is a multi-site practice whereas in Copenhagen it is considered a singular site practice, 'guerrilla garden'.

Comparison also enables **attitude benchmarks** to be created. It was possible to learn how organisers felt about their own project specifically, UA practices more broadly, urban green space provision and the foodscape of their city. A stocktake of organiser attitudes from each location provides a benchmark from which attitude change can be re-measured in future studies. This can provide indication of how changes in UA occur.

For example Hull and Copenhagen organisers viewed ownership to be inherently active in projects. They agreed it played out in complex ways because it affected all aspects of the project; ownership required protection, was subjected to internal testing by other organisers and was often a source of opportunity. However Copenhagen project organisers viewed the potential for opportunity in UA more positively in terms of providing new organiser roles and more projects. Copenhagen organisers were more welcoming of project ownership changes because they observe that with change benefits to the project can be seen. It would be interesting to go back and re-evaluate these attitudes as changes to project ownership occur.

To summarise I have identified how comparative urbanism added to the study of UA in terms of identifying nuanced differences, shared narratives, best practice, academic misinterpretations and attitude benchmarks.

8.1.3.2 What does UA add to the study of comparative urbanism?

In this study I have engaged in careful comparative urbanism rather than hypothesising its potential in the study of UA. As a result of doing so I can make contributions to the practicalities of conducting comparative urbanism on the ground in two cities. The following contributions draw on observations from the process and include recommendations for future studies. In brief contributions relate to, the appropriateness of the study phenomenon, comparison location choices and positionality.

It is necessary to consider the **appropriateness of the study phenomenon** for using comparative urbanism. I observed that UA lends itself to comparative urbanism because we already know that the phenomenon's re-emergence is not country specific. In addition UA by its very nature occurs in the 'urban', the city. The process of comparative urbanism was useful for this study because the research focussed on UA emergence using projects which were both established and in the process of becoming. Comparison as a process was complementary in nature to studying emergence as a process. This was particularly important because I was seeking to understand the re-emergence whilst the emergence processes continued around me, as the researcher.

I recommend UA research studies do not always require a comparison component. It is important to decide what the purpose of your comparison is and whether comparative urbanism is an appropriate lens for the study field.

In terms of **comparison study locations** in this study I chose to compare UA in Hull, UK and Copenhagen, Denmark. These unusual location choices raised questions from the academic community for a number of reasons. Firstly, due to the use of cities that appear to operate a different scales with Copenhagen as an 'extraordinary' city and Hull as an 'ordinary' city. Secondly, questions were raised from the deviation from where studies of UA are typically conducted. There are unspoken subjectivities about which cities are *research-worthy* and *should* be studied.

I recommend that UA researchers need greater spatial imagination when considering where to study the phenomenon and when choosing comparative locations. The reason for this is that unexpected location choices can provide data surprises. For example UA projects were far more numerous in Hull than in Copenhagen. Even when frequency of a phenomenon's occurrence is less in one city than the other it should still be committed to write up because the process of comparison has shaped how the phenomenon has been uncovered in the other location. However researchers must be mindful that there is risk in not knowing how a comparison will play out.

This study into UA highlighted the importance of the need for detailed exploration of **positionality**. The careful consideration of my position in relation to the study locations has implications for using a comparative approach. In this study I had an outsider perspective to UA however typically UA lends itself to insider perspectives, as explored in the methodology chapter. I was able to treat Hull and Copenhagen similarly because I was an outsider to not only the research subject but also to both locations. I was equally distant from UA and Hull and Copenhagen in terms of my starting point for the research. I suggest the need for a study which explores triangulation of UA, comparative urbanism and positionality. The reason for suggesting this is that it could benefits from producing more impactful research by increasing transferability across UA study locations which would enable UA researchers to better substantiate the beneficial claims of a city's involvement in UA.

8.2 Conclusions from Chapter 4: People and Practice in Urban Agriculture Projects

This chapter provided context to UA project emergence by first exploring the people involved and then exploring the practices of established UA projects.

8.2.1 Who is involved UA project emergence?

NGOs, GOs, independent and network groups are all involved in the emergence of UA projects (as outlined in the typology and described in the previous section). Current thinking suggests that certain groups are more likely to initiate specific forms of UA. Community gardens are more likely to be "initiated and managed by community groups, although an increasing number have input from external organisations" (Firth et al 2011: 556). However I found that NGOs, GOs and networks were also instrumental in the initiation and management of community gardens. Additionally independent project organisers, those started and managed by community individuals and groups described a lack of support from external organisations. I do not believe my findings contradict that of Firth et al but suggest that there had been a shift in UA project emergence, which has occurred since 2011 in which NGOs and GOs are increasingly initiating their own projects and as a result do not have the resources to also support independently started projects. I appeal to funding bodies to look at ways that they could foster a culture of cooperation between projects whose work is fundamentally the same. One way in which this could be done is through an event in which projects share their projects aims. The reason for this is that I have found UA projects initiated by different groups broadly have the same aims even though organiser's do not think they are developing projects with the same goals but fundamentally they are. UA projects aim to i. to provide space to grow food, ii. to increase sociability, (through communication and community), iii. to provide opportunity and iv. to provide choice.

In individual projects I have identified that there are two clear roles: organisers and participants. Organisers take an instrumental role in the emergence of UA projects and in the day to day running of established projects. Until now organisers have been labeled rather ambiguously within research (also described by Pudup 2008). The following insights add to the work of Glover et al (2005), McClintock (2014) and Armstrong (2000), who have begun to unpick the roles of individuals. Organisers have a "greater social responsibility" to their projects than participants (Glover et al 2005: 86). Organisers also demonstrate greater feelings of "commitment" and "obligation" to their project than participants as identified by Glover et al. On the whole the same organisers who initiated an UA project's emergence continued to be involved once it had become established. This means that the same people were instrumental in both initial project planning as well as site seeking, food production and the facilitation of participation in events. I have identified that how UA is experienced on the ground differs from organiser to organiser. I suggest further research is needed on the commitment of project organisers. A new study utilises photo diaries of organisers could be used to explore organiser feelings about projects changes and how sites physically reflect it.

Organisers are often part of multiple UA projects. In both cities organisers are part of a number of different food and non-food related groups. Hull organisers are part of more activities, with Copenhagen organisers involved in fewer activities which are more directly related to UA. This suggests that there are shared characteristics across UA project organisers in terms of a combination of socio-educational factors which determine whether they become an organiser. These factors could be utilised further to pool knowledge and connections to enable projects to be developed further and remain established. The majority of organisers had completed prior formal education as a mature student and studied subjects which could be considered to have transferable skills for UA practice. Interestingly many organisers of independent projects explained having been previously employed by NGOs and GOs in health, education and social work but not UA. Therefore volunteer organisers of independent UA projects are doing the same work in their communities that they have done before but within UA they are not paid for it. However in a small number of cases in Hull and Copenhagen, organisers were paid a limited sum of money as part of running specific initiatives. The implication of this is that projects lack financial security. A lack of funding is intrinsically tied to how organisers value themselves. I have observed examples of organisers experiencing poverty as a direct result of their UA involvement. This should be a priority area for UA researchers. UA project emergence presents an opportunity for organisers to change their career. Whether a project was in receipt of external funding impacted the likelihood that an organiser would be paid for their role. Organisers who are part of NGO, GO and network organisations are more likely to be paid than those of independent projects even though project practices fundamentally the same. The impact

of this is that independent organisers become more politically motivated in how they outwardly express their project.

Across the organisers studied there were very few who had a formal background in agriculture or horticulture. This limited role of gardening knowledge further justifies use of the term organiser as opposed to gardener. I suggest we continue to clearly distinguish the roles present in UA projects. I suggest funders create a mechanism for distinguishing between whether a project organiser or participant is applying. The reason for this is that I saw examples of organisers supporting participants to gain literacy skills by applying to funding bodies even if it reduced the likelihood of securing funds. When an organiser did have informal experience and skills in agriculture and horticulture they were typically part of an organiser group in which the other organisers were educated to degree level. I saw evidence that organiser groups benefited from these different skillsets in the emergence process. For example, in one project an organiser was responsible for seeking legal permissions while the other focused on speaking with 'the community'. The implication of this is that organisers leave if their role changes beyond what they are comfortable doing.

8.2.2 Why are organisers establishing UA projects?

From the perspective of project organisers what motivated them to engage in UA in the first instance and what the aims of the project differed. UA organiser motivations were (i.) to be involved in food and growing, (ii.) to engage specific, hidden and minority groups within the city, (iii.) to be philanthropic, (iv.) to change the 'identity' of a location (v.) as a result of a life stage or event or (vi.) to create change through 'difference' for the future.

The motivations of those involved in UA is a popular area of study. However most studies focus on the motivations of participants, do not distinguish between organisers and participants, or only focus on one type of UA project (typically community gardens). The most appropriate comparison of motivations is a review of community garden studies by Guitart et al (2012). 86% of the papers in the study discussed motivations and the study conflated motivations collected from "participants, project managers and institutions depending on who provided the information" (Guitart et al 2012: 367). Clear delineation of who is included in the study must be planned into future study designs.

Guitart et al (2012: 367) identified frequently cited motivations, which were "to consume fresh foods, create social development or cohesion such as community building and culture exchange, to improve health among members and to make or save money by eating from the garden or selling the produce". Less frequently cited motivations included: "to educate, to enhance cultural practices, to access land, to enjoy

nature, environmental sustainability and to enhance spiritual practice" (Guitart et al 2012: 367). There are interesting similarities with the findings in this study. The most common and similar motivation was (i) to be involved in food and growing, with Guitart et al also identifying "to consume fresh foods" and "to make or save money by eating from the garden or selling the produce". Further similarities were found in the motivation (ii) to engage specific, hidden and minority groups within the city. However this was broader than the specific motivation identified in the Guitart et al study, "social development or cohesion such as community building and culture exchange", and no evidence that organisers explicitly sought "to enhance cultural practices" was found. Additionally Guitart et al noted "to access land" as a motivation. The organisers in this study went further to specify changing a characteristic of the land they access; (iv) to change the 'identity' of a location. Within the motivation list compiled by Guitart et al there was no mention of altruism. I found evidence that many organisers were motivated to become involved in UA (iii.) to be philanthropic. Perhaps the sensitive class-based issues this evokes provides rationale for its lack of prevalence in existing studies. It is worth considering in future UA studies that organisers often hide their motivation from their fellow organisers and participants. This holds relevance for UA insider researchers who must seek to understand the role they have in shaping sensitive topics.

Hull and Copenhagen organisers broadly shared the same motivations, although small differences were evident. Hull organisers were much more likely to become involved in UA (v.) as a result of a life stage or event. This supports the finding that some organisers viewed UA as an opportunity to change career. Copenhagen organisers described being motivated more strongly (vi.) to create change through 'difference' for the future. I believe that in part Copenhagen organisers used the idea of future betterment by assisting others rather than the difficult notion of philanthropy because of the contrasting social structures in the UK and Denmark. Therefore comparative researchers must understand what is appropriate to discuss and can consider how rapport should be built in different contexts.

What a project aims to do is shaped by an organiser's motivation. In UA projects with multiple organisers each organiser brings their own motivations to discussions on project aims and subsequently aims account for their differing motivations. I recommend that future work should be cautious not to conflate organiser motivation and project aims but acknowledge the relationship they have in shaping one another. For organisers the development of project aims marked a project's emergence. Project aims differed depending on structural group and as a result UA's function is diversifying as different groups increasingly become involved. What projects aimed to do by structural group and how aim agreement was reached was similar in Hull and Copenhagen (Figure

36). As researchers we risk overstating the claims for UA and equating claims with the benefits of UA rather than an individual's personal motivation or motivations for being involved. Organisers are realistic that their projects are supplementary not alternative.

Structural Group	Project Aim Features
GO	To provide "secure", "attractive" and "utilised" space.
	To "communally" produce "better" food whilst acknowledging the growing process.
	To describe potential benefits for those attending the project, including, "enjoyment", "learning", "wellbeing" and "ownership".
	GO projects in Copenhagen featured a sustainability agenda much more strongly than any Hull project. Copenhagen aims were more specific in differentiating the relationship between the site and how it should be used.
NGO	Focussed on either on [1] low-income areas of the city or [2] people living on low incomes.
	Within these foci projects aimed to provide food. NGOs also aimed to "encourage" and "engage" specific areas or target groups to grow, cook and eat.
Independent	To provide a service. Within this provision there were four themes [1] to grow food, [2] to increase sociability, [3] to provide opportunity and [4] to provide choice.
	Independent projects in Copenhagen were more likely to describe the financial aims of the project because organisers feel they have more autonomy to control the future economic security of their project.
National and Local Networks	To support the work of NGO, GO and independent projects in 'greening' the city in a measurable way.
	If an organiser is involved in a UA project and a network the projects often had complementary aims.

Figure 36 Aim features from the structural groups initiating UA projects.

These findings support the work of Reynolds who identified "financial, environmental, health, social/educational, and community development" as themes evident in project aims (2015: 248). For the projects in this study space provision was considered highly important. Reynold's themes were evident in how aims specified the characteristics and use of space that the different groups wanted to create. I agree with Holland that community gardens in comparison to other types of UA project demonstrated "very little economic purpose" according to their aims (Holland 2011: 296).

8.2.3 Defining Urban Agriculture Practices

UA project activities were found to be exceptionally diverse. The majority of organisers considered their project to be an example of UA. When organisers were asked what UA

was they described it as a practice which requires two components, people and land. Generally speaking they considered UA to be the practice whereby an individual or group of individuals changes the use of available urban space to grow edible and non-edible plants. In this 'space change' organisers wanted to create opportunities for 'wasted' land in the city and for the 'wasted' skills of people in the city. Pudup described that community gardens were developed to change people and places (2008: 1228). I have found this to be the case for UA projects more generally. Interestingly what organisers considered UA to be was reflected in the project aim features described (Figure 36). Therefore researchers who work on terminology clarifications should include the voices of those involved in UA in future definitions.

Organisers considered the practice of UA to be a mechanism towards food selfsufficiency but that it does *not* have to be a viable alternative to rural agriculture. They consider UA to be a supplementary practice to the existing food system. Organisers were quicker to articulate the non-food growing activities of a project than those that were food related. This is central to understanding the role of UA projects and supports work by Holland (2011: 292) who identified that food growing was not always an UA project's priority. It can be said that organisers design a UA site to reflect the role of food in the production of the project. Food in UA projects holds symbolic importance beyond the provision of sustenance. Food, the result of the growing process, created openings for organisers and participants to learn how to learn, with food providing a prompt to exchange knowledge. In addition success in being able to produce food promotes a sense of opportunity. Organisers and participants have 'achieved' and can therefore achieve more. This is important for substantiating claims that UA can be used to alleviate food insecurity because the findings demonstrate that the relationship between UA projects and food security is more nuanced. Organisers were not motivated to become involved in UA for cultural integration. However there was evidence of the creation of cultural practices in a way that has not been previously described. Food was symbolic for organisers and participants who had moved from different countries. They used the UA project to be able to identify and connect to the food typically grown in that country.

In general UA organisers gave more consideration to what to grow than to how what was grown would actually be used. Established project organisers attributed this to a lack of food distribution planning in the emergence phase. Some established projects had formalised networks through which they distributed the food and others distributed more informally. Informal distribution was used when the project had a high footfall from the local community. Urban farms are considered by organisers to have more potential for creating an alternative food network because they are likely to have an "expert grower" (urban farmer) in the project. The field should be welcome to studies

which seek to quantify the amount of land used for UA and the quantity of food produced. Organisers who did not consider their project to be UA cited a lack of market to trade their produce. Funding bodies should welcome applications for projects which seek to support the distribution of UA produced food. Holland identified that urban farms are more likely to be visited by the public than community gardens (Holland 2011: 291). However my evidence contradicts this with some urban farms set up as associations producing food specifically for its members. On the whole established UA projects have food waste because organisers are reticent to distribute it to individuals or groups they perceive to be 'in need'. Organisers did not know how to distribute produce without compounding participant feelings of food poverty. The reason for this is that UA projects are social spaces (Glover et al 2005: 86) in which relationships can be built with organisers and participants learning about one another.

Organisers demonstrated an acute insight into both patterns of participation within their projects and their participant's lives. Armstrong (2000: 321) described "co-ordinators" as being "familiar with local neighbourhoods"; I would go further to assert that organisers become the experts of the community in which their project situated. As researchers we must be cautious that we do not produce research fatigue for organisers. This expertise in "community affairs" (Glover et al 2005: 85) forms as a result of both the process of emergence in which they learn about the conditions of the locality in which they seek to establish their projects as well as the close relationships they have with participants. Organisers are privy to and custodians of their participants' personal circumstances. The closeness of the organiser-participant relationship can create a barrier to addressing food access and availability issues. This specific relationship and affect on addressing food access warrants further investigation.

8.3 Conclusions to Chapter 5: The Emergence of Urban Agriculture Projects

Chapter 5 directly explored the emergence of UA projects by providing insights into when, where and how projects emerged in Hull and Copenhagen.

8.3.1 When projects emerged?

Patterns of project emergence were relatively similar in Hull and Copenhagen. However there was evidence of far more UA projects in Hull than Copenhagen. Between the 1990s and 2000s the re-emergence of community gardens emerged with a focus on either food production, wildlife or health and therapy. This supports the finding of Pudup (2008: 1233) who found community gardens proliferated in the 1990s. I have identified a continuation into the next decade. Following this, urban orchards and farms emerged, generally on the sites of existing community gardens and allotments. This means that in future studies on community gardens, the role of allotments must be acknowledged if they had impacted how the community garden has emerged.

The most dramatic increase in UA project emergence thus far occurred between 2013-2016. This increase has occurred because NGO, GO and network organisations began to initiate UA projects. These newly emerging projects either targeted a specific group of the population or aimed to grow using specific growing principles. Projects have emerged on sites of existing UA projects. An important conclusion is that UA projects are also emerging as attachments to existing community services such as sports clubs, playgrounds and libraries. This was evident in both Hull and Copenhagen. This is important because it marks a change from UA deployment as a 'radical' practice to a 'protectionist' practice. Across the structural groups organisers are using UA project emergence to protect community resources from closure by increasing their community 'value'.

In addition during this time period 'pop-up' and 'mobile' projects are emerging with planned ephemerality, aiming to exist only for a short period of time, at least in a particular location. This is changing how participants view UA projects. They become increasingly transient across projects rather than developing a deep engagement in one specific project. The structural group who initiated a project influenced which UA project 'type' they established. Independent projects showed the most diversity in UA type (Reynolds 2015: 241). A suggested study is to explore the place-making capabilities of these 'new' projects with planned impermanence.

8.3.2 How and where projects emerge?

As described in the Conclusion to Chapter 4, NGO, GO, network and independent projects are all initiating different types of UA project at the same time. Looking across

these initiators I identified a number of decision-making processes to be at play which shapes how and where an UA project emerges.

The processes identified were informed by Firth et al's (2011: 555) work on "community in community gardens". I have identified that the following processes are similar across different UA project 'types'. A decision maker is needed who decides to establish a project. Two types of decision maker have been found. A bottom-up decision to start a project refers to the self-organisation of community representatives. From the typology the experience of bottom-up emergence was observed to be most similar between local networks and independent projects which emerge initially without an association to an NGO, GO or national network. In some cases organisers form connections with these larger organisations once they have emerged to remain established. A top-down decision is one where the decision to initiate a project is made by an institution. The emergence experience of NGOs and GOs were the most representative of the top-down approach. However there were also more complex instances when NGOs and GOs have instructed independent groups to start a project. From this we now know that a multitude of individuals and organisers are initiating UA projects. A decision rationale is also needed. The reason organisers initiated a project related to the characteristics of a specific location or because they had a certain interest. Place-based projects are started because a group wants to change the characteristics of a particular space. Organisers were focussed on the appropriation of land. They wanted to change land use to bring it back into the public realm. Interest-based rationales related to particular feelings or experiences by an individual or group. In groups, the individuals develop a shared enthusiasm or mutual concern. At the same time wider influences shape these decision rationales. I have identified that projects are initiated as an intervention or as a result of conducive conditions. Where a project emerges is predominantly shaped by these decision influences. This has implications for debates on geographies of emergence by suggesting that emergence is complex and where projects emergence is the result of multiple competing factors. One conducive condition was the form and use of the city influenced by long-standing historical factors. This finding is similar to the work of Taylor and Lovell (2012). Another conducive condition was serendipitous encounters by individuals who shared a mutual enthusiasm or concern.

UA literature describes an uneven distribution of UA projects within many cities. Smith et al identified three reasons for uneven distribution. Reasons included complex factors related to community prioritisation, spatial decision-making, 'interests' of different parties in where projects are situated and whether social capital has been formed by relationships with connections that have an influence (Smith et al 2013).

My study has contributions for this debate in terms of who initiates UA and where they do so. The scope and remit of NGO, GO and network organisations influenced where

independent project organisers established. This included all of the work of these organisations, not only their UA activities. When an NGO, GO, or network organisation runs a large-scale community development initiative in one specific area, independent project organisers will not establish there to avoid competing for funding and participants. However if independent project organisers consider certain areas to be failed by 'community prioritisation' and resulting "disinvestment" they will intervene and establish an UA project in that area "to ameliorate conditions" (Pudup 2008: 1232). In addition if an independent project organiser perceives that an NGO, GO or network has established an UA project that does not meet the demands of the community, independent organisers might establish a project in close proximity to show them how the project should have been established. On the other hand, in some cases NGOs, GOs and networks observe the success of an independent UA project in an area and seek to replicate it.

Independent organisers view their projects as working in the gaps leftover and created by the work of NGO, GO and network organisations generally as well as their UA projects. Therefore it could be said that work in these 'gaps' contributes to an *evening* of project emergence. However this was much more evident in Hull than in Copenhagen because of how many projects were emerging and established in Hull. This opens questions about whether an even emergence of projects is preferential to an uneven emergence and what an even emergence *should* look like. I suggest future work should consider mapping UA geographies of emergence alongside food deserts.

8.4 Conclusions to Chapters 6 and 7: Manifestations of Persistence and Ephemerality in Urban Agriculture Projects

Together Chapters 6 and 7 identified organiser behaviours and project practices that relate to an UA project's process of 'becoming' established. The chapters identified a number of qualities found to be present in the projects which influence how they behave in the foodscapes of Hull and Copenhagen. The term 'manifestation' was used to conceptualise how organisers experienced abstract themes. Exploration of that which is 'manifest' can only be observed by taking a longitudinal approach because it took time for the impact of practice and behaviours to become evident. *Persisting* qualities are those that 'stabilise' a project and enable them to remain active in the foodscape (Figure 37). *Ephemeral* qualities are those which hinder a project's emergence and contribute to feelings of flux for organisers. *Persisting* and *ephemeral* qualities are dialectal themes with aspects of both being experienced by a project at the same time. Insight gained from how a theme is experienced on the ground conceptualises that which is shaping UA project emergence. This has implications for identifying the assistance UA projects and their organisers require to emerge and remain established.

Persisting Project Qualities	Ephemeral Project Qualities
- Project Identity; Aims and Discourses	- Organiser Sense of Ownership
- Organiser Commitment to Action and Recognition	 - 'Everyday' Barriers For Urban Agriculture Projects Time Period of Emergence. Risk Perception and Risk Management. Anti-social Behaviour.
- Managing Involvement and Feelings of Duty	- Fragmentary Participation
- Seeking Economic Security	

Figure 37 Identification of Persisting and Ephemeral Project Qualities.

8.4.1 What behaviours and practices are shaping the emergence process?

In existing research it has been identified that UA organisers "work to sustain" their projects (Glover et al 2005: 86). In seeking to "realise the benefits associated" with UA they face numerous challenges (Glover et al 2005: 86) with organisers striving for project "longevity" (Firth et al 2011: 566). Organisers consider the persistence of the project to be wholly their responsibility. Organisers simply took project 'sustainability'

to mean that the project continues to exist. Therefore researchers must be cautious in how they use theoretical ideas of sustainability in the study of UA, particularly given the limited frequency in which the concept of 'sustainable development' featured in organiser motivations and project aims. The two main challenges identified for UA projects were economic security and project participation.

Economic security for a project was achieved when it had enough funds to begin to address project aims. Organisers in some cases generated income by asking for produce donations or running an association with membership. However nearly all projects studied seek economic security from external funding to be able to emerge and again when established. This supports findings that to persist, organisers develop strategies and external funds are crucial (Sonnino and Griggs-Trevarthen 2013, Reynolds 2015). In addition this study identified a 'one-year syndrome' whereby organisers struggled to qualify for funding after having secured initial infrastructure funds to emerge. Carahar and Dowler (2007) also reported a short-term funding commitment evident when they looked across twenty-five projects. The result of economic insecurity is that independent project organisers cannot create paid employment opportunities as result of establishing their project. This is also experienced by organisers working within NGO, GO and network organisations who have to raise funding for "their own salaries and project budgets" (Ballamingie & Walker 2013: 553). When an organiser experiences project financial insecurity, the project becomes jeopardised and in some cases organisers have to leave the project to seek paid employment. If organisers are in a position to do so, they will use their own money to keep the project active.

This study has found that organisers in an emerging phase did not anticipate participation to be a challenge once the project became established. However in practice organisers of established projects faced many challenges. The challenges related to the number and type of participants the project needed to engage. Projects typically had a small number of *core* participants and the rest were considered by organisers to exist on the fringe of the project. Further challenges included: [1] over time organisers learnt that participants had different motivations that were at odds with project aims, [2] there were higher levels of apathy in Hull and Copenhagen than expected, [3] it was difficult to communicate to more 'hidden' social groups that the project has been established for them and [4] a lack of organiser skillsets to manage the needs of participants who have self-prescribed involvement in UA. An additional challenge for independent project organisers was that participants are increasingly being referred to projects by health services, criminal justice rehabilitation programmes and schools. Although many of the organisers explain they do not have the same resources as larger NGO and GO project organisations to address individual needs appropriately or effectively. Future work should focus specifically on the pressures faced by organisers who have participants

signposted from other services. This raised the level of expectation for organisers and in some cases led to an overwhelming feeling of personal obligation to the project (Glover et al 2005: 86). Given the limited role food has as a means to provide sustenance in projects it can be said that projects are increasingly providing an alternative social service rather than an alternative food network.

An interesting relationship between economic security and project participation has been identified. Without participation an established project is no longer in a position to seek or maintain economic security because they cannot provide evidence that the project has benefited attendees as a direct result of their involvement in the project. This is the result of different groups initiating UA projects. Previously NGOs, GOs and network organisations used to fund and signpost participants to independent projects however they have now become UA project initiators themselves. Thus despite wanting to work together on urban development they are forced to compete for both external funding and participants.

In response this is impacting the behaviours and practices of projects in a number of ways. In terms of project identities, organisers are changing what they aim to do between emerging and becoming established. According to organisers, the establishment of aims marks a project's emergence. Aims were found to perform a number of functions: [1] to communicate the goals of the project, [2] to differentiate a project from other projects in the city, [3] to create a sense of value through which the project begins to gain 'agency' and can engage in conversations in the foodscape and [4] to provide a benchmark against which organisers make project decisions. Holland's work surveyed community gardens on project purpose identifying that established projects had an "original intention" and "present purpose" (Holland 2011: 293-294). Strong evidence of this was found with aims shifting for numerous reasons. Reasons included: [1] to meet funding specifications, [2] as a result of newfound project knowledge or [3] to align with broader agendas or specific discourses. Interestingly organisers of emerging projects expressed commitment to their initial aims and did not expect these to change once the project 'became' established. However organisers of established projects described that their aims had changed a number of times. Holland (2011: 296) described aim change as indicative of "healthy development of the movement because schemes appear to have been able to diversify and to respond to changing demands in their community". I propose that, generally speaking, changes did not relate to community demands but instead were changed to appease funding bodies. Often organisers presented aims differently in private (between organisers and participants) and publicly to funders. This should be acknowledged in future research because it is highlights a power imbalance. The field needs to know whether funders are aware that in some cases they are causing detrimental aim change.

Established UA projects in Hull and Copenhagen were experiencing *aim drain* where aims had undergone so many revisions that they became unrecognisable and no longer reflected the original intention or motivation of the organiser. Holland also identified that the older the project the more changes in direction were recorded, which supports my findings (Holland 2011: 299). This has contributed to a disorientated sense of purpose for organisers. However it was a persisting project quality because on the whole organisers changed aims for the betterment of the project, increasing the likelihood of appealing to funders. This supports the findings of Reynolds who acknowledged similarities between "practioner goals" and "the priorities of the funders" (Reynolds 2015: 249). A disorientated sense of purpose for an organiser created by aim change impacted their project further.

Organisers demonstrated a commitment to action through which they were able to channel their enthusiasm and pursue progress for the project. However as organisers failed to feel adequately valued for their work by receipt of funding or participation, they seek recognition. Recognition has become a substitute for evaluation. This is so organisers can rationalise their continued involvement in UA having not been able to evaluate the impact of their project. The reason for this was that many organisers felt it was systemic of third sector culture to fail to meaningfully evaluate their work. This was compounded by evaluation becoming synonymous with funder requirements and affected how organisers felt about measuring project achievements. Organisers acknowledged that recognition does not align with why they are involved in UA. Organisers across the structural groups did not have the skillsets to know how to evaluate the project particularly when aims were continually shifting. Organisers of NGO, GO and national network projects felt they did not have the support or tools from their respective wider organisation to meaningfully evaluate their projects.

Researchers, working from an insider perspective should explore existing funder evaluation formats. The output of such research should make recommendations for implementation of a UA evaluation toolkit. This seems realistic and could be done in a way that is in the best interest of funders and organisers. Additionally, increased evaluation by UA project organisers will provide useful data for UA researchers to substantiate current 'claim' debates. Failure to recognise the work of UA projects is having a detrimental impact on the ability of organisers to scale their project.

An image that results from this study is that the goodwill of "dedicated" organisers is being tested by the foodscapes in which they operate (Corrigan 2011). This was observed in how organisers felt about their project and expressed in their sense of ownership. Organisers from projects across the structural groups experienced personal conflicts as a result of their role in UA. For organisers, articulating their involvement often caused anxiety. Many organisers described their "sense of obligation" (Glover et

al 2005: 86) as negatively impacting their health and wellbeing with repercussions affecting their families. This is particularly interesting given the claims made about the benefits of involvement for project participants and warrants further investigation. The role of 'organiser' in UA is time-consuming and a project requires constant 'organising'. Organisers feel their involvement is *not* adequately valued and their *hidden* work is not appreciated.

SUMMARY OF FINDINGS

The myriad of forms and practices of UA projects in Hull and Copenhagen are complex. Generally organisers consider their projects to be an example of UA. As 'new' initiators become involved the form and practices continue to diversify. Rising popularity is leading to unexpected initiators seeking to realise 'claimed' UA benefits. It can be said that food production in projects provides sustenance but the process of growing plays a more important symbolic role for both organisers and participants.

Project initiators have disparate interests and reasons for becoming involved in UA. The personal motivations of organisers are often hidden from participants, whereas organisers have insight into participant motivations. UA project aims and organiser motivations are different. In cases where an individual organiser forms a group to initiate UA, personal motivations are used to influence what the project aims to do. Organisers consider project aims to be very important because they are the outward expression of what it is that their project does. However aims are changed to appeal to funders. Multiple direction changes mean a project's aim in some cases no longer reflects the initial motivation of an organiser. Shifting project goals presents a challenge for researchers seeking to substantiate UA claims.

How a project emerges in Hull and Copenhagen depends in part upon structural group. Generally NGOs, GOs and national network projects emerge similarly, with a contrasting experience for independent and local network projects. In emergence, multiple decision-making processes are at play which shape why and where a project may emerge. Regardless of structural group organisers are the drivers of UA project emergence. Similarities and differences in the emergence process are observable in multiple cities at the same time. Nuanced variations are present based on the collective experience of the communities in which organisers seek to establish a project. Collective experiences relate to historic, socio-cultural and economic factors that contextualise and underpin emergence processes. UA projects act as a bridge between the past experiences of organisers and the future directions they view to be needed by their community and or the city more broadly. Cities that are often viewed as 'ordinary' (Hull) because they make up the majority of cities in a national context, provide a valuable scale of analysis for whole city studies of UA. As proven in this study,

ordinary cities can unexpectedly have more UA projects emerging than capital cities (Copenhagen). In Hull and Copenhagen projects are emerging as a result of receiving external funding to develop the infrastructure required by the project. Thereafter established UA projects remain in constant flux. This has fostered a dependence on external funding because organisers do not have the time and resources to be able to make the project economically self-sustaining.

On the whole UA projects emerge with place-making functions. However UA projects are increasingly being initiated with the overt aim to be ephemeral. This ephemerality means that a project can be initiated to only exist for a certain period of time and then close or to exist temporarily in one location and then move to new urban spaces. Organisers are playing on 'placeless' project qualities to widen potential participation and distribute the benefits of UA involvement. The purposeful ways organisers are testing project embeddedness and ownership warrants further study.

The research identified project practices and initiator behaviours that shaped how the process of emergence was experienced. A fragmentary experience of participation is a greater driver of project closure than experiences of economic insecurity. This is because participation is required by organisers to be able to prove project value to external funders. Organisers are bound to their project by a determination for action by making project progress. During emergence, organisers become experts within their communities and as a result their commitment to project 'action' and feelings of duty deepen. Over time they struggle to control their involvement in the project. This is contributing to the persistence of UA projects in both Hull and Copenhagen. Organisers are initially able to receive some of the (physical and mental) health and wellbeing benefits from involvement. However a lack of resources mean organisers are unable to adequately record project achievements. They cannot evidence their accomplishments and communicate benefits of their project to those with the power to award funding. The resulting stress and frustration felt by organisers of established projects means they are not benefitting from UA in the same way as participants. The precarious nature of organiser work should be acknowledged in future studies which seek to substantiate the benefits resulting from UA involvement.

BIBLIOGRAPHY

Agnew, J. A., Mamadouh, V., Secor, A. & Sharp, J. (2017). *The Wiley Blackwell Companion To Political Geography*. John Wiley & Sons.

Abbots, E. J., & Coles, B. (2013). Horsemeat-Gate: The Discursive Production Of A Neoliberal Food Scandal. Food, Culture And Society: *An International Journal Of Multidisciplinary Research*, 16(4), P.535-550.

Ackerman, K., Conard, M., Culligan, P., Plunz, R., Sutto, M. P. & Whittinghill, L. (2014). Sustainable Food Systems For Future Cities: The Potential Of Urban Agriculture. *The Economic And Social Review*, 45(2, Summer), P.189-206.

Adams, D., & Hardman, M. (2013). Observing Guerrillas In The Wild: Reinterpreting Practices Of Urban Guerrilla Gardening. *Urban Studies*, *51*(6), p.1103-1119.

Aerts, R., Dewaelheyns, V. & Achten, W. M., (2016). Potential Ecosystem Services Of Urban Agriculture: A Review. (No. E2286v1). Peerj Preprints.

Agyeman, J. & Mcentee, J. 2014. Moving The Field Of Food Justice Forward Through The Lens Of Urban Political Ecology. *Geography Compass*, 8(3), P.211-220.

Agyeman, J., Bullard, R. and B. Evans (2003) Just Sustainabilities: Development In An Unequal World. Cambridge, MA: MIT Press.

Akter, S., & Basher, S. A. (2014). The Impacts Of Food Price And Income Shocks On Household Food Security And Economic Well-Being: Evidence From Rural Bangladesh. *Global Environmental Change*, 25, P.150-162.

Alaimo, K., Packnett, E., Miles, R. A., & Kruger, D. J. (2008). Fruit And Vegetable Intake Among Urban Community Gardeners. *Journal Of Nutrition Education And Behaviour*, 40(2), P.94–101. Doi:10.1016/J.Jneb.2006.12.003.

Allen, P., Fitzsimmons, M., Goodman, M. & Warner, K. (2003). Shifting Plates In The Agrifood Landscape: The Tectonics Of Alternative Agrifood Initiatives In California, *Journal Of Rural Studies*, 19 P.61–75.

Anderson, J. And Jones, K., (2009). The Difference That Place Makes To Methodology: Uncovering The 'Lived Space' of Young People's Spatial Practices. *Children's Geographies*, 7(3), P.291-303.

Anderson, J., (2004). Talking Whilst Walking: A Geographical Archaeology Of Knowledge. *Area*, 36(3), P.254-261.

Anderson, M. D., & Cook, J. T. (1999). Community Food Security: Practice In Need Of Theory? *Agriculture And Human Values*, 16(2), P.141-150.

Angel, D. & Rock, M. T. (2009). Environmental Rationalities And The Development State In East Asia: Prospects For A Sustainability Transition. *Technological Forecasting And Social Change*, 76(2), P.229-240.

Angotti, T. (2015). Urban Agriculture: Long-Term Strategy Or Impossible Dream? Lessons From Prospect Farm In Brooklyn, New York. *Public Health*, 129(4), P.336–341. Available At: Http://Dx.Doi.Org/10.1016/J.Puhe.2014.12.008.

Armstrong, D. (2000). A Survey Of Community Gardens In Upstate New York: Implications For Health Promotion And Community Development. *Health & Place*, 6(4), P.319-327.

Badami, M.G. & Ramankutty, N. (2015a). Urban Agriculture And Food Security: A Critique Based On An Assessment Of Urban Land Constraints. *Global Food Security*, 4, P.8–15. Available At: Http://Dx.Doi.Org/10.1016/J.Gfs.2014.10.003.

Baker, L.E. (2004). Tending Cultural Landscapes And Food Citizenship In Toronto's Community Gardens. *Geographical Review*, 94(3), P.305-325.

Baker, S. & Mehmood, A. (2013). Social Innovation And The Governance Of Sustainable Places, *Local Environment: The International Journal Of Justice And Sustainability*, 20:3, P.321-334, Doi: 10.1080/13549839.2013.842964

Gundel, S., Dubbeling, M., Zeeuw, H. D., Bakker, N. & Sabel-Koschella, U. (2000). Growing Cities, Growing Food: Urban Agriculture On The Policy Agenda. Deutsche Stiftung Fur Internationale Entwicklung (DSE). P.329-346.

Ballamingie, P. & Walker, S. M. (2013). Field Of Dreams: Just Food's Proposal To Create A Community Food And Sustainable Agriculture Hub In Ottawa, Ontario. *Local Environment*, 18(5), P.529-542.

Balmer, K., Gill, J. K., Miller, J., Peterason, M., Rhoads, A., Rosenbloom, P., & Wall, T. (2005). The Diggable City: Making Urban Agriculture *A Planning Priority*. P.1–102.

Banks, J. W. R. (2013). 'Sustainability, Citizenship, And Transformation', *In* Cunningham P. (Ed.) Identities And Citizenship Education: Controversy, Crisis And Challenges. London: Cice, P.601-624.

Barilla CFN. (2010). Double Pyramid: Healthy Food For People, Sustainable Food For The Planet. Barilla Center For Food And Nutrition, Rome.

https://www.barillacfn.com/m/publications/pp-double-pyramid-healthy-diet-for-people-sustainable-for-the-planet.pdf.

Barling, D., Sharpe, R. & Lang, T., (2009). Traceability And Ethical Concerns In The UK Wheatbread Chain: From Food Safety To Provenance To Transparency. *International Journal Of Agricultural Sustainability*, 7(4), P.261-278.

Barr, S., Gilg, A., & Shaw, G. (2011). 'Helping People Make Better Choices': Exploring The Behaviour Change Agenda For Environmental Sustainability. *Applied Geography*, 31(2), P.712-720.

Barrett, C. B. (2010). Measuring Food Insecurity. Science, 327 (5967), P.825-828.

Barthel, S. & Isendahl, C. (2013). Urban Gardens, Agriculture, And Water Management: Sources Of Resilience For Long-Term Food Security In Cities. *Ecological Economics*, 86, P.224-234.

Barton, H. & Kleiner, D. (2000). Innovative Eco-Neighbourhood Projects. *In* H. Barton, Ed. Sustainable Communities. The Potential For Eco-Neighbourhoods. London: Earthscan, P.66–84.

Batty, M. (2009). Cities As Complex Systems: Scaling, Interactions, Networks, Dynamics And Urban Morphologies. P.1041-1071.

Beatley, T. (2011). Biophilic Cities: Integrating Nature Into Urban Design And Planning. Washington, Dc: Island Press.

Beatty, T. K., Blow, L. & Crossley, T. F. (2014). Is There A 'Heat-Or-Eat'trade-Off In The UK? *Journal Of The Royal Statistical Society*: Series A (Statistics In Society), 177(1), P.281-294.

Beilin, R., & Hunter, A. (2011). Co-Constructing The Sustainable City: How Indicators Help Us Grow More Than Just Food In Community Gardens. *Local Environment*, 16(6), P.523-538.

Bell, D. & Jayne, M. (2009), Small Cities? Towards A Research Agenda. *International Journal Of Urban And Regional Research*, 33: 683–699. Doi:10.1111/J.1468-2427.2009.00886.X

Bell, S. J., & Cerulli, C. (2012). Emerging Community Food Production And Pathways For Urban Landscape Transitions. Emergence: Complexity And Organization, 14(1), P.31-44.

Bell, S., & Morse, S. (2008). Sustainability Indicators: Measuring The Immeasurable? Earthscan.

Bell, S., & Morse, S. (2013). Measuring Sustainability: Learning From Doing. Routledge.

Bendt, P., Barthel, S. & Colding, J. (2013). Civic Greening And Environmental Learning In Public-Access Community Gardens In Berlin. *Landscape And Urban Planning*, 109(1), P.18-30.

Berg, B., L. (2007). Qualitative Research Methods For The Social Sciences. 6th Edition. San Francisco: Pearson Education, Inc.

Berget, B. & Braastad, B. O. (2011). Animal-Assisted Therapy With Farm Animals For Persons With Psychiatric Disorders. *Annali Dell'istituto Superiore Di Sanita*, 47(4), P.384-390.

Berget, B., Ekeberg, Ø., Pedersen, I., & Braastad, B., O. (2011). Animal-Assisted Therapy With Farm Animals For Persons With Psychiatric Disorders: Effects On Anxiety And Depression. A Randomized Controlled Trial. *Occupational Therapy And Mental Health*, 27, 50-64.

Berkhout, F., Angel, D., & Wieczorek, A. J. (2009). Asian Development Pathways And Sustainable Socio-Technical Regimes. *Technological Forecasting And Social Change*, 76(2), P.218-228.

Bidwell, S., (2009). Food Security: A Review And Synthesis Of Themes From The Literature. *Canterbury District Health Board, New Zealand.*

Blay-Palmer, A., Landman, K., Knezevic, I., & Hayhurst, R. (2013). Constructing Resilient, Transformative Communities Through Sustainable Food Hubs. *Local Environment*, 18(5), P.521-528.

Bogdan, R., & Bilken, S. (2006). Qualitative Research For Education: An Introduction To Theories And Models. 5th Edition. Published By Pearson. 25/7/06.

Borelli, D. (2008). Filling The Void: A Place-Based Ethic To Community Gardens, *Journal Of Environmental Law*, Isbn:1464-374x, 9: P.271-303.

Born, B., & Purcell, M. (2006). Avoiding The Local Trap Scale And Food Systems In Planning Research. *Journal Of Planning Education And Research*, 26(2), P.195-207.

Borras, Jr. S. M. (2008). La Vía Campesina And Its Global Campaign For Agrarian Reform. *Journal Of Agrarian Change*, 8(2-3), P.258.

Boyle, A. M. (2013). School Gardens: Reconnecting Children With Nature And Food. *Scripps Senior theses*. 142. Http://Scholarship.Claremont.Edu/Scripps Theses/14.

Brannick, T. & Coghlan, D., (2007). In Defense Of Being Native: The Case For Insider Academic Research. *Organizational Research Methods*, 10(1), P.59-74.

Brinkmann, S. (2014). Interview In Encyclopedia Of Critical Psychology (P. 1008-1010). Springer New York.

Brundtland, G. H. (1987). World Commission On Environment And Development: Our Common Future, Oxford University Press.

Brunori, G. (2007). Local Food And Alternative Food Networks: A Communication Perspective. *Anthropology Of Food*, (S2).

Büchs, M., Edwards, R. & Smith, G. (2012a). Third Sector Organisations 'Role In Pro-Environmental Behaviour Change – A Review Of The Literature And Evidence. (May).

Bugliarello, G. (2006). Urban Sustainability: Dilemmas, Challenges And Paradigms. *Technology In Society*, 28(1), P.19-26.

Buhaug, H., & Urdal, H. (2013). An Urbanization Bomb? Population Growth And Social Disorder In Cities. *Global Environmental Change*, 23(1), P.1-10.

Bulkeley, H. (2006). Urban Sustainability: Learning From Best Practice? *Environment And Planning A*, 38(6), P.1029.

Burgess, R. (1984). In The Field: An Introduction To Field Research. London: Allen And Unwin.

Campanelli, P., O'muircheartaigh, C. (1998). The Relative Impact Of Interviewer Effects And Sample Design Effects On Survey Precision. *Journal Of The Royal Statistical Society*. Series A (Statistics In Society). Vol. 161, No. 1 (1998), P.63-77. Published By: Wiley. Article Stable Url: Http://Www.Jstor.Org/Stable/2983554

Campbell, A. M. & Macrae, R. (2013). Local Food Plus: The Connective Tissue In Local/Sustainable Supply Chain Development. *Local Environment*, 18(5), P.557-566.

Campbell, L. K. (2016). Getting Farming On The Agenda: Planning, Policymaking, And Governance Practices Of Urban Agriculture In New York City. *Urban Forestry & Urban Greening*, 19, P.295-305.

Campbell, S. (2007). Green Cities, Growing Cities, Just Cities?: Urban Planning And The Contradictions Of Sustainable Development, *Journal Of The American Planning Association*, 62:3, P.296-312, Doi: 10.1080/01944369608975696.

Caraher, M., & Dowler, E. (2007). Food Projects In London: Lessons For Policy And Practice—A Hidden Sector And The Need For More Unhealthy Puddings... Sometimes'. *Health Education Journal*, 66(2), P.188-205.

Carletto, C., Zezza, A., & Banerjee, R. (2013). Towards Better Measurement Of Household Food Security: Harmonizing Indicators And The Role Of Household Surveys. *Global Food Security*, 2(1), P.30-40.

Carmody, C. (2013). Slowing Productivity Growth-A Developed Economy. *Economic Roundup*, (2), P.57-78.

Carolan, M. & Hale, J., (2016). Growing Communities With Urban Agriculture: Generating Value Above And Below Ground. *Community Development*, 47(4), P.530-545.

Carolan, M. S. (2013). Reclaiming Food Security. Routledge. (1).

Carpiano, R. M. (2009). Come Take A Walk With Me: The Go-Along Interview As A Novel Method For Studying The Implications Of Place For Health And Well-Being. *Health & Place*, 15(1), P.263-272.

Cassell, C., & Symon, G. (2004). Essential Guide To Qualitative Methods In Organisational Research. [Online]. Sage Publications. Available From:<hr/>
<hr/>
Http://Lib.Myilibrary.Com?Id=36913></hr>

Cassman, K. G. (2012). What Do We Need To Know About Global Food Security? *Global Food Security*, 1(2), P.81-82.

CFSC. (2003). Urban Agriculture And Community Food Security In The United States: Farming From The City Center To The Urban Fringe. Urban Agriculture Committee Of The Community Food Security Coalition 2003: Online At: Http://Www.Foodsecurity.Org/Primerefscuac

Charles, L. (2011). Animating Community Supported Agriculture In North East England: Striving For A 'Caring Practice'. Centre For Rural Economy. *Journal Of Rural Studies*, 27(4), P.362-371.

Chesters, G. (2016). Social Movements And The Ethics Of Knowledge Production. *Social Movement Studies*, 11(2), P.145-160.

Childers, D. L., Pickett, S. T., Grove, J. M., Ogden, L., & Whitmer, A. (2014). Advancing Urban Sustainability Theory And Action: Challenges And Opportunities. *Landscape And Urban Planning*, 125, P.320-328.

Colasanti, K. J., Hamm, M.W. and Litjens, C.M. (2012). The city as an" agricultural powerhouse"? Perspectives on expanding urban agriculture from Detroit, Michigan. *Urban Geography*, 33(3), P.348-369.

Conover, M. D., Davis, C., Ferrara, E., McKelvey, K., Menczer, F. and Flammini, A., (2013). The geospatial characteristics of a social movement communication network. *PloS one*, 8(3), p.e55957.

Corrigan, M. P. (2011). Growing What You Eat: Developing Community Gardens In Baltimore, Maryland. *Applied Geography*, 31(4), P.1232-1241.

Coufopoulos, A., Coffey, M. & Dugdill, L. (2010). Working As A Community Food Worker: Voices From The Inside. *Perspectives In Public Health*, 130(4), P.180-185.

Crane, A., Viswanathan, L., & Whitelaw, G. (2012). Sustainability Through Intervention: A Case Study Of Guerrilla Gardening In Kingston, Ontario. *Local Environment*, 18(1), P.71-90.

Creswell, J. (2012). Qualitative Inquiry And Research Design: Choosing Among Five Approaches. 3rd Edition. Published By Sage Publications. 8/5/2012. Isbn-10: 1412995302

Crouch, D. (2010). Creativity, Space And Performance: Community Gardening. In: Edensor, T. (Ed.) Spaces Of Vernacular Creativity: Rethinking The Cultural Economy. New York: Routledge; London: Taylor & Francis [Distributor].

Crouch, D. & Ward, C. (1988). The Allotment: Its Landscape And Culture. Faber and Faber.

Crouch, D. (1998). Reinventing Allotments For The Twenty-First Century: The UK Experience. In Xxv International Horticultural Congress, Part 13: New And Specialized Crops And Products, Botanic Gardens And 523 (P. 135-142).

Crouch, M. & Mckenzie, H. (2006). The Logic Of Small Samples In Interview-Based Qualitative Research. *Social Science Information*, 45(4), P.483-499.

Davis, C. G., Thomas, C. Y. & Amponsah, W. A. (2001). Globalization And Poverty: Lessons From The Theory And Practice Of Food Security. *American Journal Of Agricultural Economics*, 83(3), P.714-721.

Deaton, A., (2010). Price indexes, inequality, and the measurement of world poverty. *American Economic Review*, 100(1), pp.5-34.

Deelstra, T., & Girardet, H. (2000). Urban Agriculture And Sustainable Cities. Bakker N., Dubbeling M., Gündel S., Sabel-Koshella U., De Zeeuw H. Growing Cities, Growing Food. Urban Agriculture On The Policy Agenda. Feldafing, Germany: Zentralstelle Für Ernährung Und Landwirtschaft (Zel), P.43-66.

Denscombe, M. (2007). Good Research Guide Open University Press Publication. May 2007. P.359. E. ISBN: 9780335229680.

Dibden, J., Gibbs, D. & Cocklin, C. (2013). Framing Gm Crops As A Food Security Solution. *Journal Of Rural Studies*, 29, P.59-70.

Dimitri, C., Oberholtzer, L. & Pressman, A. (2016). Urban Agriculture: Connecting Producers With Consumers. *British Food Journal*, 118(3), P.603-617.

Dowler, E., Dobson, B., & Turner, S. (2001). Poverty Bites Food, Health And Poor Families. London (United Kingdom). Child Poverty Action Group.

Dowler, E.A., Kneafsey, M., Lambie, H., Inman, A. and Collier, R., (2011). Thinking about 'food security': engaging with UK consumers. *Critical Public Health*, *21*(4), P.403-416.

Dowler, E. (2001). Inequalities In Diet And Physical Activity In Europe. *Public Health Nutrition* 4, (2b), P.701-709.

Dowler, E. (2003). Food And Poverty In Britain: Rights And Responsibilities *In* E. Dowler And C. Jones Finer (Eds) The Welfare Of Food: Rights And Responsibilities In A Changing World, Oxford: Blackwell Publishing, P.140-159.

Dowler, E. & O'connor, D. (2012). Rights-Based Approaches To Addressing Food Poverty And Food Insecurity In Ireland And UK. *Social Science & Medicine*, 74(1), P.44-51.

Dowler, E. & Caraher, M. (2003). Local Food Projects: The New Philanthropy? *Political Quarterly*, 74(1), P.57-65.

Dowler, E., Turner, S. & Dobson, B. (2001). Poverty Bites: Food, Health And Poor Families, London: Child Poverty Action Group.

Dowler, E., Caraher, M. & Lincoln, P. (2007). Inequalities In Food And Nutrition; Challenging Lifestyles. *In* Dowler, E. & Spencer, N. Challenging Health Inequalities: From Acheson To 'Choosing Health'. The Policy Press; Bristol, P.127-155.

Dowler, E., Kneafsey, C., & Holloway, L. (2010) 'Doing Food Differently: Reconnecting Biological And Social Relationships Through Care For Food' *In* N. Charles & R. Carter (Eds) Nature, Society And Environmental Crisis, Chichester: Wiley-Blackwell.

Dupuis, E. M., & Block, D. (2008). Sustainability And Scale: Us Milk-Market Orders As Relocalization Policy. *Environment And Planning*. *A*, 40(8), 1987.

Dupuis, E. M., & Goodman, D. (2005). Should We Go Home To Eat?: Toward A Reflexive Politics Of Localism. *Journal Of Rural Studies*, 21(3), P.359-371.

Dupuis, E. M., Goodman, D., & Harrison, J. (2006). Just Values Or Just Value? Remaking The Local In Agro-Food Studies. *Research In Rural Sociology And Development*, 12, P.241-268.

Dwyer, S.C. & Buckle, J. L. (2009). The Space Between: On Being An Insider-Outsider In Qualitative Research. *International Journal Of Qualitative Methods*, 8(1), P.54-63.

Edensor, T., Leslie, D., Millington, S. & Rantisi, N. M. (2010). Introduction. Rethinking Creativity: Critiquing The Creative Class Thesis. *In* Edensor, T., Leslie, D., Millington, S. & Rantisi, N. M. (Eds.) Spaces Of Vernacular Creativity: Rethinking The Cultural Economy. New York: Routledge; London: Taylor & Francis [Distributor].

England, K. V. (1994). Getting Personal: Reflexivity, Positionality, And Feminist Research. *The Professional Geographer*, 46(1), P.80-89.

Ernwein, M. (2014). Framing Urban Gardening And Agriculture: On Space, Scale And The Public, *Geoforum*, Volume 56, September 2014, P.77-86, Issn 0016-7185, Http://Dx.Doi.Org/10.1016/J.Geoforum.2014.06.016.

Evans, J. & Jones, P., (2011). The Walking Interview: Methodology, Mobility And Place. *Applied Geography*, 31(2), P.849-858.

Faculty Of Public Health. (2014). Public Health Experts Call On Pm To Take Action On Nutrition And Hunger, Http://Www.Fph.Org. UK/Public Health Experts Call On Pm To Take Action On Nutrition And Hunger

Feagan, R. (2007). The Place Of Food: Mapping Out The 'Local' In Local Food Systems, Progress In Human Geography, 31 (1), P.23-42.

Feenstra, G. (2002). Creating Space For Sustainable Food Systems: Lessons From The Field. Agriculture And Human Values. 19 (2), P.99–106. Doi:10.1023/A:1016095421310

Feenstra, G. W. (1997). Local Food Systems And Sustainable Communities. *American Journal Of Alternative Agriculture*, 12 (01), P.28-36.

Feenstra, G.W., (1999). Entrepreneurial community gardens: Growing food, skills, jobs and communities (Vol. 21587). UCANR Publications.

Ferris, J., Norman, C., & Sempik, J. (2001). People, Land And Sustainability: Community Gardens And The Social Dimension Of Sustainable Development. *Social Policy & Administration*, 35(5), P.559-568.

Firth, C., Maye, D., & Pearson, D. (2011). Developing Community In Community Gardens. Francis. Cities Farming In The Future. *Local Environment*, 16(6), P.555-568.

Flachs, A. (2010). Food For Thought: The Social Impact Of Community Gardens In The Greater Cleveland Area. *Electronic Green Journal*, 1(30).

Frey, J., & Fontana, A. (1991). The Group Interview In Social Research, *The Social Science Journal*, 28 (2), 1991, P.175-187, Issn 0362-3319, Http://Dx.Doi.Org/10.1016/0362-3319(91)90003-M. (Http://Www.Sciencedirect.Com/Science/Article/Pii/036233199190003m).

Fridman, J., & Lenters, L. (2013). Kitchen As Food Hub: Adaptive Food Systems Governance In The City Of Toronto. *Local Environment*, 18(5), P.543-556.

Frost, N. (2001). Qualitative Research Methods In Psychology: Combining Core Approaches. 1st Edition. Published By Open University Press 1/7/2001.

Geels, F. W. (2013). The Impact Of The Financial–Economic Crisis On Sustainability Transitions: Financial Investment, Governance And Public Discourse. *Environmental Innovation And Societal Transitions*, 6, P.67-95.

George, A. L. & Bennett, A. (2005). Case Studies And Theory Development In The Social Sciences. MIT Press.

Ghose, R., & Pettygrove, M. (2014). Actors And Networks In Urban Community Garden Development. *Geoforum*, 53, P.93-103.

Gilbert, N. (2008). Researching Social Life. 3rd Edition, Published By Sage Publications. 18/3/2008.

Gill, P., Stewart, K., Treasure, E. & Chadwick, B., (2008). Methods Of Data Collection In Qualitative Research: Interviews And Focus Groups. *British Dental Journal*, 204(6), P.291-295.

Gladwin, C. H., Thomson, A. M., Peterson, J. S. & Anderson, A.S., (2001). Addressing Food Security In Africa Via Multiple Livelihood Strategies Of Women Farmers. *Food Policy*, 26(2), P.177-207.

Glover, T. D. (2004). Social Capital In The Lived Experiences Of Community Gardeners. *Leisure Sciences*, 26(2), P.143-162.

Glover, T. D., Shinew, K. J. & Parry, D.C. (2005). Association, Sociability, And Civic Culture: The Democratic Effect Of Community Gardening. *Leisure Sciences*, 27(1), P.75-92.

Goodman, D. (2004). Rural Europe Redux? Reflections On Alternative Agro-Food Studies *Sociologia Ruralis* 44 P.3–16.

Goodman, M.K., Maye, D. & Holloway, L. (2010). Ethical Foodscapes?: Premises, Promises, And Possibilities. *Environment and Planning A: Economy and Space*. 42. P.1782-1796.

Gray, L., Guzman, P., Glowa, K. M., & Drevno, A. G. (2014). Can Home Gardens Scale Up Into Movements For Social Change? The Role Of Home Gardens In Providing Food Security And Community Change In San Jose, California. *Local Environment*, 19(2), P.187-203.

Graham, P. L., Crilley, E., Stretesky, P. B., Long, M. A., Palmer, K. J., Steinbock, E. And Defeyter, M. A. (2016). School Holiday Food Provision In The UK: A Qualitative Investigation Of Needs, Benefits, And Potential For Development. *Frontiers In Public Health*, 4.

Guitart, D., Pickering, C., & Byrne, J. (2012). Past Results And Future Directions In Urban Community Gardens Research. *Urban Forestry & Urban Greening*, 11(4), P.364-373.

Gundersen, C. & Ziliak, J. P. (2014). Childhood Food Insecurity In The Us: Trends, Causes, And Policy Options. *The Future Of Children*, 24(2), P.1-19.

Guthman, J. (2008). Bringing Good Food To Others: Investigating The Subjects Of Alternative Food Practice. *Cultural Geographies*, 15(4), P.431-447.

Haenfler, R., Johnson, B. and Jones, E., (2012). Lifestyle movements: Exploring the intersection of lifestyle and social movements. *Social Movement Studies*, 11(1), pp.1-20.

Hammersley, M., & Atkinson, P. (2007). Ethnography: Principles In Practice. 3rd Edition. Published By Routledge, 14/6/2007. Isbn-10: 0415396050

Hansen, T., & Coenen, L. (2013). The Geography Of Sustainability Transitions: A Literature Review (No. 2013/39). Lund University, Circle-Center For Innovation, Research And Competences In The Learning Economy.

Hardman, M. & Larkham, P. J., (2014). Guerrilla Gardeners, Urban Agriculture, Food and the Future. In *Informal Urban Agriculture* (P. 185-196). Springer, Cham.

Hassanein, N. (2003). Practicing Food Democracy: A Pragmatic Politics Of Transformation. *Journal Of Rural Studies*, 19(1), P.77-86.

Headey, D., & Ecker, O. (2013). Rethinking The Measurement Of Food Security: From First Principles To Best Practice. *Food Security*, 5(3), P.327-343.

Hinrichs, C. (2003). The Practice And Politics Of Food System Localization. *Journal Of Rural Studies*, 19(1), P.33-45.

Hinrichs, C. (2014). Transitions To Sustainability: A Change In Thinking About Food Systems Change?. *Agriculture And Human Values*, 31(1), P.143-155.

Holland, L. (2004). Diversity And Connections In Community Gardens: A Contribution To Local Sustainability. *Local Environment*, 9(3), P.285-305.

Holland, L. (2011). Diversity And Connections In Community Gardens: A Contribution To Local Sustainability. *Local Environment*, 9(3), P.285-305.

Holloway, L. & Kneafsey, M. (2000). Reading The Space Of The Farmers' Market: A Preliminary Investigation From The UK. *Sociologia Ruralis*, 40(3), P.285-299.

Holloway, L., Cox, R., Venn, L., Kneafsey, M., Dowler, E., & Tuomainen, H. (2006). Managing Sustainable Farmed Landscape Through 'Alternative' food Networks: A Case Study From Italy. *The Geographical Journal*, 172(3), P.219-229.

Holloway, L., Kneafsey, M., Venn, L., Cox, R., Dowler, E., & Tuomainen, H. (2007). Possible Food Economies: A Methodological Framework For Exploring Food Production—Consumption Relationships. *Sociologia Ruralis*, 47(1), P.1-19.

Holton, M. & Riley, M. (2014). Talking On The Move: Place-Based Interviewing With Undergraduate Students. *Area*, 46(1), P.59-65.

Horst, M., McClintock, N. & Hoey, L. (2017). The Intersection Of Planning, Urban Agriculture, And Food Justice: A Review Of The Literature. *Journal Of The American Planning Association*, 83(3), P.277-295.

Hospes, O. (2014). Food Sovereignty: The Debate, The Deadlock, And A Suggested Detour. *Agriculture And Human Values*, 31(1), P.119-130.

Hull Data Observatory. (2017). The People's Panel. Wave 22: September, Wave 17: March / April and Wave 13: March / April. Part of the Humber Data Observatory Group [Online] http://109.228.11.121/IAS_Live/bytheme?themeId=385&themeName=People's%20Panel. [Accessed 12/5/2016].

Hou, J. (2010). Insurgent Public Space: Guerrilla Urbanism And The Remaking Of Contemporary Cities. Routledge.

Husserl, E. (1970). The Crisis Of European Sciences And Transcendental Phenomenology: An Introduction To Phenomenological Philosophy. Northwestern University Press.

Ilbery, B., & Kneafsey, M. (2000). Producer Constructions Of Quality In Regional Speciality Food Production: A Case Study From South West England. *Journal Of Rural Studies*, 16(2), P.217-230.

Irvine, S., Johnson, L., & Peters, K. (1999). Community Gardens And Sustainable Land Use Planning: A Case-Study Of The Alex Wilson Community Garden. *Local Environment*, 4(1), P.33-46.

Jarosz, L. (2008). The City In The Country: Growing Alternative Food Networks In Metropolitan Areas. *Journal Of Rural Studies*, 24(3), P.231-244.

Jarosz, L. (2014). Comparing Food Security And Food Sovereignty Discourses. *Dialogues In Human Geography*, 4(2), P.168-181.

Johnson, R., & Onwuegbuzie, A. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Educational Researcher, 33(7), P.14-26 Published By: American Educational Research Association. Stable Url: Http://Www.Jstor.Org/Stable/3700093

Johnston, J. & Baumann, S. (2014). Foodies: Democracy And Distinction In The Gourmet Foodscape. Routledge.

Johnston, J., Biro, A., & Mackendrick, N. (2009). Lost In The Supermarket: The Corporate-Organic Foodscape And The Struggle For Food Democracy. *Antipode*, 41(3), P.509-532.

Jones, P., Bunce, G., Evans, J., Gibbs, H. & Hein, J. R. (2008). Exploring Space And Place With Walking Interviews. *Journal Of Research Practice*, 4(2), P.2.

Keenan, D. P., Olson, C., Hersey, J. C., & Parmer, S. M. (2001). Measures Of Food Insecurity/Security. *Journal Of Nutrition Education*, 33, S49-S58.

Keivani, R. (2010). A Review Of The Main Challenges To Urban Sustainability, International *Journal Of Urban Sustainable Development*, (1)1-2, P.5-16, Doi: 10.1080/19463131003704213

Khan, F., & Prior, C. (2010). Evaluating The Urban Consumer With Regard To Sourcing Local Food: A Heart Of England Study. *International Journal Of Consumer Studies*, 34(2), P.161-168.

Kiggins, E., & Erikson, S. L. (2013). 'No Food In The House': Policy Ambiguity, Inaction, And Food Insecurity. *Community Development Journal*, 48(4), P.623-638.

King, N. (2004). Using Interviews In Qualitative Research, *In* Cassell, C. & Symon, G. (Eds.) Essential Guide To Qualitative Methods In Organizational Research 2nd Ed. London: Sage, P.11-22.

Kingsley, J., & Townsend, M. (2006). 'Dig In' To Social Capital: Community Gardens As Mechanisms For Growing Urban Social Connectedness. *Urban Policy And Research*, 24(4), P.525-537.

Kirwan, J., & Maye, D. (2013). Food Security Framings Within The UK And The Integration Of Local Food Systems. *Journal Of Rural Studies*, 29, P.91-100.

Knapp, L., Veen, E., Renting, H., Wiskerke, J. S. & Groot, J. C. (2016). Vulnerability Analysis Of Urban Agriculture Projects: A Case Study Of Community And Entrepreneurial Gardens In The Netherlands And Switzerland. *Urban Agriculture & Regional Food Systems*, 1(1).

Kneafsey, M., Cox, R., Holloway, L., Dowler, E., Venn, L., & Tuomainen, H. (2008). Reconnecting Consumers, Producers And Food: Exploring Alternatives. Berg.

Kneafsey, M., Dowler, E., Lambie-Mumford, H., Inman, A., & Collier, R. (2013). Consumers And Food Security: Uncertain Or Empowered? *Journal Of Rural Studies*, 29, P.101-112.

Kobayashi, M., Tyson, L., & Abi-Nader, J. (2010). The Activities And Impacts Of Community Food Projects 2005-2009, P.1–28.

Kortright, R. & Wakefield, S. (2011). Edible Backyards: A Qualitative Study Of Household Food Growing And Its Contributions To Food Security. *Agriculture And Human Values*, 28(1), P.39-53.

Koopmans, M. E., Keech, D., Sovova, L. & Reed, M. (2017a). Urban Agriculture And Place-Making: Narratives About Place And Space In Ghent, Brno And Bristol. *Moravian Geographical Reports*, 25(3), P.154-165.

Kremer, P., & Deliberty, T. L. (2011). Local Food Practices And Growing Potential: Mapping The Case Of Philadelphia. *Applied Geography*, 31(4), P.1252-1261.

Kristensen, D. K. & Kjeldsen, C. (2016). Imagining And Doing Agro-Food Futures Otherwise: Exploring The Pig City Experiment In The Foodscape Of Denmark. *Journal Of Rural Studies*, 43, P.40-48.

Krueger, R. A. (2014). Focus Groups: A Practical Guide For Applied Research. Sage Publications.

Kurtz, H. (2001). Differentiating Multiple Meanings Of Garden And Community. *Urban Geography*, 22(7), P.656-670.

Kvale, S. (2008). Interviews: Learning The Craft Of Qualitative Research Interviewing. 2nd Edition. Published By Sage Publications 4/9/2008. Isbn-10: 0761925422.

Lambie-Mumford, H., (2012). Regeneration and food poverty in the United Kingdom: learning from the New Deal for Communities Programme. *Community Development Journal*, 48(4), P.540-554.

Lang, T. & Barling, D. (2012). Food Security And Food Sustainability: Reformulating The Debate. *The Geographical Journal*, 178(4), P.313-326.

Lang, T., (2009). Reshaping The Food System For Ecological Public Health. *Journal Of Hunger & Environmental Nutrition*, 4(3-4), P.315-335.

Lang, T., (2010). Crisis? What Crisis? The Normality Of The Current Food Crisis. *Journal Of Agrarian Change*, 10(1), P.87-97.

Law, J. (2004). After Method: Mess In Social Science Research. Routledge.

Lee, K., Mcneil, D. & Holland, A. J. (2000). Global Sustainable Development In The 21st Century. Edinburgh: University Press

Lerner, A. M. & Eakin, H., (2011). An Obsolete Dichotomy? Rethinking The Rural–Urban Interface In Terms Of Food Security And Production In The Global South. *The Geographical Journal*, 177(4), P.311-320.

Lindenberg, M., (2002). Measuring Household Livelihood Security At The Family And Community Level In The Developing World. *World Development*, 30(2), P.301-318.

Lohrberg, F., Lička, L., Scazzosi, L. & Timpe, A. (2016). Urban Agriculture Europe. Jovis.

Loue, S., Karges, R. R. & Carlton, C. (2014). The Therapeutic Farm Community: An Innovative Intervention For Mental Illness. *Procedia-Social And Behavioral Sciences*, 149, P.503-507.

Macdonald, L., Cummins, S. & Macintyre, S., (2007). Neighbourhood Fast Food Environment And Area Deprivation—Substitution Or Concentration?. *Appetite*, 49(1), P.251-254.

Macmillan, T., & Dowler, E. (2012). Just And Sustainable? Examining The Rhetoric And Potential Realities Of UK Food Security. *Journal Of Agricultural And Environmental Ethics*, 25(2), P.181-204.

Magis, K. (2010). Community Resilience: An Indicator Of Social Sustainability, *Society & Natural Resources: An International Journal*, 23:5, P.401-416, Doi: 10.1080/08941920903305674

Mapp, T. (2008). Understanding Phenomenology: The Lived Experience. *British Journal Of Midwifery*, 16(5).

Markard, J., Raven, R., & Truffer, B. (2012). Sustainability Transitions: An Emerging Field Of Research And Its Prospects. *Research Policy*, 41(6), P.955-967.

Marsden, T., & Franklin, A. (2013). Replacing Neoliberalism: Theoretical Implications Of The Rise Of Local Food Movements. *Local Environment*, 18(5), P.636-641.

Marsden, T., & Sonnino, R. (2012). Human Health And Wellbeing And The Sustainability Of Urban–Regional Food Systems. *Current Opinion In Environmental Sustainability*, 4(4), P.427-430.

Marsden, T. (2013). From Post-Productionism To Reflexive Governance: Contested Transitions In Securing More Sustainable Food Futures. *Journal Of Rural Studies*, 29, P.123-134.

Marsden, T., & Martin, R. (1999). Food For Urban Spaces: The Development Of Urban Food Production In England And Wales *International Planning Studies*. (4)3 P.389-412. Published Online: 18 Apr 2007.

Martin, G., Clift, R., Christie, I. & Druckman, A., (2014). The sustainability contributions of urban agriculture: Exploring a community garden and a community farm. *LCA Foods*, pp.752-760.

Mason, M. (2010) Sample Size And Saturation In Phd Studies Using Qualitative Interviews. In Forum Qualitative Sozialforschung/Forum: Qualitative Sozial Research (Vol. 11, No. 3).

McMorran, R., Scott, A. J., & Price, M. F. (2014). Reconstructing Sustainability; Participant Experiences Of Community Land Tenure In North West Scotland. *Journal Of Rural Studies*, 33, P.20-31.

McCann, E., Roy, A. & Ward, K., (2013). Assembling/Worlding Cities. *Urban Geography*, 34(5), P.581-589.

McClintock, N. & Cooper, J. (2009). Cultivating The Commons: An Assessment Of The Potential For Urban Agriculture On Oakland's Public Land. Berkeley: University Of California.

McClintock, N. (2014). Radical, Reformist, And Garden-Variety Neoliberal: Coming To Terms With Urban Agriculture's Contradictions. *Local Environment*, 19(2), P.147-171.

McCormack, L. A., Laska, M. N., Larson, N., & Story, M. (2010). Review Of The Nutritional Implications Of Farmers' Markets And Community Gardens: A Call For Evaluation And Research Efforts. *Journal Of The American Dietetic Association*, P.1–3.

McCurdy, P. & Uldam, J. (2014). Connecting Participant Observation Positions: Toward A Reflexive Framework For Studying Social Movements. 26(1), P.40–55.

McGlone, P., Dobson, B., Dowler, E., & Nelson, M. (1999). Food Projects And How They Work (P. 64). York Publishing Services Limited For The Joseph Rowntree Foundation.

McGranahan, G., & Satterthwaite, D. (2002). The Environmental Dimensions Of Sustainable Development For Cities. *Geography*, P.213-226.

McMorran, R. & Scott, A. (2013). Community Landownership: Rediscovering The Road To Sustainability. *Lairds: Scottish Perspectives On Upland Management*, P.20-31.

McNamara, C. (1999) General Guidelines for Conducting Interviews. Minnesota. USA.

Mertens, D. (2009). Research And Evaluation In Education And Psychology: Integrating Diversity With Quantitative, Qualitative And Mixed Methods. 3rd Edition. Published By Sage Publications, 8/10/2009. Isbn-10: 141297190x

Middle, I, Dzidic., P. Buckley, A., Bennett., D. Tye., M. & Jones, R. (2014). Integrating Community Gardens Into Public Parks: An Innovative Approach For Providing Ecosystem Services In Urban Areas. *Urban Forestry & Urban Greening*, 13, No. 4. P.638-645.

Milbourne, P., (2012). Everyday (In) Justices And Ordinary Environmentalisms: Community Gardening In Disadvantaged Urban Neighbourhoods. *Local Environment*, 17(9), P.943-957.

Miller, W. M. (2013). Allotments And Alternative Food Networks: The Case Of Plymouth, UK. PhD Thesis.

Mikkelsen, E. B. (2011). "Images Of Foodscapes: Introduction To Foodscape Studies And Their Application In The Study Of Healthy Eating Out-Of-Home Environments." *Perspectives In Public Health* 131, No. 5 P.209-216.

Misselhorn, A., Aggarwal, P., Ericksen, P., Gregory, P., Horn-Phathanothai, L., Ingram, J. & Wiebe, K. (2012). A Vision For Attaining Food Security. *Current Opinion In Environmental Sustainability*, 4(1), P.7-17.

Mok, H. F., Williamson, V. G., Grove, J. R., Burry, K., Barker, S. F., & Hamilton, A. J. (2014). Strawberry Fields Forever? Urban Agriculture In Developed Countries: A Review. *Agronomy For Sustainable Development*, 34(1), P.21-43.

Moldan, B., Janoušková, S., & Hák, T. (2012). How To Understand And Measure Environmental Sustainability: Indicators And Targets. *Ecological Indicators*, 17, P.4-13.

Morgan, K.J., (2009). Feeding the City: The Challenge of Urban Food Planning. *International Planning Studies*, 14(4), P.341-348.

Morgan, K., & Sonnino, R. (2010). The Urban Foodscape: World Cities And The New Food Equation. *Cambridge Journal Of Regions, Economy And Society*, 3(2), pp.209-224.

Morris, C. & Kirwan, J. (2010). Food Commodities, Geographical Knowledges And The Reconnection Of Production And Consumption: The Case Of Naturally Embedded Food Products. *Geoforum*, 41, P.131-143.

Morris, C. & Kirwan, J. (2011). Ecological Embeddedness: Developing The Concept Within The Context Of Alternative Food Networks In The UK. *Journal Of Rural Studies*, 27, P.322-330.

Mount, P., & Andrée, P. (2013). Visualising Community- Based Food Projects In Ontario. *Local Environment: The International Journal Of Justice And Sustainability*, 18(5), P.578–591.

Mount, P., Hazen, S., Holmes, S., Fraser, E., Winson, A., Knezevic, I. & Landman, K. (2013). Barriers To The Local Food Movement: Ontario's Community Food Projects And The Capacity For Convergence. *Local Environment*, 18(5), P.592-605.

Murtagh, A. (2015). The Defining Characteristics Of Alternative Food Initiatives In Ireland: A Social Movement Battling For An Alternative Food Future? PhD Thesis, University College Cork.

Nelson, E., Knezevic, I. & Landman, K., (2013). The Uneven Geographies Of Community Food Initiatives In Southwestern Ontario. *Local Environment*, 18(5), P.567-577.

Nelson, H, C. & Stroink, L. M. (2013). Complexity And Food Hubs: Five Case Studies From Northern Ontario, *Local Environment: The International Journal Of Justice And Sustainability*, 18:5, P.620-635

Neuman, W. L. & Robson, K. (2014). Basics Of Social Research. Pearson Canada.

Nwaobi, G. (2014). Inequality, Poverty And Hunger In Developing Countries: Sustainability Implications.

OECD. (2016). Population And Elections (See: Population At The First Day Of The Quarter By Municipality, Sex, Age, Marital Status, Ancestry, Country Of Origin And Citizenship). Statbank.dk. Statistics Denmark. 1 January 2016. [Retrieved 22 April 2016].

Opitz, I., Berges, R., Piorr, A. & Krikser, T., (2016). Contributing To Food Security In Urban Areas: Differences Between Urban Agriculture And Peri-Urban Agriculture In The Global North. *Agriculture And Human Values*, 33(2), P.341-358.

Pinstrup-Andersen, P. (2009). Food Security: Definition And Measurement. Food Security, 1(1), P.5-7.

Pothukuchi, K. (2004). Community Food Assessment A First Step In Planning For Community Food Security. *Journal Of Planning Education and Research*, 23(4), P.356-377.

Poulsen, M. N. (2017). Cultivating Citizenship, Equity, And Social Inclusion? Putting Civic Agriculture Into Practice Through Urban Farming. *Agriculture And Human Values*, 34(1), P.135-148.

Poulsen, M. N., Mcnab, P. R., Clayton, M. L. & Neff, R. A. (2015). A Systematic Review Of Urban Agriculture And Food Security Impacts In Low-Income Countries. *Food Policy*, 55, P.131-146.

Powell R. A. & Single H. M. (1996). 'Focus Groups'. *International Journal Of Quality In Health Care*, (8) 5, P.499–504.

Quisumbing, A. R. (2013). Generating Evidence On Individuals' Experience Of Food Insecurity And Vulnerability. *Global Food Security*, 2(1), P. 50-55.

Rapport, D. J. (2007). Sustainability Science: An Ecohealth Perspective. *Sustainability Science*, 2(1), P.77-84.

Renting, H., Marsden, T., Banks J. (2003). Understanding Alternative Food Networks: Exploring The Role Of Short Food Supply Chains In Rural Development. *Environment And Planning A* 2003, Volume 35, P.393 – 411.

Reynolds, K., (2015). Disparity Despite Diversity: Social Injustice In New York City's Urban Agriculture System. *Antipode*. 47(1), P.240–259.

Reynolds, R., (2008). On Guerrilla Gardening: A Handbook For Gardening Without Permission. Bloomsbury, London.

Rich, S. C. (2012). Urban Farms. Abrams.

Riley, M., (2010). Emplacing The Research Encounter: Exploring Farm Life Histories. *Qualitative Inquiry*, 16(8), P.651-662.

Ritchie, J., Lewis, J., Nicholls, C. M. & Ormston, R. (2013). Qualitative Research Practice: A Guide For Social Science Students And Researchers. Sage.

Robinson, J. (2011). Cities In A World Of Cities: The Comparative Gesture. *International Journal Of Urban And Regional Research*, 35(1), P.1-23.

Robinson, J. (2013). The Urban Now: Theorising Cities Beyond The New. *European Journal Of Cultural Studies*, 16(6), P.659-677.

Rosin, C., Stock, P. & Campbell, H. (2013). Food Systems Failure: The Global Food Crisis And The Future Of Agriculture. Routledge.

Rubin, H. J. & Rubin, I. S. (2011). Qualitative Interviewing: The Art Of Hearing Data. Sage.

Rychetnik, L., Webb, K., Story, L. & Katz, T. (2003). Food Security Options Paper: A Planning Framework And Menu Of Options For Policy And Practice Interventions. New South Wales, Au: New South Wales Department Of Health.

Sage, C. (2003). Social Embeddedness And Relations Of Regard: Alternative 'Good Food' Networks In Southwest Ireland. *Journal Of Rural Studies*, 19, P.47–60.

Sage, C. (2014). The Transition Movement And Food Sovereignty: From Local Resilience To Global Engagement In Food System Transformation. *Journal Of Consumer Culture*, 14(2), P.254-275.

Saldivar-Tanaka, L. & Krasny, M. E. (2004). Culturing Community Development, Neighborhood Open Space, And Civic Agriculture: The Case Of Latino Community Gardens In New York City. *Agriculture And Human Values*, 21(4), P.399-412.

Satterthwaite, D., Mcgranahan, G. And Tacoli, C. (2010). Urbanization And Its Implications For Food And Farming. Philosophical Transactions Of The Royal Society Of London B: Biological Sciences, 365(1554), P.2809-2820.

Sayer, A. (1984). Defining The Urban. *Geojournal*, 9(3), P.279-284.

Schmelzkopf, K. (1998). Urban Community Gardens As Contested Space. *Geographical Review*, P.364-381.

Schmelzkopf, K. (2002). Incommensurability, Land Use, And The Right To Space: Community Gardens In New York City. *Urban Geography*, 23(4), P.323-343.

Schukoske, J. E. (2000). Community Development Through Gardening: State And Local Policies Transforming Urban Open Space. Nyuj Legis. & Pub. Pol'y, 3, P.351.

Serageldin, I. (2001). Assuring Water For Food: The Challenge Of The Coming Generation. *International Journal of Water Resources Development*, 17(4), P.521-525.

Shannon, J. (2014). Food Deserts Governing Obesity In The Neoliberal City. *Progress In Human Geography*, 38(2), P.248-266.

Shickle, D., Wickramasekera, N. & Richardson, Z. (2014). Understanding The Impacts Of Care Farms On Health And Well-Being Of Disadvantaged Populations: A Protocol Of The Evaluating Community Orders (Eco) Pilot Study. Bmj Open, 4(10), P.E006536.

Shinew, K. J., Glover, T. D., & Parry, D. C. (2005). Leisure Spaces As Potential Sites For Interracial Interaction: Community Gardens In Urban Areas. *Journal Of Leisure Research*, 36(3), P.336-355.

Sin, C. H. (2003). Interviewing In 'Place': The Socio-Spatial Construction Of Interview Data. *Area*, 35(3), P.305-312.

Smith, C. M. & Kurtz, H. E. (2003). Community Gardens And Politics Of Scale In New York City. *Geographical Review*, *93*(2), P.193-212.

Smith, V. M., Greene, R. B. & Silbernagel, J. (2013). The Social And Spatial Dynamics Of Community Food Production: A Landscape Approach To Policy And Program Development. *Landscape Ecology*, 28(7), P.1415-1426.

Sonnino, R. (2016). The New Geography Of Food Security: Exploring The Potential Of Urban Food Strategies. *The Geographical Journal*, 182(2), P.190-200.

Sonnino, R. (2014). The New Geography Of Food Security: Exploring The Potential Of Urban Food Strategies. *The Geographical Journal*. Doi: 10.1111/Geoj.12129

Sonnino, R., & Griggs-Trevarthen, C. (2013). A Resilient Social Economy? Insights From The Community Food Sector In The UK. *Entrepreneurship & Regional Development*, 25(3-4), P.272-292.

Sonnino, R., & Marsden, T. (2006). Beyond The Divide: Rethinking Relationships Between Alternative And Conventional Food Networks In Europe. *Journal Of Economic Geography*, 6(2), P.181-199.

Sonnino, R. (2009). Feeding The City: Towards A New Research And Planning Agenda. *International Planning Studies*, 14(4), P.425-435.

Sonnino, R. (2010). Escaping The Local Trap: Insights On Re-Localization From School Food Reform. *Journal Of Environmental Policy & Planning*, 12(1), P.23-40.

Spangenberg, J. H. (2011). Sustainability Science: A Review, An Analysis And Some Empirical Lessons. *Environmental Conservation*, 38(03), P.275-287.

Stake, R. E. (2000). Case Studies *In* Denzin, N. K., & Lincoln, Y. S. (Eds.) 2000. The Handbook Of Qualitative Research (Second Edition) London: Sage Publications, P.435-454

Starman, A. B. (2013). The Case Study As A Type Of Qualitative Research. *Journal Of Contemporary Educational Studies*, 1(2013), P.28-43.

Starr, A. (2010). Local Food: A Social Movement?. Cultural Studies ↔ Critical Methodologies, 10(6), P.479-490.

Stocker, L. & Barnett, K. (1998). The Significance And Praxis Of Community-Based Sustainability Projects: Community Gardens In Western Australia. *Local Environment*, 3(2), P.179-189.

Stroink, M. L., & Nelson, C. H. (2013). Complexity And Food Hubs: Five Case Studies From Northern Ontario. *Local Environment*, 18(5), P.620-635.

Tarasuk, V. & Vogt, J. (2009). Household Food Insecurity In Ontario. *Canadian Journal Of Public Health*/Revue Canadienne De Sante'e Publique, P.184-188.

Taylor, J. R. & Taylor, S. (2012). Landscape And Urban Planning Mapping Public And Private Spaces Of Urban Agriculture *In* Chicago Through The Analysis Of High-Resolution Aerial Images In Google Earth. *Landscape And Urban Planning*, 108(1), P.57–70. Available At: Http://Dx.Doi.Org/10.1016/J.Landurbplan.2012.08.001.

The Urban Life Account (2014). Copenhagen Together Report. Written by The Technical and Environmental Administration, City of Copenhagen, Denmark. [Online] https://kk.sites.itera.dk/apps/kk_pub2/pdf/1258_0B5eEF1cF5.pdf [Accessed 18/4/2016].

Tomlinson, I., (2013). Doubling food production to feed the 9 billion: a critical perspective on a key discourse of food security in the UK. *Journal Of Rural Studies*, 29, P.81-90.

Tong, A., Sainsbury, P. & Craig, J. (2007). Consolidated Criteria For Reporting Qualitative Research (Coreq): A 32-Item Checklist For Interviews And Focus Groups. *International Journal For Quality In Health Care*, 19(6), P.349-357.

Tornaghi, C., (2014). Critical geography of urban agriculture. *Progress in Human Geography*, 38(4), P.551-567.

Tornaghi, C., & Van Dyck, B. (2014). Research-Informed Gardening Activism: Steering The Public Food And Land Agenda. *Local Environment*, P.1-18.

Tourangeau, R. & Smith, T. W. (1996). Asking Sensitive Questions: The Impact Of Data Collection Mode, Question Format, And Question Context. *Public Opinion Quarterly*, 60(2), P.275-304.

Tregear, A. (2011). Progressing Knowledge In Alternative And Local Food Networks: Critical Reflections And A Research Agenda. *Journal Of Rural Studies*, 27(4), P.419-430.

Turcu, C. (2012). Re-Thinking Sustainability Indicators: Local Perspectives Of Urban Sustainability, *Journal Of Environmental Planning And Management*, 56(5), 695-719, Doi: 10.1080/09640568.2012.698984

Turner, B. (2011). Embodied Connections: Sustainability, Food Systems And Community Gardens. *Local Environment*, 16(6), P.509-522.

Twiss, J., Dickinson, J., Duma, S., Kleinman, T., Paulsen, H., & Rilveria, L. (2003). Community Gardens: Lessons Learned From California Healthy Cities And Communities. *Journal Information*, 93(9).

UN DESA (2014). United Nation-Department Of Economic And Social Affairs. Population Division. World Urbanisation Prospects, The 2014 Revision. Http://Esa.Un.Org/Unpd/Wup/

Vallance, S., Perkins, H. C., & Dixon, J. E. (2011). What Is Social Sustainability? A Clarification Of Concepts. *Geoforum*, 42(3), P.342-348.

Venn, L., Kneafsey, M., Holloway, L, Cox, R. & Tuomainen, H. (2006). Researching European 'Alternative' Food Networks: Some Methodological Considerations. *Area* 38.3, P.248–25 Journal Compilation © Royal Geographical Society (With The Institute Of British Geographers).

Verain, M. C., Bartels, J., Dagevos, H., Sijtsema, S. J., Onwezen, M. C., & Antonides, G. (2012). Segments Of Sustainable Food Consumers: A Literature Review. *International Journal Of Consumer Studies*, 36(2), P.123-132.

Viljoen, A. & Wiskerke, J.S. (2012). Sustainable Food Planning: Evolving Theory And Practice. Wageningen Academic Publishers.

Viljoen, A., Bohn, K., & Howe, J. (2005). Continuous Productive Urban Landscapes: Designing Urban Agriculture For Sustainable Cities. Routledge.

Vojnovic, I. (2014). Urban Sustainability: Research, Politics, Policy And Practice. *Cities*, 41, P.30-S44.

Wakefield, S., Yeudall, F., Taron, C., Reynolds, J., & Skinner, A. (2007). Growing Urban Health: Community Gardening In South-East Toronto. *Health Promotion International*, 22(2), P.92-101.

Wandel, M. (1994). Understanding Consumer Concern About Food-Related Health Risks. *British Food Journal*, 96(7), P.35-40.

Warren, E., Hawkesworth, S. & Knai, C., (2015b). Investigating The Association Between Urban Agriculture And Food Security, Dietary Diversity And Nutritional Status: A Systematic Literature Review. *Food Policy*, 53, P.54–66. Available At: Http://Dx.Doi.Org/10.1016/J.Foodpol.2015.03.004.

Watts, D. C. H., Ilbery, B. & Maye, D. (2005). Making Reconnections In Agro-Food Geography: Alternative Systems Of Food Provision. *Progress In Human Geography* 29 P.22–40.

WCED. (1987). United Nations General Assembly (1987). Report Of The World Commission On Environment And Development: Our Common Future. Transmitted To The General Assembly As An Annex To Document A/42/427 - Development And International Co-Operation: Environment.

Webber, C. B., Sobal, J., & Dollahite, J. S. (2010). Shopping For Fruits And Vegetables. Food And Retail Qualities Of Importance To Low-Income Households At The Grocery Store. *Appetite*, 54(2), P.297-303.

Weinstein, M. P., Upadhyay, N., & Brinkmann, R. (2010). Sustainability Science: The Emerging Paradigm And The Ecology Of Cities. *Journal Editor*, 6(1).

Whatmore, S., Stassart, P. & Renting, H., (2003). What's Alternative About Alternative Food Networks? *Environment and Planning A*, 35, pages 389-391.

White, M., Bunting, J., Williams, L., Raybould, S., Adamson, A., & Mathers, J. (2004). Do Food Deserts Exist? A Multi-Level, Geographical Analysis Of The Relationship Between Retail Food Access, Socio-Economic Position And Dietary Intake. Food Standards Authority, London.

White, M. M., (2011). Sisters Of The Soil: Urban Gardening As Resistance In Detroit. *Race/Ethnicity: Multidisciplinary Global Contexts*, 5(1), P.13-28.

Wight, V., Kaushal, N., Waldfogel, J., & Garfinkel, I. (2014). Understanding The Link Between Poverty And Food Insecurity Among Children: Does The Definition Of Poverty Matter?. *Journal Of Children And Poverty*, P.1-20.

Will, B. (2003). Cultivating Hope: The Community Gardens Of New York City. We Are Everywhere: The Irresistible Rise Of Global Anti-Capitalism. New York: Verso, P.134-139.

Willard, B. (2013). Reinhabiting The Land: From Vacant Lot To Garden Plot. *Performance On Behalf Of The Environment*, 93.

Chapter 8: Conclusion

Wilson, A. (2010). Urban And Regional Dynamics From The Global To The Local: Hierarchies, DNA, 'Andgenetic' planning. *Environment And Planning B: Planning And Design*, 37, P.823-837.

Winter, M. (2003a). Embeddedness, The New Food Economy And Defensive Localism. *Journal Of Rural Studies* 19, P.23–32.

Wiskerke, J. S. (2009). On Places Lost And Places Regained: Reflections On The Alternative Food Geography And Sustainable Regional Development. *International Planning Studies*, 14(4), P.369-387.

Yasmeen, G., (2006). Bangkok's Foodscape. Bangkok: White Lotus.

Yin, R. K. (2003). Case Study Research: Design And Methods. Thousand Oaks, CA: Sage Publications.

Zahavi, D. (2012). The Oxford Handbook Of Contemporary Phenomenology, 1st Edition. Published By Oxford: Oxford University Press, 2012; 13/12/12.

Zainal, Z., (2007). Case Study As A Research Method. *Journal Kemanusiaan*, 9.

Zezza, A., & Tasciotti, L. (2010). Urban Agriculture, Poverty, And Food Security: Empirical Evidence From A Sample Of Developing Countries. *Food Policy*, 35(4), P.265-273.

Zhang, J., Brereton, M., & Roe, P. (2013). Growing Friends By Growing And Sharing Garden Produce. In *Urban Agriculture : A Growing Field of Research - Workshop at Interact 2013*, 3 September 2013, Cape Town, South Africa. (In Press).

Zikmund, W., Babin, B., Carr, J., & Griffin, M. (2009). Business Research Methods, 8th Edition With Qualtrics Card. Publised By Cengage Learning, 17/08/2009. Isbn-10: 1439080674.